

IMPACT OF SELECTED DETERMINANTS OF CORPORATE GOVERNANCE ON FINANCIAL PERFORMANCE OF COMPANIES

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Abstract: The role of corporate governance (CG) is to ensure the functioning of companies in accordance with formulated objectives to ensure the growth of the corporate assets and the satisfaction of its owners. In addition to the management of the company, other groups of persons whose interests need to be taken into account in meeting the owners' objectives. These include creditors, employees, clients, and the wider surroundings of the business. The aim of this paper is to explore and compare the impact of selected financial and non-financial determinants representing the interests of these groups on corporate financial performance. The influence of determinants of CG on the financial performance, measured by return on assets (ROA), return on equity (ROE) and return on sales (ROS), is investigated by means of correlation analysis. The sample of enterprises consists of non-financial stock companies listed on The Bratislava Stock Exchange, insurance companies and banks based in Slovakia. The findings show that each of the investigated determinants of CG affects the financial performance of companies. ROA, ROE and ROS of share issuers are significantly influenced by the total equity (EQ), average remuneration (AR) and number of the Board of Supervisor members (BSM). In banks, performance indicators are only influenced by total personal costs (PC). ROA, ROE and ROS of all companies are influenced by dividend ratio (DR), EQ, AR and BSM.

Keywords: corporate governance, globalization, financial performance, stakeholders' interests

JEL Classification: F65, G32, G34

1. Introduction

Corporate governance (CG) is currently the focus of several researches. The role of CG is to ensure functioning of companies in accordance with formulated strategic and operational objectives, which are to ensure the growth of the value of the company's assets and satisfaction of its owners. The principles recommended in CG are the result of globalization trends (Schymik, 2018) and have a transnational dimension.

Several important organizations have been dealing with CG issues. Among them are the Organization for Economic Cooperation and Development (OECD). According to OECD, CG

helps to build the climate of confidence, transparency and accountability needed to support long-term investments, financial stability and corporate integrity, there by fostering stronger growth and a more inclusive society (www.oecd.org). In order to fulfil its mission, the OECD drafted CG principles in 1999 and reviewed and supplemented them in 2004 and 2015. The current version was developed in cooperation with the OECD Corporate governance Committee with the G20. They consist of 6 separate chapters: (I) Ensuring the basis for an effective CG framework, (II) The rights and equitable treatment of shareholders and key ownership functions, (III) Institutional investors, stock markets, and other intermediaries, (IV) The role of stakeholders in CG, (V) Disclosure and transparency, (VI) The responsibilities of the board. Each of the chapters contains a list of supporting sub-principles, supplemented by explanatory notes.

Relationships between corporate performance and CG are discussed in detail by the professional public and many contributions have been published on this topic, e.g. (Bhagat and Bolton, 2008; Bhagat and Bolton, 2019; Paniagua et al., 2018; Di Bernardino, 2015; Naciti, 2019; Hearn, 2011).

Khanchel (2007) examines CG issues from the perspective of its measurement and indicates the following determinants of strong CG: independent directors, independence of committees, board size, split chairman/CEO roles, board meetings, competence of audit committee members, reputation of auditors, audit committee meetings.

A well-functioning business management system helps the company attract investment, raise funds (Musa et al., 2014b) and strengthen key business performance factors (Grofcikova, 2016a), (Grofcikova, 2016b), (Valaskova et al., 2018), (Rodriguez-Fernandez, 2016). In addition, good CG strengthens the financial stability of the company and its resilience to future financial problems (Musa et al., 2014a), strengthens decision-making processes and reduces conflicts of interest between stakeholders, minimizes shareholder control over company management. This, according to Shleifer a Vishny (1997), increases the likelihood that managers will invest in projects with a positive net present value.

Zahroh and Hamidah (2016) examine the relationship between corporate financial performance and CG in terms of board size and independence, audit committee independence, audit quality and the degree of implementation of CG principles. Other contributions examine the impact of selected determinants of CG on corporate performance, measured most commonly by ROA and ROE on a sample of enterprises, for example from Vietnam (Vo and Phan, 2013), Malaysia (Fooladi et al., 2014), India (Waleed et al., 2019), Singapore (Vu and Nguyen, 2017), Japan (Mizuno, 2010), Turkey (Ararat et al., 2017), Thailand (Detthamrong et al., 2017), or the United Kingdom (Akbar et al., 2016).

