ORIGINAL PAPER

DOI: 10.26794/2587-5671-2021-25-1-84-102
UDC 336.67(045)
JEL G30, M210

Corporate Social Responsibility: Strengthening Brand Value and Affecting Company's Financial Performance

N.Yu. Zhukova[a] ✉, **A.E. Melikova**[b]
[a, b] HSE University, Perm branch, Perm, Russia
[a] https://orcid.org/0000-0003-1126-3343; [b] https://orcid.org/0000-0003-0879-3589
✉ Corresponding author

ABSTRACT

The article **aims** to identify the influence of corporate social responsibility on the relationship between brand value and the company's financial performance. The **methodological basis** of the work is an empirical study of an open data sample on 78 American companies for 2000–2019. The authors analyzed 962 observations from the Thomson Reuters Eikon database. The Interbrand consulting agency was the source for determining the brand value. Built by the authors, three regression models rely on panel data and control an extended set of accounting and corporate variables. The evaluation of the models employs a fixed effects model. The authors **conclude** that corporate investments in social responsibility activities have a positive indirect effect on the company's financial performance, such as return on assets and market capitalization: the influence of brand value on these indicators increases due to a high level of corporate social responsibility and ethical behavior. The study showed that the level of corporate social responsibility neither enhances nor it weakens the influence of the brand on the return on equity. The study results may be of practical use to owners, top management of companies and investors when making the company's strategy and investment decisions. Moreover, the research materials can be used by public authorities to stimulate the corporate social responsibility. **The prospects** for future research may relate to lifting the current restrictions: research on samples that include more heterogeneous companies and/or companies from different countries.

Keywords: corporate social responsibility; brand; brand value; financial indicators; return on assets; return on equity; market capitalization

For citation: **Zhukova N.Yu., Melikova A.E. Corporate social responsibility: strengthening brand value and affecting company's financial performance.** ***Finance: Theory and Practice.*** **2021;25(1):84-102. (In Russ.). DOI: 10.26794/2587-5671-2021-25-1-84-102**

INTRODUCTION

The relevance of such a phenomenon as "corporate social responsibility" (hereinafter referred to as "CSR"), was clearly manifested in the case of a pandemic due to the coronavirus, when it is required not only to support economic growth, but also to mobilize private sector resources for social needs, i.e. companies must fulfill a specific social function. The company leaders understanding the need to interact with a society made it possible back in 2001 to officially introduce the concept "corporate social responsibility", which was proposed to be considered as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis".[1] This study comprises a broader interpretation of CSR,

[1] Commission of the European Communities (2001), Green Paper: Promoting a European framework for Corporate Social Responsibility. URL: https://ec.europa.eu/transparency/regdoc/rep/1/2001/EN/1–2001–366-EN-1–0.Pdf (accessed on 21.08.2020).

which was proposed by A. McWilliams and D. Siegel as actions of a firm that go beyond its immediate interests, are not required by law, but contribute to the achievement of some public good [1].

At the end of 2019, CEOs of more than 180 of the largest American companies signed the Statement[2] on the Purpose of a Corporation, in which they noted that the Principles of Corporate Governance issued since 1978, according to which corporations exist to serve shareholders, no longer reflect the current situation. As such, the statement cited that the long-term success of companies and the U.S. economy depends on businesses investing in their workers and communities.

J. Stiglitz also notes [2] that currently, the pressing problem of corporate governance is the misalignment of incentives of individuals with those of the organization and, in a broader sense, with the interests of society in long-term economic growth.

In our opinion, the role of CSR in business will increase regardless of the industry and will be stimulated/encouraged by the state to perform a certain public function by the company in the future. For example, Russia has already adopted a law on amendments to the Tax Code, which provides certain benefits and support measures for NPOs focused on social responsibilities during the pandemic. In addition, this law introduces a tax deduction for businesses that participate in charitable activities: from January 1, 2020, commercial companies can classify charitable expenses as non-operating expenses in an amount not exceeding 1% of the organization's revenue.

Besides, companies' CSR initiatives are beneficial in terms of building a positive public image and fostering trust between the firm and the community. Failure to meet growing community expectations can jeopardize a company's image and reputation. Therefore, many companies are paying more and more attention to creating a socially responsible brand and communicating their values to society.

The purpose of our study is to identify the impact of a company's CSR not only on performance but also on the relationship between brand value and financial performance. The main distinguishing feature of the paper is that we consider a sample within a long period of time (20 years) and control an extended set of accounting and corporate variables.

The article has the following structure: 1) a theoretical review of research on the impact of brand and CSR on the company's financial performance; 2) statement of the problem and research hypotheses; 3) description of the study sample; 4) research methodology; 5) results; 6) limitations and future research; 7) conclusions.

THEORETICAL OVERVIEW

The impact of brand on financial performance

As noted by J. Barney, M. Wright, and D. Ketchen [3], the main theoretical basis for studying the relationship between the brand and the company's performance is the resource-based view, according to which resources that are valuable, rare, inimitable, and non-substitutable (VRIN criterion) contribute to creating a competitive advantage for companies. Based on the fact that a brand fully meets this criterion, it is considered as one of the most important strategic assets of a company, which allows firms to be competitive in the market, successfully and effectively create value for stakeholders in a way that their competitors cannot do [3], which, in turn, should have a positive effect on the performance of firms.

Previous research suggests that brand value can influence a company's performance by increasing revenue or decreasing costs. So, if we consider the effect of a brand on income, then brand equity, according to the research of K. Ailawadi, D. Lehmann, and S. Neslin [4], can affect both the price and quantity.

[2] Business Roundtable. Statement on the Purpose of a Corporation. URL: https://opportunity.businessroundtable.org/our-commitment/ (accessed on 19.08.2020).

For example, the influence of a strong brand on improving the financial performance of companies by increasing demand for their goods and services has been confirmed [5, 6]. In terms of costs, firms with a strong brand can also use aspects such as brand loyalty to achieve certain financial results at lower costs [5, 7].

D. Aaker and R. Jacobson [8] in a study evaluating the relationship between a brand and the financial performance of companies, concluded that there is a significant positive relationship between brand quality improvement and stock returns. In this study, the brand's potential for value creation was first identified and the significant influence of brand quality on the company's market value was substantiated.

Later R. Kerin and R. Sethuraman [9] investigated the influence of brand value on several financial indicators. Their results demonstrate a positive relationship between brand value and the ratio of a firm's market value to its book value. According to other studies (for example, M. Barth, M. Clement, G. Foster and R. Kasznik [10]) brand value is positively related not only to the variables calculated from the financial statements but also to the prices of shares and their returns. Based on the approach used in this study, T. Madden, F. Fehle and S. Fournier [11] concluded that brands with higher value bring greater returns to shareholders with less risk.