CG models are based on basic management theories that Afza and Nazir (2014) categorize into agency theory, stewardship theory, stakeholder theory, resource dependence theory, transaction cost theory and political theory in their paper.

The contribution is based on the assumptions of stakeholder theory, because in addition to the management of the business, other groups of people whose interests need to be taken into account are involved in meeting the objectives of the owners. These include creditors who provide repayable funding to the enterprise, employees, clients, but also the wider environment of the enterprise represented by the state and the population.

2. Methodology

The aim of the paper is to present the results of the research, whose aim was to examine and compare the impact of selected financial and non-financial determinants representing the interests of four basic interest groups in accordance with stakeholders' theory on the financial

performance of companies. The author measured the performance of companies by indicators of return on assets, return on equity and return on sales calculated from the net profit of the company. The research was conducted on a basic set of entities, which was divided into three groups: (1) non-financial joint-stock companies whose shares are listed on The Bratislava Stock Exchange, (2) insurance companies based in Slovakia and (3) banks and building savings banks based in Slovakia. All these entities are joint-stock companies, which, in accordance with the valid legislation of the Slovak Republic, create the governing bodies, i.e. Board of Directors and Board of Supervisor, which as determinants of CG are part of this research. For this reason, branches of foreign banks and insurance companies were not considered. The object of this research was to compare findings between groups of these subjects.

The description and definitions of selected financial and non-financial determinants of CG, including the identification of the interest group that the determinant represents, are included in Table 1.

Table 1: Definition of variables examined

| | Symbol | Description and measurement (stakeholders identifier) |
|------------------------------------|--------|---|
| Financial performance determinants | ROA | Return on Assets in % (net profit / total assets) |
| | ROE | Return on Equity in % (net profit / equity) |
| | ROS | Return on Settlement in % (net profit / revenues) |
| | EQ | Total equity (in EUR) (1) |
| Financial CG determinants | DR | Dividend ratio in % (dividend paid in 2017 / net profit in 2016) (1) |
| | AR | Average remuneration per member of the Company's governing bodies (in EUR) (total remuneration paid to members of the Board of Directors and Board of Supervisors together / sum of the members of the Board of Directors and Board of Supervisors) (2) |
| | PC | Total personnel costs (EUR) (3) |
| | TI | Total indebtedness ((Assets-Equity)/Assets) (4) |
| Non-financial CG determinants | LSH | Percentage of the largest shareholder in the share capital (%) (1) |
| | QSH | Number of qualifying shareholders (1) |
| | BDM | Number of the Board of Directors members, including the Chairman (2) |
| | BSM | Number of the Board of Supervisors members (2) |
| | EMP | Total number of employees (3) |
| | MAN | Ratio of middle managers on total number of employees (3) |

Stakeholder identifier: (1) shareholders, (2) management, (3) employees, (4) creditors.

Source: own processing

The aim was to examine the interests of business owners using the size of the company's equity, dividend share, percentage share of the largest shareholder in the registered capital and the number of shareholders with qualifying holdings in the registered capital. The top management of the company is represented by the indicator of the average annual remuneration per member of the board, number of members of the Board of Directors and Board of Supervisors. Employees' interests are taken into account by classifying their total number, middle management share and annual personnel costs into the variable group surveyed. Creditors' interests are represented by the indicator of total indebtedness.

Data were drawn from the annual reports of individual companies for 2017 that are available on the company's website.

The influence of selected determinants of CG on the financial performance of companies is investigated by means of correlation analysis, namely Pearson's R, Spearman correlation and Somers' d, which measures unidirectional dependence of variables. Dependent variables are indicators of financial performance; independent variables are individual determinants of CG.

Hypotheses about the existence of dependence between the dependent and independent variable ($H_0: \rho = 0$; $H_1: \rho \neq 0$) are verified at the significance level $\alpha = 0.1$.

Table 2: Correlation analysis

| Dependent variable | | ROA | | ROE | | ROS | | ROA | | ROE | | ROS | |
|---|-----------------|--------|------|--------|------|-------|------|--------|------|---------|-------|--------|------|
| Non-financial determinants of corporate governance | | | | | | | | | | | | | |
| Independent variable | | LHS | | | | | | BSM | | | | | |
| Entities | Stat. indicator | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. |
| | Pearson's R | -.088 | .786 | .100 | .757 | -.120 | .710 | -.013 | .969 | -.232 | .467 | -.004 | .991 |
| Banks | Spearman Corr. | -.112 | .729 | -.034 | .917 | -.269 | .398 | .152 | .637 | -.081 | .802 | .230 | .473 |
| | Somers' d | -.098 | .679 | -.020 | .940 | -.216 | .375 | .016 | .936 | -.082 | .672 | .148 | .428 |
| | Pearson's R | .125 | .510 | -.223 | .236 | -.086 | .650 | .276 | .114 | .174 | .325 | .162 | .361 |
| Issuers of shares | Spearman Corr. | -.034 | .856 | -.158 | .404 | -.218 | .247 | .381** | .026 | .423** | .013 | .231 | .188 |
| | Somers' d | -.039 | .782 | -.103 | .486 | -.168 | .202 | .451** | .016 | .487*** | .007 | .278* | .096 |
| | Pearson's R | .093 | .752 | .217 | .455 | .293 | .310 | -.127 | .651 | .071 | .801 | -.089 | .752 |
| Insurance companies | Spearman Corr. | .169 | .565 | .155 | .597 | .308 | .284 | .069 | .808 | .039 | .890 | -.183 | .513 |
| | Somers' d | .160 | .471 | .136 | .466 | .235 | .227 | .070 | .747 | .000 | 1.000 | -.116 | .407 |
| | Pearson's R | .209** | .012 | .047 | .730 | .163 | .230 | .172 | .186 | .162 | .212 | .180 | .164 |
| All entities | Spearman Corr. | .061 | .655 | .298** | .026 | .199 | .141 | .215* | .096 | .343*** | .007 | .266** | .038 |
| | Somers' d | .038 | .666 | .208** | .025 | .141 | .132 | .195* | .054 | .301*** | .003 | .229** | .014 |
| Independent variable | | QSH | | | | | | EMP | | | | | |
| | Pearson's R | -.138 | .669 | -.152 | .638 | .064 | .844 | .393 | .207 | .301 | .342 | .346 | .270 |
| Banks | Spearman Corr. | -.101 | .755 | -.101 | .755 | .073 | .821 | .364 | .245 | .552* | .063 | .462 | .131 |
| | Somers' d | -.133 | .722 | -.200 | .540 | .067 | .826 | .242 | .168 | .424** | .019 | .333* | .100 |
| | Pearson's R | .220 | .219 | .276 | .119 | -.016 | .931 | .176 | .318 | .074 | .679 | .095 | .594 |
| Issuers of shares | Spearman Corr. | .181 | .314 | .176 | .328 | .256 | .150 | .165 | .351 | .219 | .214 | .029 | .872 |
| | Somers' d | .158 | .300 | .144 | .348 | .219 | .143 | .103 | .401 | .139 | .265 | .038 | .800 |
| | Pearson's R | -.119 | .686 | -.045 | .880 | .081 | .782 | -.131 | .641 | .174 | .535 | .013 | .964 |
| Insurance companies | Spearman Corr. | -.135 | .645 | -.066 | .822 | -.103 | .726 | -.232 | .405 | -.189 | .499 | -.143 | .612 |
| | Somers' d | -.127 | .644 | -.055 | .865 | -.091 | .724 | -.143 | .574 | -.143 | .565 | -.048 | .814 |
| All entities | Pearson's R | .074 | .576 | .082 | .538 | -.139 | .294 | .100 | .442 | .155 | .233 | .272** | .034 |

*Impact of selected determinants of corporate governance of
financial performance of companies.
Author: Janka Grofcikova*