In general, it should be noted that the researchers also found a positive influence of the brand on such indicators as Tobin's Q [6, 12], cash flows [12, 13], sales revenue [14], return on investment [13], EBITDA [15], net income and book value of capital [10]. Researchers quite unambiguously agree that a brand is a significant predictor of a company's financial performance [11, 16].

Impact of CSR on financial performance

A large amount of scientific literature is devoted to the study of the relationship between CSR and the financial performance of companies. For example, a review article by J. Margolis, H. Elfenbein, J. Walsh [17] contains information that 167 studies from 1972 to 2007 analyze the relationship between CSR and financial performance. Herewith, the standard approach in these studies is the regression of financial indicators (Tobin's Q, return on assets, etc.) on CSR indicators (for example, the social efficiency index is used (Kinder, Lydenberg and Domini, hereinafter referred to as "KLD").

Moreover, while the early works in the study of the relationship between CSR and financial indicators showed a negative relationship, then later ones recognize the value and influence of CSR on financial indicators. For example, C. Flammer [18] presents the results of his empirical study on the impact of CSR on financial performance, assessing the impact of shareholder CSR proposals on shareholder income and other variables reflecting financial performance, and finds that the adoption of CSR proposals has a positive impact on labor productivity and sales growth. This is consistent with the views of many authors on the consideration of CSR as a resource that can improve efficiency, competitiveness, influence the reputation and brand (see, for example, [19–21]).

Thus, studies over the past 20 years indicate that CSR, similar to a brand, can be a determining factor affecting a company's financial performance.

Relationship between CSR initiatives, company brand, and financial performance

In 2015, the authors of the study D. Wang, P. Chen, T. Yu, C. Hsiao [22] attempted to identify the influence of CSR on the relationship between firm performance and brand equity. However, this work did not achieve the expected result: the study was carried out on a sample that included data on high-tech traded companies in Taiwan for 4 years (from 2010 to 2013). At the same time, the brand value was estimated by researchers using the Hirose model, and the

CSR variable was constructed on their own, based on the Dow Jones Sustainability Index method. To form the CSR variable, four CSR dimensions were considered: economic, social, environmental, and corporate governance. As a result, a general CSR index was formed, including each of the measurements with equal weight. To study the causal relationship between CSR, brand value, and financial performance, the authors used a structural equation modeling, and it was found out that brand value does not affect the relationship between CSR and financial performance. The lack of correlation is possibly due to the fact that the authors used their own, unproven methodology for assessing CSR.

Later, research was conducted by M. Rahman, M. Rodríguez-Serrano, M. Lambkin [23], dedicated to the study of the relationship between CSR, brand, and firm performance on a sample of 62 American companies over 14 years — from 2000 to 2013. In the model, the authors used generally accepted data: to describe the brand value — estimates of the brand consultancy Interbrand, CSR data — from the KLD database, and financial indicators — from the COMPUSTAT database. Brand value has been shown to have a positive impact on a company's current market-based performance, measured by market share, as well as on future financial performance, measured by Tobin's Q. In addition, the findings indicated a significant interaction effect between brand value and the CSR variable, which suggests that the relationship between brand value and the firm performance is enhanced when the company invests in CSR.

Thus, it can be argued that the issue of the impact of CSR on the relationship between brand and firm performance has not yet been widely studied. Moreover, in the studies carried out, the authors obtained varying results, which indicates that at the moment there is no consensus regarding the impact of CSR. Therefore, we consider it appropriate to conduct a study wherein we attempt to assess the impact of CSR on the relationship between brand value and financial performance.

STATEMENT OF THE PROBLEM AND HYPOTHESES OF THE RESEARCH

Our research is aimed at determining the impact of CSR on the relationship between brand value and financial performance (*Fig. 1*), we assume that this relationship is enhanced when companies invest in CSR activities.

As part of our data analysis, we test hypotheses about the influence of the brand on the firm performance and try to find the moderating effect of CSR on this relationship.

Hypothesis 1: Brand value growth has a positive effect on financial performance.

In most empirical studies, to reflect the firm performance, financial indicators are used, calculated based on the accounting data, rather than market-based indicators [24, 25]. We also choose return on assets (ROA) and return on equity (ROE) as financial indicators, since they are one of the most frequently used financial indicators that act as exogenous variables in the relevant literature and reflect the firm performance [26]:

- ROA acts as an indicator reflecting the company's potential for generating cash flows in the future, and is an indicator of the stability of the company's financial position;
- ROE is a measure of profitability and is of great interest to shareholders.

Hypothesis 1.1: Brand value growth has a positive effect on return on assets.

Hypothesis 1.2: Brand value growth has a positive effect on the company's return on equity.

Within the framework of this study, it was decided to assess the influence of brand value not only on the financial ratios calculated based on the financial statements but also on the company's market value. It is believed that an increase in brand value drives its awareness in the market, which, in turn, leads to the growing attention from potential investors, and has an ultimately positive effect on the company's market value.

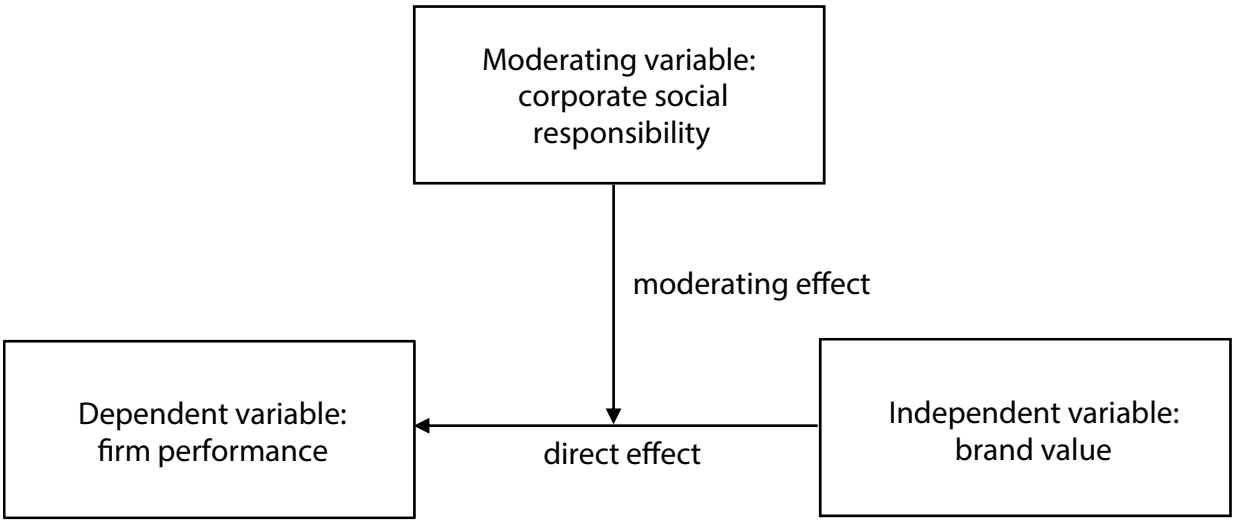

Fig. 1. **Expected relationship between exogenous and endogenous variables**

Source: compiled by the authors.

Hypothesis 1.3: Brand value growth has a positive effect on the company's market value.

According to stakeholder theory, stakeholders reward those companies that perform well in CSR activities and treat unfavourably companies that perform poorly in this area [27]. It can be argued that companies can consider CSR activities as some kind of investment, assuming that the CSR activities they have performed will enable them to achieve better financial results, so we test the following hypothesis:

Hypothesis 2: The actions of companies in the field of CSR have a positive effect on the relationship between brand value and financial performance. We test the impact on three financial metrics:

Hypothesis 2.1. CSR activities have a positive effect on the relationship between brand value and a company's return on assets.

Hypothesis 2.2. CSR activities have a positive effect on the relationship between brand value and a company's return on equity.

Hypothesis 2.3. CSR activities have a positive effect on the relationship between brand value and the company's market value.

Companies with higher brand value are more likely to participate in CSR activities on a proactive basis in order to inform the market that they are more socially responsible market participants than their competitors [28]. CSR initiatives undertaken by such companies will be more visible to stakeholders as opposed to companies with lower brand value, as strong brands have a higher level of market awareness. It follows that, by attracting more stakeholder attention, firms with relatively higher brand value may result in greater CSR benefits than firms with lower brand value [27].

Companies with high brand value receive a more favorable response from stakeholders regarding their CSR activities compared to firms with low brand value, which suggests that there is a positive interaction effect between brand value and CSR. In other words, the performance of two hypothetical firms with the same brand value will vary depending on the extent to which these firms invest in CSR activities and how effectively they use these activities in order to enhance their reputation and improve relationships with key stakeholders [23].

DATA

A sample of US companies was formed for the study, since the CEOs of US companies announced the decision to change the main corporate goal, which suggests that a certain

consensus has been reached in the community on measuring CSR indicators. The sample included companies for which brand value estimates were provided by the Interbrand consulting agency. Thus, the initial sample, based on the publicly available data, contained 1,064 observations of 90 companies for the period from 2000 to 2019.

As a proxy for CSR, following previous studies (H. Wang, S. Sengupta [6], G. Giannarakis [29], A. Dardour, J. Husser [30]), we used the ESG (Environmental, Social and Governance) rating, which is calculated by analysts and is designed to objectively and accurately measure the company's CSR activities in three aspects: environmental protection, social sphere and economy. The source was the Thomson Reuters Eikon database.

Indicators such as return on assets (ROA), return on equity (ROE), market value were considered as dependent variables.

Control variables are R&D, advertising, general selling and administrative expenses, the book value of assets, average number of employees, leverage, and industry.

The source for the dependent and control variables was the Thomson Reuters Eikon database. However, not every company in our sample was happen to have the necessary data for all 20 years, and therefore observations were removed from the original sample for which there is not a large amount of data. In particular, brand value estimates such as Compaq, LinkedIn, Sun Microsystems, The Wall Street Journal, TIME, and Wrigley have been removed due to lack of data on variables of interest, as well as several companies that were absorbed, as a result of which information on the firm performance was also unavailable.

In addition, several companies have a large number of brands, each of which is individually assessed by a consulting agency. For example, Coca-Cola Co. is a manufacturer of beverage brands such as Coca-Cola and Sprite. Both of these brands were present in the sample and, since it is possible to consider the financial indicators only for the Coca-Cola Co company taken as a whole, such observations were excluded.

Further, in the course of the preliminary analysis of the data, restrictions were imposed on the variable responsible for financial leverage, and the final sample was reduced to 962 observations from 2000 to 2019 of 78 companies from 32 industries.

For the convenience of further use of the variable responsible for belonging to the industry, it has been transformed into a categorical variable (*Fig. 2*), which takes on the value 1 if the company belongs to a consumer-oriented industry (goods and consumer services), 0 — otherwise (according to the Global Industry Classification Standard — GICS).

Descriptive statistics for the quantitative variables included in the final sample are given in *Table 1*, the Jarque-Bera test showed that the distribution of a set of values of variables does not violate the normal law.

The average brand value of the sample is $ 17,970.19 million. The average CSR score is 69.51, while the lowest value of this indicator is 20.78. On average, the return on assets of the firms in the sample is 9%, the return on equity is 29%, the market value of the average company in the sample is $ 107,141.18 million, and the revenue is $ 36,939.28 million, of which $ 6,735.57 million are allocated to selling and administrative expenses.

The performed check for the presence of multicollinearity showed that there is no strong correlation between the endogenous variables, which prevents the building of models (*Table 2*).

RESEARCH METHODOLOGY

The final sample is panel dataset; therefore, linear multiple regression was used for its analysis, formula (1):

$$y_{it} = a_{it} + x'_{it}\beta + u_{it}, \quad (1)$$

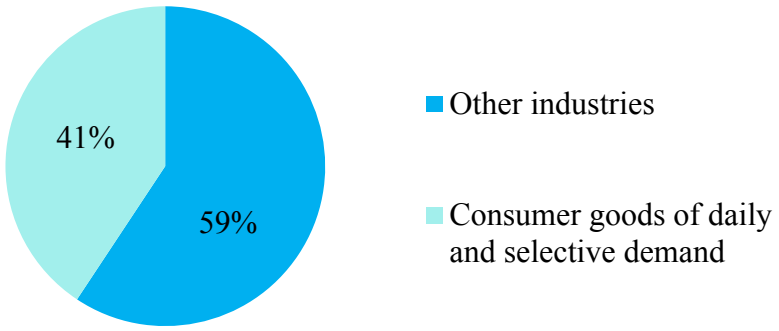

Fig. 2. **Industrial distribution of the companies in the sample**

Source: compiled by the authors based on the sample.

where: y_{it} — the dependent variable (financial performance of company i at time t, expressed in terms of return on assets, return on equity and market value), where $i = 1,\ldots n$ — the index of the object (company), $t = 1,\ldots T$ — the time index (period under consideration: 2000–2019);

a_{it} — the individual effect of the i-th object;

x'_{it} — a set of explanatory variables (brand value, CSR and a vector of control variables), which is a vector of dimension K, where K — the number of features;

β — a vector of coefficients of dimension $K \times 1$;

u_{it} — random observation errors.

The regression formula is used in this study to analyze three mathematical models.