| | | | | | | | | | | | | | |
|----------------------|----------------|-------|------|--------|------|-------|------|-------|------|---------|------|--------|-------|
| | Spearman Corr. | .056 | .676 | -.159 | .229 | -.042 | .752 | .153 | .239 | .386*** | .002 | .298** | .020 |
| | Somers' d | .047 | .671 | -.135 | .214 | -.036 | .752 | .100 | .238 | .261*** | .002 | .218** | .024 |
| Independent variable | BDM | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | MAN | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Banks | Pearson's R | .311 | .326 | .314 | .320 | .278 | .381 | .285 | .458 | .597* | .089 | .270 | .482 |
| | Spearman Corr. | .397 | .202 | .375 | .230 | .277 | .384 | .350 | .356 | .283 | .460 | .000 | 1.000 |
| | Somers' d | .333 | .185 | .296 | .168 | .259 | .311 | .278 | .130 | .222 | .300 | .056 | .769 |
| Issuers of shares | Pearson's R | -.124 | .484 | .019 | .920 | .140 | .431 | -.077 | .669 | -.042 | .817 | -.096 | .595 |
| | Spearman Corr. | .086 | .629 | .109 | .540 | .107 | .549 | .051 | .779 | .079 | .661 | .002 | .993 |
| | Somers' d | .088 | .610 | .111 | .529 | .094 | .533 | .050 | .710 | .069 | .579 | .022 | .891 |
| Insurance companies | Pearson's R | -.099 | .726 | -.092 | .745 | -.204 | .466 | .096 | .732 | -.306 | .268 | -.349 | .203 |
| | Spearman Corr. | -.054 | .849 | -.295 | .286 | -.322 | .241 | -.121 | .666 | -.032 | .909 | -.132 | .639 |
| | Somers' d | -.060 | .752 | -.277 | .217 | -.277 | .180 | -.086 | .720 | -.010 | .966 | -.067 | .769 |
| All entities | Pearson's R | -.003 | .979 | .132 | .311 | .218* | .092 | -.010 | .940 | -.006 | .965 | -.110 | .417 |
| | Spearman Corr. | .158 | .224 | .276** | .031 | .175 | .178 | .172 | .200 | .167 | .215 | -.001 | .996 |
| | Somers' d | .134 | .209 | .250** | .202 | .159 | .159 | .119 | .230 | .133 | .161 | .026 | .809 |

Financial determinants of corporate governance

| Dependent variable | | ROA | | ROE | | ROS | | ROA | | ROE | | ROS | |
|----------------------|-----------------|--------|------|---------|------|---------|------|--------|------|--------|------|---------|------|
| Independent variable | | EQ | | | | | | AR | | | | | |
| Entities | Stat. indicator | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. | Value | Sig. |
| | Pearson's R | .499* | .098 | -.080 | .806 | .417 | .177 | .427 | .166 | .365 | .243 | .403 | .194 |
| Banks | Spearman Corr. | .483 | .112 | .252 | .430 | .608** | .036 | .378 | .226 | .573* | .051 | .399 | .199 |
| | Somers' d | .364** | .037 | .182 | .418 | .515*** | .009 | .242 | .256 | .424** | .023 | .212 | .284 |
| Issuers of shares | Pearson's R | .149 | .400 | .075 | .672 | .053 | .766 | .173 | .335 | .084 | .644 | .116 | .521 |
| | Spearman Corr. | .422** | .013 | .468*** | .005 | .293* | .093 | .387** | .026 | .409** | .018 | .297* | .093 |
| | Somers' d | .294** | .013 | .333*** | .005 | .219* | .070 | .299** | .016 | .320** | .016 | .238* | .087 |
| Insurance companies | Pearson's R | -.057 | .839 | .220 | .430 | -.027 | .925 | -.107 | .703 | .270 | .331 | .110 | .697 |
| | Spearman Corr. | -.096 | .732 | .021 | .940 | -.054 | .850 | -.107 | .704 | .018 | .950 | .007 | .980 |
| | Somers' d | -.086 | .748 | -.010 | .969 | -.029 | .896 | .010 | .970 | .010 | .966 | .029 | .903 |
| All entities | Pearson's R | .108 | .409 | .106 | .416 | .244* | .058 | .152 | .247 | .220* | .091 | .351*** | .006 |