Model A. "Return on assets":

$$ROA_{it} = f(Brand\,Value; ESG; Brand\,Value * ESG; SGA / TA; D / E; Ind; Lag(ROA); Revenue / Number\,of\,employees) + u_{Ait}.$$

Model B. "Return on equity" is a regression with fixed individual effects, the dependent variable in which is ROE, the set of explanatory variables in this model coincides with the previous regression model:

$$ROE_{it} = f(Brand\,Value; ESG; Brand\,Value * ESG; SGA / TA; D / E; Ind; Lag(ROE); Revenue / Number\,of\,employees) + u_{Bit}.$$

Model C. "Market value":

$$MV_{it} = f(Brand\,Value; ESG; Brand\,Value * ESG; SGA / TA; D / E; Ind; Revenue / Number\,of\,employees) + u_{Cit}.$$

To obtain effective estimates, it was decided to build several specifications for each model and choose the model where estimates will be consistent, unbiased, and efficient. To establish the desired relationship, we used a model with fixed individual effects, based on the assumption that each company has individual characteristics (unobserved heterogeneity) that can bias estimates of predictors or dependent variables, which leads to a correlation between the random error of the object (company) and explanatory variables. The fixed effects model allows us to eliminate the influence of these time-invariant characteristics and makes it possible to assess the net effect of endogenous variables on the dependent.

Endogeneity testing was carried out using the Hausman specification test, which tested the hypothesis that there was no correlation between individual effects and explanatory variables.

In addition, within the framework of our study, the fixed effects model was evaluated with the inclusion of both individual (specific for certain observations, but constant in time) and time (specific for a certain period of time, but constant for observations) effects, since it can be argued

Table 1

Descriptive statistics for companies in the sample

Variable	Unit	Average	Standard deviation	Min. value	Max. value	p-value (Jarque-Bera test)
Dependent variables						
Return on assets (ROA)	unit	0.09	0.07	–0.48	0.35	0.0000
Return on equity (ROE)	unit	0.29	0.26	–0.83	3.13	0.0000
Market value (MV)	USD million	107141.18	132978.25	685.80	1304764.77	0.0000
Brand measure						
Brand value	USD million	17970.19	24284.11	1235.00	234241.00	0.0000
CSR measure						
ESG score	unit	69.51	15.00	20.78	97.66	0.0000
Control variables						
Total assets (TA)	USD million	179113.64	416040.15	1491.55	2687379.00	0.0000
Selling, general and administrative expenses (SGA)	USD million	6735.57	7092.73	218.00	61323.00	0.0000
Selling, general and administrative expenses/ Total assets (SGA/TA)	unit	0.19	0.17	0.00	1.00	0.0000
Financial leverage (D/E)	unit	1.47	2.24	0.00	15.20	0.0000
R&D expenses	USD million	3742.62	4438.89	22.00	35931.00	0.0000
R&D expenses/TA	unit	0.06	0.04	0.00	0.19	0.0000
Revenue	USD million	36939.28	39763.90	203.00	291252.00	0.0000
Number of employees	unit	110674.71	110998.64	2625.50	722750.00	0.0000
Revenue/Number of employees	unit	0.52	0.44	0.00	3.29	0.0000

Source: compiled by the authors.

that for the companies in the sample, there are some unobservable time effects (e.g., business cycles) and company-specific effects that are constant over time (e.g., corporate culture, business practices, etc.). To check the feasibility of including such effects, an F-test was performed.

Since our study assumes that CSR affects the relationship between the brand and the firm performance, the models include the interaction effect to test this relationship. This effect is observed in cases when the influence of the independent variable x (within the framework of this study, this

Table 2

Correlation matrix of the dependent and explanatory variables

	ROA	ROE	MV	BV	ESG	TA	R&D	R&D / TA	SGA	SGA / TA	D / E	Rev / N
ROA	1.00											
ROE	0.39***	1.00										
MV	0.12***	0.00	1.00									
BV	0.16***	0.08**	0.77***	1.00								
ESG	0.08**	0.07*	0.25***	0.25***	1.00							
TA	−0.36***	−0.27***	0.23***	0.04	0.13***	1.00						
R&D	0.18***	0.08	0.81***	0.71***	0.38***	0.74***	1.00					
R&D / TA	0.00	−0.19***	0.25***	0.18***	0.06	0.02	0.52***	1.00				
SGA	0.01	0.01	0.61***	0.45***	0.37***	0.19***	0.64***	0.14***	1.00			
SGA / TA	0.25***	0.20***	−0.22***	−0.20***	−0.10***	−0.36***	−0.11**	0.17***	−0.02	1.00		
D / E	−0.38***	0.14***	−0.12***	−0.10***	−0.04	0.65***	−0.21***	−0.37***	−0.11***	−0.17***	1.00	
Rev / N	0.05	−0.10**	0.39***	0.24***	−0.23***	0.29***	0.19***	0.00	0.13***	−0.32***	0.13***	1.00

Source: compiled by the authors.

Note: ***, **, * — significance at the 1, 5 and 10% level respectively.

is the brand value) on the dependent variable y (the financial performance of the company) changes depending on the moderating variable z (CSR level).

The same set of control variables was used in the models we evaluated. We control for the size of the firm, since this parameter can significantly affect the financial performance of companies: the larger the firm, the greater the number of resources and opportunities it has to maintain a competitive advantage due to economies of scale [31]. In the literature, usually the following options for accounting for this parameter are offered: the natural logarithm of total assets [23], sales proceeds [6, 13] or the average number of employees in a company [12, 14, 32]. Thus, the size of the firm in our models was estimated in turn using these variables. Evaluated models include those predictors that show the strongest correlation with each of the dependent variables.

The researchers also point to the need to include variables reflecting advertising and R&D expenditures as controls. As an important component of the brand promotion process, advertising can increase brand awareness and significantly improve the brand image, so that the company's products will compare favorably with those of its competitors [33]. Thus, the company will be able to set a higher price for its products in comparison with the competitor's products with identical characteristics, which ultimately can have a positive impact on the company's financial performance. Concerning R&D expenditures, many studies confirm that this parameter, along with company size, risk, past financial performance, and industry affiliation, is a reliable predictor of company performance [34–38]. However, given that many companies do not disclose data on advertising expenditures, and more than half of the values for R&D expenditures are not available (the number of missing values corresponds to 58.63%), it is inappropriate to use these variables in this study. In this case, the generally accepted alternative is to use general selling and administrative expenses as a proxy for advertising costs [6, 39]. To exclude

the possible presence of economies of scale due to the use of this variable in its original form, general selling and administrative expenses were normalized by total assets. The resulting indicator is interpreted by some authors as the intensity of sales [23].

Following previous studies, as a control variable, we use financial leverage, calculated as total liabilities to equity, as a proxy of risk [23, 38].

In addition, the researchers suggest taking into account such a parameter as labor productivity [23]. It is obvious that employees have a significant influence on the company's performance, due to which higher labor productivity guarantees the higher financial performance of the company. The ratio of revenue to the number of employees acts as a proxy to this parameter.

Finally, given that the current values of the company's financial indicators are highly dependent on the past ones [38], namely, the financial ratios tend to converge to the average value, i.e. high (low) values are usually followed by lower (higher) values [37]; it is also necessary to control for the lagged value of the exogenous variable used in the model. Therefore, the model with the dependent variable of return on assets includes the return on assets of the previous year as a control one. The past values of other exogenous variables are considered in a similar way. Thus, the indicators described above are the part of the set of control variables included in the models of our study. It seems possible to include industry affiliation only in the model with time effects.

DESCRIPTION OF RESULTS

Model A. "Return on assets"

The first specification is a pooled regression model where the dependent variable is ROA. This model was built as a default one, however, it should be noted that this model does not consider the panel dataset structure, in particular, individual differences between companies.

As explanatory variables, the model included brand value, ESG score, the logarithm of sales revenue as a proxy of company size, financial leverage, industry affiliation, the share of general selling and administrative expenses in total assets, one year lagged ROA, and the ratio of revenue to the number of employees.

The specifications of model A considered by us are presented in *Table 3*: specification (1) is a pooled regression, specifications (2), (3), (4), and (5) are models with fixed individual effects (the results of the conducted Hausman specification test indicate the advisability of using models with fixed effects). Specification (2) included the same explanatory variables as a specification (3), except for the interaction effect. This was done in order to assess the contribution of the interaction effect of brand value and CSR to the explanation of the variance of the dependent variable. All the constructed model specifications were estimated using the least squares method (OLS), whereby specifications (1), (2), and (3) are linear-log: the return on assets is the dependent variable in them. In specifications (4) and (5), the logarithm of the return on assets acts as an exogenous variable, and model (5) is completely logarithmic.

As criteria for assessing the quality of models, we consider the coefficient of determination and the p-value of the F-statistic. According to the value of the F-statistic, all presented models are significant. According to the value of the determination coefficient, the best specification is (1). However, since this model was assessed as a default one and does not consider the presence of individual differences between companies, we will define the model of the highest quality without taking into consideration the pooled regression. Thus, the highest proportion of the explained variance of the dependent variable is demonstrated by the specification (4). It should be noted that during the transition from one specification to another, the signs of the estimates of the

Table 3

Comparison of the quality of regression models with the dependent variable of return on assets

Regressors	(1)	(2)	(3)	(4)	(5)
Brand value		−0.000000493***	−0.00001431***		
Brand value logarithm					
CSR	0.00026*				
CSR logarithm					−2.30326**
Interaction effect between brand value and CSR			0.000000012*	0.00000015*	
Interaction effect between brand value and CSR (logarithm)					0.24466*
Total assets logarithm					−0.54532***
Sales revenue logarithm		0.02130***	0.02349***		
Industry					
Financial leverage	-0.00410***	−0.00336**	−0.00353**		
Financial leverage logarithm					−0.21292**
Ratio of selling, general and administrative expenses to total assets	0.03422***	0.21983***	0.22269***	1.92972***	
Ratio of selling, general and administrative expenses to total assets (logarithm)					
Revenue/Number of employees ratio	0.01314***		0.04221***	0.46876***	
Revenue/Number of employees ratio logarithm					0.38581***
ROA value in the past period	0.71920***			3.29819***	
ROA value in the past period (logarithm)					0.12366***
Constant					
$prob(F-stat.)$	0.0000	0.0000	0.0000	0.0000	0.0000
R^2	0.6672	0.1189	0.1241	0.1658	0.1503
Number of observations	610	639	639	599	589

Source: compiled by the authors.

Note: ***, **, * – significance at the 1, 5 and 10% level respectively. The table presents only significant variables. Newey-West standard error correction for estimates was conducted to get heteroskedasticity and autocorrelation consistent estimators. The obtained estimates are unbiased, consistent and inefficient for all specifications except the first one.

coefficients do not change, which is evidence of the quality of the constructed models.

Specification (2) was considered in order to estimate the contribution of the interaction effect included in the model later. Thus, during the transition from one regression to another, an increase in the adjusted coefficient of determination is observed, albeit insignificant. This indicator controls for the number of variables included, so it can be argued that considering the interaction effect between brand value and CSR helps to explain a greater proportion of the variance of the dependent variable.

The presented above results show that, contrary to expectations, *hypothesis 1.1*. on the positive effect of brand value on return on assets has not been confirmed. In three specifications, the brand value was found to be insignificant, but in the other models, the negative significant coefficient is observed. This result contradicts previous studies. Thus, in the work of A. Krasnikov, S. Mishra, D. Orozco [12], a positive influence of the brand on ROA was found. This may be due to the method used to measure the brand, as in this study, trademarks were used as a proxy to the brand, and not the brand value estimates provided by the consulting agency.

However, our *hypothesis 2.1*. on the positive impact of CSR on the relationship between brand value and such financial results as return on assets was confirmed. Thus, in three specifications, the interaction effect of brand value and CSR turned out to be significant. This suggests that for companies with different CSR levels, the influence of brand value on return on assets is different. A positive significant coefficient indicates that with a higher CSR, there is a stronger relationship between the brand value and return on assets, while with a lower CSR level, there is a weaker relationship between the brand and the specified indicator, i.e. the impact of brand value on return on assets is enhanced if the company has a higher level of social responsibility.

When analyzing the impact of CSR on the return on assets, specification (1) indicates that with an increase in the value of CSR, an increase in the return on assets is observed. At the same time, in the model (5), a negative influence of the company's initiatives in the framework of CSR on the return on assets was obtained. This effect can be explained by the fact that companies spend additional funds to implement such initiatives. It should be noted that the observed uncertainty in the impact of the company's level of social responsibility on the return on assets is consistent with the findings of previous studies. The reason for this may be the lack of a comprehensive measure to assess companies' performance in the field of CSR.

A number of control variables were also included in the regression models, to which the focus of this study is not limited, but the influence of which should be considered based on the opinion of many researchers on the issue under consideration. As expected, ROA increases as the company's investment in advertising grows. A 1 unit increase in the ratio of general selling and administrative expenses to total assets on average and all other things being equal, leads to approximately 6% growth in the company's return on assets. The same results were obtained in previous studies [6, 39].

The influence of leverage, which was included in the regressions as an indicator of risk, testifies to the negative effect of financial leverage growth on the company's return on assets. So, a 1% increase in the ratio of total liabilities to equity results in an average of 0.21% decrease in ROA. We can say that such a result was also expected and is consistent with common sense. Despite the fact that debt financing is cheaper for companies than their own, the growth of financial leverage leads to the fact that the company's capital structure becomes more risky, which negatively affects the return on assets.