| | | | | | | | | | | | | | |
|----------------------|-----------|----------|------|---------|------|---------|------|--------|------|---------|------|---------|------|
| | Spearman | | | | | | | | | | | | |
| | Corr. | .318** | .012 | .545*** | .000 | .509*** | .000 | .261** | .044 | .535*** | .000 | .487*** | .000 |
| | Somers' d | .207** | .016 | .370*** | .000 | .365*** | .000 | .164* | .072 | .378*** | .000 | .352*** | .000 |
| Independent variable | DR | | | | | | | | | | | | |
| | PC | | | | | | | | | | | | |
| | Pearson's | | | | | | | | | | | | |
| | R | .176 | .583 | .349 | .267 | .240 | .452 | .448 | .144 | .306 | .333 | .394 | .204 |
| Banks | Spearman | | | | | | | | | | | | |
| | Corr. | .206 | .520 | .363 | .246 | .246 | .442 | .490 | .106 | .636** | .206 | .594** | .042 |
| | Somers' d | .133 | .634 | .267 | .198 | .167 | .507 | .333** | .040 | .455*** | .002 | .424** | .019 |
| | Pearson's | | | | | | | | | | | | |
| | R | .233 | .185 | .117 | .508 | .090 | .611 | .161 | .363 | .074 | .679 | .063 | .724 |
| Issuers of | Spearman | | | | | | | | | | | | |
| shares | Corr. | .279 | .110 | .250 | .154 | .078 | .662 | .205 | .244 | .255 | .146 | .049 | .785 |
| | Somers' d | .399 | .203 | .355 | .224 | .115 | .606 | .146 | .470 | .182 | .155 | .059 | .687 |
| | Pearson's | | | | | | | | | | | | |
| | R | .162 | .563 | .297 | .282 | -.170 | .545 | -.138 | .623 | .149 | .596 | -.066 | .816 |
| Insurance | Spearman | | | | | | | | | | | | |
| companies | Corr. | .055 | .847 | .071 | .802 | .022 | .938 | -.257 | .355 | -.246 | .376 | -.279 | .315 |
| | Somers' d | .043 | .843 | .021 | .919 | .043 | .844 | -.181 | .473 | -.219 | .372 | -.162 | .421 |
| | Pearson's | | | | | | | | | | | | |
| | R | .251* | .051 | .220* | .089 | .180 | .166 | .103 | .430 | .153 | .240 | .259** | .044 |
| All | Spearman | | | | | | | | | | | | |
| entities | Corr. | .317** | .013 | .505*** | .000 | .309** | .015 | .188 | .147 | .417*** | .001 | .337*** | .008 |
| | Somers' d | .301*** | .006 | .475*** | .000 | .295*** | .005 | .127 | .135 | .293*** | .000 | .243** | .012 |
| Independent variable | TI | | | | | | | | | | | | |
| | Pearson's | | | | | | | | | | | | |
| | R | -.044 | .892 | .350 | .265 | -.002 | .996 | | | | | | |
| Banks | Spearman | | | | | | | | | | | | |
| | Corr. | -.441 | .152 | .217 | .499 | -.182 | .572 | | | | | | |
| | Somers' d | -.303 | .130 | .182 | .483 | -.152 | .474 | | | | | | |
| | Pearson's | | | | | | | | | | | | |
| | R | -.030 | .867 | -.342** | .048 | .060 | .735 | | | | | | |
| Issuers of | Spearman | | | | | | | | | | | | |
| shares | Corr. | -.078 | .662 | -.076 | .670 | -.055 | .755 | | | | | | |
| | Somers' d | -.045 | .718 | -.041 | .757 | -.048 | .762 | | | | | | |
| | Pearson's | | | | | | | | | | | | |
| | R | -.813*** | .000 | -.395 | .145 | -.261 | .348 | | | | | | |
| Insurance | Spearman | | | | | | | | | | | | |
| companies | Corr. | -.629** | .012 | -.221 | .428 | -.468* | .079 | | | | | | |
| | Somers' d | -.467*** | .009 | -.162 | .452 | -.333** | .044 | | | | | | |
| | Pearson's | | | | | | | | | | | | |
| | R | .066 | .619 | -.090 | .488 | .233* | .071 | | | | | | |
| All | Spearman | | | | | | | | | | | | |
| entities | Corr. | -.091 | .484 | .203 | .117 | .217* | .093 | | | | | | |
| | Somers' d | -.090 | .375 | .149 | .118 | .158 | .127 | | | | | | |

*Correlation is significant at the 0.1 level (2-tailed). **Correlation is significant at the 0.05 level (2-tailed).

***Correlation is significant at the 0.01 level (2-tailed).

Source: own calculations based on data from annuals reports of individual companies

3. Results

The author examined the influence of selected determinants of CG on a sample of companies that form the basic set in the conditions of Slovakia.