All specifications show a positive impact of labor productivity on ROA. A 1 unit increase

in the ratio of revenue to the number of employees on average and all other things being equal leads to a 0.59% increase in return on assets. The authors of studies in the relevant literature have also obtained a positive effect of this parameter on financial results [23].

Another control variable that has a positive impact on the return on assets was the one year lagged ROA. So, a 1 unit increase in the past ROA will on average lead to approximately 26% increase in the current ROA. This effect is consistent with the findings of the researchers that the current values of the company's financial indicators are highly dependent on the past ones [38].

Model B. "Return on equity".

We have considered five specifications of the model; the results are presented in *Table 4*: (1) — pooled regression, (2) and (3) are linear-log, and in the specification (2) all predictors of the model (3) act as explanatory variables, except for the interaction effect, which will allow us to estimate the contribution of this effect to the explanation of variance of dependent variable. The return on equity acts as an exogenous variable in specifications (1), (2), and (3), the logarithm of ROE — in specifications (4) and (5), and specification (5) is completely logarithmic.

All the obtained regression models, except for the first one, are fixed effects models, the feasibility of using which was verified by the Hausman specification test. The models were estimated using OLS.

In accordance with the results (*Table 4*), it can be argued that all the constructed models are significant, in addition, the specifications retain the signs of the coefficient estimates, which indicates the quality of the constructed models. Among the specifications, the best result in terms of the coefficient of determination, as in the case of regressions with the dependent variable ROA, is demonstrated by the pooled regression model: the proportion of the explained variance of the dependent variable corresponds to 77%. However, given that this model does not take into account the presence of individual differences between companies, let's compare the quality of the other models. Thus, the variance of the dependent variable is best explained by the model (5), while in the other models the proportion of variance explained is approximately equal to 26%.

Our *hypothesis 1.2.* on the impact of brand value on return on equity has been confirmed. Brand value has a positive effect on ROE — this result is observed in four specifications: a 1% increase in brand value on average, and all other things being equal, leads to 0.82% increase in ROE.

Contrary to expectations, *hypothesis 2.2.* which assumes that the value of CSR strengthens the relationship between brand value and such a financial result as return on equity has not been confirmed. The interaction effect of brand value and CSR turned out to be insignificant in all specifications, i.e. the influence of brand value on ROE is the same for companies with different levels of CSR, the level of social responsibility of the company neither enhances nor diminishes the influence of the brand on the return on equity.

Three specifications confirm the positive impact of CSR on ROE: a 1 unit increase in the ESG score results in an increase in ROE by 0.0047 units on average.

Analysis of the control variables showed that, as in the case of ROA, advertising costs have a positive effect on the return on equity. A 1 unit increase in the ratio of general selling and administrative expenses to total assets on average and all other things being equal leads to an increase in ROE by about 0.28 units. In addition, a positive effect of financial leverage on ROE is observed. Furthermore, a significant effect of the firm size, proxied by the total assets, on ROE was revealed. Thus, a negative coefficient indicates that with an increase in the size of the firm, the return on equity decreases, this result is confirmed in all specifications.

Table 4

Regression models with dependent variable of return on equity

Regressors	(1)	(2)	(3)	(4)	(5)
Brand value		0.0000027***	0.0000069**	0.000014**	
Brand value logarithm					0.82356**
CSR		0.00395***	0.0047***	0.01398***	
CSR logarithm					
Interaction effect between brand value and CSR					
Interaction effect between brand value and CSR (logarithm)					
Total assets logarithm	−0.02668***	−0.10528***	−0.10695***	−0.25655***	−0.57920***
Number of employees logarithm					
Sales revenue logarithm					
Industry		−0.07954***	−0.08060***		
Financial leverage	0.01415***	0.07850***	0.07969***	0.13062***	
Financial leverage logarithm					0.58834***
Ratio of selling, general and administrative expenses to total assets		0.28448***	0.28670***	0.82393***	
Ratio of selling, general and administrative expenses to total assets (logarithm)					
Revenue/Number of employees ratio					
Revenue/Number of employees ratio logarithm					0.17688***
ROA value in the past period	0.81624***				
ROA value in the past period (logarithm)					
Constant	0.28187***				
$prob(F-stat.)$	0.0000	0.0000	0.0000	0.0000	0.0000
R^2	0.7697	0.2628	0.2663	0.2623	0.3631
Number of observations	463	506	506	505	505

Source: compiled by the authors.

Note: ***, **, * — significance at the 1, 5 and 10% level respectively. The table presents only significant variables. Newey-West standard error correction for estimates was conducted to get heteroskedasticity and autocorrelation consistent estimators. The obtained estimates are unbiased, consistent and inefficient.

Model C. "Market value".

We have considered four specifications of the model, the results are presented in *Table 5*: (1) — linear-log model, pooled regression, (2) — linear-log model with fixed individual effects. Specifications (2), (3), and (4) are models with fixed individual effects, with the dependent variable in models (3) and (4) being

Table 5

Regression models with a market cap dependent variable

Regressors	(1)	(2)	(3)	(4)
Brand value			0.00001*	
Brand value logarithm				0.58205*
CSR			0.00494**	
CSR logarithm				
Interaction effect between brand value and CSR	0.03953***	0.03554***		
Interaction effect between brand value and CSR (logarithm)				
Total assets logarithm	35 799.75***	36 213.85***		0.45181***
Number of employees logarithm				
Sales revenue logarithm			0.40010***	
Industry				
Financial leverage	−15 980.70***	−16 777.81***	−0.03111**	
Financial leverage logarithm				−0.18247***
Ratio of selling, general and administrative expenses to total assets	107 204.37***	120 819.64***	−0.94222**	
Ratio of selling, general and administrative expenses to total assets (logarithm)				0.09935*
Revenue/Number of employees ratio	69 598.40***	65 591.03***		
Revenue/Number of employees ratio logarithm				
ROA value in the past period	−353 986.15***			
$prob(F-stat.)$	0.0000	0.0000	0.0000	0.0000
R^2	0.7498	0.7508	0.3405	0.5717
Number of observations	641	641	643	643

Source: compiled by the authors.

Note: ***, **, * — significance at the 1, 5 and 10% level respectively. The table presents only significant variables. Newey-West standard error correction for estimates was conducted to get heteroskedasticity and autocorrelation consistent estimators. The obtained estimates are unbiased, consistent and inefficient.

the logarithm of market capitalization, and the model specification (4) being completely logarithmic. All constructed models were also evaluated using OLS.

According to the results of the model evaluation (*Table 5*), all presented specifications are significant. The coefficient of determination shows that the best is the specification of the model (2): it explains the highest proportion of the variance of the dependent variable — 75%. In models (1), (3), and (4), this indicator corresponds to 74.9, 34, and 57%, respectively. It should also be noted that the signs of the coefficient estimates in the models are predominantly preserved during the transition from one specification to another, which indicates the quality of the constructed models.

Hypothesis 1.3. on the positive impact of brand value on market value was confirmed. This effect is found in two specifications. Thus, a 1% increase in brand value results in 0.58% increase in the company's capitalization on average and all other things being equal. Hence it appears that the company's investments in brand development, which contribute to the growth of brand equity, lead to an increase in the company's market value, and this, in turn, entails the attraction of many potential investors, which brings an increase of capital inflow into the company.

It can be argued that *hypothesis 2.3.* on the positive impact of CSR on the relationship between brand value and such a market indicator as capitalization has been confirmed: a significant interaction effect is observed in the two models. A positive coefficient indicates that a higher level of corporate social responsibility leads to a stronger relationship between the brand and market value, while a lower level of CSR results in a weaker relationship between the brand and the specified indicator. Thus, the influence of brand value on market value is enhanced if the company is characterized by high level of socially responsible and ethical behavior.

Analysis of the control variables showed that an increase in such a determinant as advertising expenditures results in an increase in market value (observed in all four specifications). Also, in all specifications, a negative effect of leverage on market value was found, which is quite logical, since, with the growth of financial leverage, the company's capital structure becomes more risky, and therefore, can negatively affect the interest of potential investors in the company, thereby leading to a decrease in its market value. The variable reflecting the size of the company has a positive effect on the market value: this is due to the fact that as the size of the company increases, the company's recognition in the market grows, which leads to the awareness of potential investors and increase their interest in relation to the given company and ultimately — to the growth of market value.

Thus, on the whole, it can be argued that the results obtained in the course of our study are relevant: the signs of the coefficient estimates do not contradict common sense and correspond to the conclusions of the researchers. Moreover, given that the significance of the parameter estimates is not lost, and the signs in the estimated models do not change during the transition from one specification to another, we can speak both about the robustness of the identified effects and the quality of the tested regressions.

LIMITATIONS AND FUTURE RESEARCH

Our study is no exception and has a number of limitations:

- due to the fact that the Interbrand agency evaluates only the most expensive brands, the sample formed for the study is characterized by a bias towards expensive companies. Consequently, the focus of this study is limited solely to large corporations that pay special attention to their brands and invest a significant amount of funds in their maintenance and development. Given this, it becomes impossible to generalize the identified effects to a population of all firms, and when conducting studies on samples that include more heterogeneous companies, other relationships between the brand, CSR and the results of companies' performance may be found;
- consulting agencies often separately estimate the value of several different brands that belong to the same company, however, to build a model, the financial performance of only one company can be used, despite the fact that it is assumed that when assessing the brand value, consulting agencies consider indicators for all companies to which the evaluated brand belongs;
- there is a limitation associated with the variable reflecting the company's CSR activities: at present, the company's CSR initiatives are assessed only on the basis of the company's degree of disclosure of information on these

activities due to the lack of a tool for assessing the quality of these practices, therefore, using this variable it is possible only to assess the disclosure degree by the company of information on these activities, and not the actual level of social responsibility and ethics of the company;

- the results obtained also cannot be generalized to the entire population due to the fact that companies from only one country are considered;
- in addition, it should be noted that some researchers suggest the lagged influence of branding on financial performance. By analogy with intellectual property rights, advertising, and R&D, actions of creating a brand, also through CSR, take some time to influence the company's performance.

CONCLUSIONS

Claims that companies with CSR activities have some advantages are already widespread both in the business press and in empirical research. The European Union has officially recognized the existence of the concept of CSR in corporate governance.

The theoretical contribution of this study is that, in contrast to most previous studies, which focused on the direct impact of CSR on a company's financial performance, we assume that there are also indirect effects. Moreover, in previous studies, the authors obtained conflicting results, which indicates that there is currently no consensus regarding the effect of CSR. Our main argument is that the company's CSR helps to increase brand value, which, in turn, has an impact on improving financial performance.

The effects revealed in the course of our study partly confirm the hypotheses put forward and serve as evidence of the existence of the effect of CSR on the relationship between brand value and financial performance. Thus, the hypothesis which assumes that companies with a higher CSR level have a stronger relationship between brand value and return on assets, i.e. the positive relationship between brand value and ROA is reinforced with large CSR initiatives by companies, was confirmed. It was also revealed that the relationship between brand value and the market value of a company is enhanced when the company, among other things, invests in CSR.

The findings of our research may be valuable for marketing specialists, owners, top managers, and investors, as well as may be used in the educational process. The effects found in the course of the study may serve as evidence of the importance of investing in the brand and participation of companies in CSR initiatives due to their significant impact on the financial performance of companies. Companies can use CSR initiatives as a tool for managing relationships with key stakeholders, and also as socially necessary initiatives and generally beneficial for the company.

In addition, since the role of corporate social responsibility is becoming more and more important, and the company's accomplishment of a certain public function can be encouraged by the state, the research materials may be used by public authorities to encourage the social responsibility of business.

REFERENCE

1. McWilliams A., Siegel D. Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review.* 2001;26(1):117–127. DOI: 10.5465/AMR.2001.4011987
2. Stiglitz J. Key challenges facing modern finance: Making the financial sector serve society. *Finansy: teoriya i praktika = Finance: Theory and Practice.* 2020;24(2):6–21. DOI: 10.26794/2587–5671–2020–24–2–6–21
3. Barney J., Wright M., Ketchen D.J. The resource-based view of the firm: Ten years after 1991. *Journal of Management.* 2001;27(6):625–641. DOI: 10.1177/014920630102700601
4. Ailawadi K.L., Lehmann D.R., Neslin S.A. Revenue premium as an outcome measure of brand equity. *Journal of Marketing*. 2003;67(4):1–17. DOI: 10.1509/jmkg.67.4.1.18688
5. Aaker D.A. Managing brand equity. New York: The Free Press; 1991. 299 p.