The first group of entities consisted of banks and building societies. As of 31 December 2017, according to NBS data, 9 banks, 3 building saving banks and 14 branches of foreign banks operated in the Slovak Republic. The longest operating banks on the Slovak market are VUB bank and Tatra bank, which were founded in 1990. The youngest bank is ČSOB, founded in 2008. The highest profitability in the period under review was achieved by Privatbanka, while OTP bank showed a negative economic result and profitability too. SLSP achieved the highest net profit in 2017. 6 banks are owned by only one institutional investor; in the other 4 banks the largest shareholder owns at least 89 % of the registered capital. VUB has the largest volume of equity, the second one is SLSP. ČSOB has the least equity. In 5 banks was in 2017 paid to shareholders more than 90 % of 2016 net profit, no dividends were paid by 4 banks. The highest personnel costs per employee were reported by Privatbanka, the lowest by Wüstenrot building society. The highest remuneration per member of the governing bodies was paid by Poštová bank, the lowest by the SZRB (Slovak Guarantee and Development Bank). Further descriptive statistics of the variables are given in Table 3.

Table 3: Descriptive statistics of variables

| Statistical indicator | Financial performance determinants | | | Financial CG determinants | | | | Non-financial CG determinants | | | | | | |
|---|------------------------------------|-------|-------|---------------------------|-------|---------|-------------|-------------------------------|-------|-----|-----|-----|------|-------|
| | ROA | ROE | ROS | EQ | DR | AR | PC | TI | LSH | QSH | BDM | BSM | EMP | MAN |
| All entities (number: 61) | | | | | | | | | | | | | | |
| Mean | 0.00 | -0.03 | 0.06 | 147,094,785 | 0.33 | 61,944 | 14,409,559 | 0.61 | 0.69 | 2 | 4 | 5 | 494 | 0.08 |
| Median | 0.01 | 0.05 | 0.07 | 18,454,098 | 0.00 | 19,533 | 3,335,483 | 0.68 | 0.80 | 2 | 3 | 3 | 160 | 0.05 |
| Std. Dev. | 0.07 | 0.52 | 0.24 | 360,718,882 | 0.47 | 82,480 | 29,899,101 | 0.33 | 0.31 | 1 | 1 | 2 | 902 | 0.09 |
| Skewness | -3.92 | -5.61 | -0.60 | 3 | 1.07 | 1 | 3 | -0.15 | -0.50 | 1 | 1 | 2 | 3 | 1.40 |
| Kurtosis | 20.90 | 35.80 | 3.82 | 10 | -0.13 | 1 | 8 | -0.39 | -1.39 | 1 | 3 | 2 | 8 | 1.24 |
| Minimum | -0.42 | -3.53 | -0.81 | -732,318 | 0.00 | 0 | 0 | 0.00 | 0.17 | 1 | 1 | 2 | 0 | 0.00 |
| Maximum | 0.11 | 0.67 | 0.73 | 1,599,689,000 | 1.70 | 321,111 | 133,399,000 | 1.52 | 1.00 | 7 | 9 | 13 | 4208 | 0.33 |
| Insurance companies (number: 15) | | | | | | | | | | | | | | |
| Mean | 0.03 | 0.11 | 0.11 | 77,350,533 | 0.60 | 78,000 | 10,677,200 | 0.80 | 0.93 | 2 | 4 | 5 | 396 | 0.12 |
| Median | 0.02 | 0.12 | 0.08 | 47,760,000 | 0.85 | 56,727 | 6,495,000 | 0.83 | 1.00 | 2 | 4 | 4 | 298 | 0.13 |
| Std. Dev. | 0.03 | 0.11 | 0.20 | 96,790,802 | 0.46 | 57,752 | 12,525,258 | 0.10 | 0.09 | 1 | 1 | 3 | 442 | 0.07 |
| Skewness | 1.57 | -1.19 | 2.33 | 2 | -0.51 | 2 | 2 | -1.38 | -1.05 | 1 | 0 | 1 | 2 | 0.42 |
| Kurtosis | 3.69 | 2.42 | 8.63 | 3 | -1.59 | 5 | 5 | 1.75 | -0.30 | 0 | 1 | 1 | 3 | -0.47 |
| Minimum | -0.01 | -0.18 | -0.21 | 8,170,000 | 0.00 | 25,333 | 1,301,000 | 0.54 | 0.73 | 1 | 2 | 2 | 36 | 0.01 |
| Maximum | 0.11 | 0.27 | 0.73 | 304,709,000 | 1.23 | 247,000 | 47,130,000 | 0.93 | 1.00 | 3 | 7 | 13 | 1516 | 0.25 |
| Non-financial corporations listed on stock exchange (issuers of shares) (number: 34) | | | | | | | | | | | | | | |
| Mean | -0.01 | -0.15 | -0.01 | 57,725,555 | 0.14 | 18,157 | 5,392,473 | 0.43 | 0.49 | 3 | 3 | 4 | 204 | 0.08 |