6. Wang H.-M.D., Sengupta S. Stakeholder relationships, brand equity, firm performance: A resource-based perspective. *Journal of Business Research*. 2016;69(12):5561–5568. DOI: 10.1016/j.jbusres.2016.05.009
7. Simon C.J., Sullivan M.W. The measurement and determinants of brand equity: A financial approach. *Marketing Science*. 1993;12(1):28–52. DOI: 10.1287/mksc.12.1.28
8. Aaker D.A., Jacobson R. The financial information content of perceived quality. *Journal of Marketing Research*. 1994;31(2):191–201. DOI: 10.2307/3152193
9. Kerin R.A., Sethuraman R. Exploring the brand value-shareholder value nexus for consumer goods companies. *Journal of the Academy of Marketing Science*. 1998;26(4):260–273. DOI: 10.1177/0092070398264001
10. Barth M.E., Clement M.B., Foster G., Kasznik R. Brand values and capital market valuation. *Review of Accounting Studies*. 1998;3(1/2):41–68. DOI: 10.1023/A:1009620132177
11. Madden T.J., Fehle F., Fournier S. Brands matter: An empirical demonstration of the creation of shareholder value through branding. *Journal of the Academy of Marketing Science*. 2006;34(2):224–235. DOI: 10.1177/0092070305283356
12. Krasnikov A., Mishra S., Orozco D. Evaluating the financial impact of branding using trademarks: A framework and empirical evidence. *Journal of Marketing*. 2009;73(6):154–166. DOI: 10.1509%2Fjmkg.73.6.154
13. Verbeeten F.H.M., Vijn P. Are brand-equity measures associated with business-unit financial performance? Empirical evidence from the Netherlands. *Journal of Accounting, Auditing & Finance*. 2010;25(4):645–671. DOI: 10.1177/0148558X1002500408
14. Agostini L., Filippini R., Nosella A. Brand-building efforts and their association with SME sales performance. *Journal of Small Business Management*. 2015;53(S 1):161–173. DOI: 10.1111/jsbm.12185
15. Gromark J., Melin F. The underlying dimensions of brand orientation and its impact on financial performance. *Journal of Brand Management*. 2011;18(6):394–410. DOI: 10.1057/bm.2010.52
16. Morgan N.A., Slotegraaf R.J., Vorhies D.W. Linking marketing capabilities with profit growth. *International Journal of Research in Marketing*. 2009;26(4):284–293. DOI: 10.1016/j.ijresmar.2009.06.005
17. Margolis J.D., Elfenbein H.A., Walsh J.P. Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate, social and financial performance. 2007. URL: https://www.academia.edu/750748/Does_it_pay_to_be_good_A_meta_analysis_and_redirection_of_research_on_the_relationship_between_corporate_social_and_financial_performance
18. Flammer C. Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*. 2015;61(11):2549–2568. DOI: 10.1287/mnsc.2014.2038
19. Barney J. Firm resources and sustained competitive advantage. *Journal of Management*. 1991;17(1):99–120. DOI: 10.1177/014920639101700108
20. Hart S.L. A natural-resource-based view of the firm. *The Academy of Management Review*. 1995;20(4):986–1014. DOI: 10.5465/amr.1995.9512280033
21. Porter M.E., Kramer M.R. Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*. 2006;84(12):78–92.
22. Wang D.H.-M., Chen P.-H., Yu T.H-K., Hsiao C.-Y. The effects of corporate social responsibility on brand equity and firm performance. *Journal of Business Research*. 2015;68(11):2232–2236. DOI: 10.1016/j.jbusres.2015.06.003
23. Rahman M., Rodríguez-Serrano M.Á., Lambkin M. Brand equity and firm performance: the complementary role of corporate social responsibility. *Journal of Brand Management*. 2019;26(6):691–704. DOI: 10.1057/s41262–019–00155–9
24. Waddock S.A., Graves S.B. The corporate social performance-financial performance link. *Strategic Management Journal*. 1997;18(4):303–319. DOI: 10.1002/(SICI)1097–0266(199704)18:4%3C303::AID-SMJ869%3E 3.0.CO;2-G
25. Simpson W.G., Kohers T. The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics*. 2002;35(2):97–109. DOI: 10.1023/A:1013082525900
26. Palmer H.J. Corporate social responsibility and financial performance: Does it pay to be good? CMC Senior Theses. Paper. 2012;(529). URL: https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1502&context=cmc_theses#:~:text=Results%20also%20indicate%20that%20increased,a%20company%20with%20CSR%20initiatives

27. Jamali D. A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*. 2008;82(1):213–231. DOI: 10.1007/s10551–007–9572–4
28. Lamberti L., Lettieri E. CSR practices and corporate strategy: Evidence from a longitudinal case study. *Journal of Business Ethics*. 2009;87(2):153–168. DOI: 10.1007/s10551–008–9876-z
29. Giannarakis G. The determinants influencing the extent of CSR disclosure. *International Journal of Law and Management*. 2014;56(5):393–416. DOI: 10.1108/IJLMA-05–2013–0021
30. Dardour A., Husser J. Does it pay to disclose CSR information? Evidence from French companies. *Management International*. 2016;20(Spec. No.):94–108. URL: https://www.erudit.org/fr/revues/mi/2016-v20-mi04839/1063708ar.pdf
31. Roberts P.W., Dowling G.R. Corporate reputation and sustained superior financial performance. *Strategic Management Journal*. 2002;23(12):1077–1093. DOI: 10.1002/smj.274
32. Gherghina S.C., Simionescu L.N. Does entrepreneurship and corporate social responsibility act as catalyst towards firm performance and brand value? *International Journal of Economics and Finance*. 2015;7(4):23–34. DOI: 10.5539/ijef.v7n4p23
33. Erickson G., Jacobson R. Gaining comparative advantage through discretionary expenditures: The returns to R&D and advertising. *Management Science*. 1992;38(9):1264–1279. DOI: 10.1287/mnsc.38.9.1264
34. Griliches Z. Issues in assessing the contribution of research and development to productivity growth. *The Bell Journal of Economics*. 1979;10(1):92–116. DOI: 10.2307/3003321
35. Gooding R.Z., Wagner J.A. A meta-analytic review of the relationship between size and performance: The productivity and efficiency of organizations and their subunits. *Administrative Science Quarterly*. 1985;30(4):462–481. DOI: 10.2307/2392692
36. Miles G., Snow C.C., Sharfman M.P. Industry variety and performance. *Strategic Management Journal*. 1993;14(3):163–177. DOI: 10.1002/smj.4250140302
37. Ruf B.M., Muralidhar K., Brown R.M., Janney J.J., Paul K. An empirical investigation of the relationship between change in corporate social performance and financial performance: A stakeholder theory perspective. *Journal of Business Ethics*. 2001;32(2):143–156. DOI: 10.1023/A:1010786912118
38. Shahzad A.M., Sharfman M.P. Corporate social performance and financial performance: Sample-selection issues. *Business & Society*. 2017;56(6):889–918. DOI: 10.1177/0007650315590399
39. Berman S.L., Wicks A.C., Kotha S., Jones T.M. Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *The Academy of Management Journal*. 1999;42(5):488–506. DOI: 10.5465/256972

ABOUT THE AUTHORS

Natal'ya Yu. Zhukova — Cand. Sci. (Econ.), Assoc. Prof., Department of Economics and Finance, HSE University, Perm branch, Perm, Russia
nuzhukova@hse.ru

Aigun E. Melikova — Master of Finance, HSE University, Perm branch, Perm, Russia
aigun_melikova@mail.ru

The article was submitted on 28.08.2020; revised on 11.09.2020 and accepted for publication on 07.12.2020. The authors read and approved the final version of the manuscript.