| | | | | | | | | | | | | | | |
|---------------------------|-------|-------|-------|---------------|-------|---------|-------------|-------|-------|---|---|----|-------|------|
| Median | 0.00 | 0.00 | 0.01 | 3,089,196 | 0.00 | 2,424 | 766,841 | 0.39 | 0.41 | 3 | 3 | 3 | 44 | 0.04 |
| Std. Dev. | 0.09 | 0.67 | 0.25 | 273,391,249 | 0.39 | 46,721 | 17,797,822 | 0.33 | 0.28 | 1 | 1 | 1 | 455 | 0.10 |
| Skewness | -3.05 | -4.47 | -0.72 | 6 | 3.17 | 3 | 5 | 1.17 | 0.45 | 1 | 1 | 2 | 4 | 1.69 |
| Kurtosis | 11.83 | 21.42 | 3.44 | 33 | 9.76 | 12 | 30 | 2.05 | -1.27 | 1 | 4 | 5 | 16 | 1.73 |
| Minimum | -0.42 | -3.53 | -0.81 | -732318 | 0.00 | 0 | 0 | 0.00 | 0.17 | 1 | 1 | 3 | 0 | 0.00 |
| Maximum | 0.08 | 0.23 | 0.68 | 1,599,689,000 | 1.70 | 220,462 | 103,001,000 | 1.52 | 1.00 | 7 | 7 | 9 | 2,341 | 0.33 |
| Banks (number: 12) | | | | | | | | | | | | | | |
| Mean | 0.01 | 0.11 | 0.21 | 487,487,917 | 0.51 | 162,285 | 44,623,417 | 0.87 | 0.90 | 2 | 5 | 6 | 1,440 | 0.05 |
| Median | 0.01 | 0.07 | 0.22 | 266,174,000 | 0.55 | 178,876 | 18,223,500 | 0.90 | 1.00 | 1 | 4 | 6 | 808 | 0.03 |
| Std. Dev. | 0.00 | 0.18 | 0.15 | 562,016,643 | 0.45 | 93,843 | 49,598,309 | 0.13 | 0.21 | 1 | 2 | 3 | 1,523 | 0.05 |
| Skewness | -0.76 | 3.01 | -1.82 | 1 | -0.11 | 0 | 1 | -3.07 | -2.42 | 2 | 1 | 1 | 1 | 1.48 |
| Kurtosis | 1.32 | 9.89 | 5.00 | 0 | -2.14 | -1 | -1 | 10.21 | 5.59 | 5 | 1 | -1 | -1 | 0.84 |
| Minimum | -0.00 | -0.05 | -0.19 | 25,962,000 | 0.00 | 9,214 | 2,892,000 | 0.46 | 0.33 | 1 | 3 | 3 | 121 | 0.01 |
| Maximum | 0.01 | 0.67 | 0.40 | 1,555,980,000 | 1.00 | 321,111 | 133,399,000 | 0.99 | 1.00 | 5 | 9 | 11 | 4,208 | 0.14 |

Source: own calculations based on data from annuals reports of individual companies

The second group of examined subjects were insurance companies. As of 31 December 2017, according to NBS data, a total of 16 insurance companies based in SR and 26 branches of foreign insurance companies were operating in the SR. One insurance company declared bankruptcy in January 2018, which is why it was excluded it from set of researched companies and examined a total of 15 insurance companies. The largest insurance company in Slovakia in terms of equity is Kooperativa, followed by Allianz. According to the amount of net profit achieved in 2017, these insurance companies changed their order. Ergo has the lowest equity and reported the highest loss in 2017. Union insurance company reported the loss too. A total of 6 insurance companies are owned by one shareholder, in the other 4 the main shareholder holds more than 90% of the registered capital. Kooperativa had the highest number of members of the Boards. The highest average personnel costs per employee were reported by the Union insurance company, the lowest by the insurance company NN, followed by Wüstenrot insurance company. The highest ROE was reported by Cardif, while negative ROE was reported by ERGO. Generali reported the lowest ROE among the profitable insurance companies, but it paid the second highest average remuneration per person of governing bodies (AR) from all insurance companies. The highest AR was paid by Allianz, the lowest by Poštová insurance company. The highest share of dividends paid from last year's profit was reported by Aegon. A total of 7 insurance companies paid at least 90 % of their net profit to their shareholders. 5 insurance companies, including Allianz, state in their annual report that they did not pay any dividends in 2017.

The third group of examined entities were joint stock companies, share issuers, listed on The Bratislava Stock Exchange (hereinafter also companies). Those companies that issued only the bonds were not examined. As of 31 December 2017, 38 issuers of shares were listed to The Bratislava Stock Exchange, of which there was 1 insurance company (Union), 3 banks (Tatra bank, VÚB bank, Prima bank) and 34 non-financial joint stock companies, and the focus was on in this group of entities. The largest company is Slovnaft. In 2017 this company reported the highest volume of assets, equity, net profit, it is the employer with the highest number of employees and it is a company with the second highest average personnel costs per employee. However, it ranked 6th in ROE, and it ranked 5th in ROA. Slovnaft paid the highest average remuneration per member of the governing bodies. A total of 12 companies, including ZTS

INMART, which achieved the highest ROE in this group of entities nor did it employ any employees, did not pay any remuneration to the governing bodies. The highest average personnel costs per employee are reported by Geocomplex, which reported 1.36 percentage points higher ROA and 20.2 pp. higher ROS than Slovnaft. Slovnaft compared to Geocomplex reached by 1.79 pp. higher ROE and paid 31.5 times higher remuneration per person of governing bodies.

The capital strength of the company allows the payment of higher remuneration to the governing bodies, even though the relative economic results may not be among the best. From a quantitative point of view, this finding is also confirmed by the results of the correlation analysis of AR dependence and financial performance indicators measured by Pearson's R (see Table A1). Based on Sig. it can be argued that there is no correlation between financial performance and the average level of remuneration per person of governing bodies in any of the groups of entities under review. The existence of dependence between AR as a dependent variable and EQ as an independent variable was confirmed by the Somer's d test in all groups of subjects and in the entire set of subjects. A small dependence of AR on EQ was found in banks ($r = 0.273$, Sig. = 0.066), moderate in the group of companies ($r = 0.470$, Sig. = 0.000), and a large dependence in insurance companies ($r = 0.562$, Sig. = 0.000) and in the entire set of subjects ($r = 0.678$, Sig. = 0.000) too.

In accordance with the objectives and selected methods, the author tested and compared the impact of selected determinants of CG on the financial performance of entities. In the text, the statistically significant results are interpreted, ascertained by Somer's d, on the selected significance level. Other results are shown in Table A1.

In the first step the influence of financial and non-financial determinants of CG on ROA was evaluated. A moderate negative correlation was found between ROA and TI ($r = -0.467$) in insurance companies. Other subjects did not show a statistically significant effect of TI on ROA. The results indicate moderate dependence in companies between ROA and BSM ($r = 0.451$), in banks between ROA and EQ ($r = 0.364$), ROA and PC ($r = 0.333$). Weak dependence was identified in companies between ROA and AR ($r = 0.299$), ROA and EQ ($r = 0.294$). In the group of all companies, a moderate correlation between ROA and DR was found ($r = 0.301$), between ROA and EQ ($r = 0.207$), between ROA and BSM ($r = 0.195$), and between ROA and AR ($r = 0.164$).

When examining the influence of CG determinants on ROE, significant results were found only in the group of companies and banks. In banks it was between ROE and PC ($r = 0.455$), AR ($r = 0.424$), and EMP ($r = 0.424$). In companies it was between ROE and BSM ($r = 0.487$), EQ ($r = 0.333$) and AR ($r = 0.320$). All values show moderate dependence of variables. In the group of all entities, moderate dependence between ROE and DR was revealed ($r = 0.475$), ROE and AR ($r = 0.378$), ROE and EQ ($r = 0.370$), ROE and BSM ($r = 0.301$), weak dependence between ROE and PC ($r = 0.293$), ROE and EMP ($r = 0.261$) and ROE and LSH ($r = 0.208$).

The moderate influence of EQ ($r = 0.515$), PC ($r = 0.424$), and EMP ($r = 0.333$) on ROS is found in the group of banks. In the insurance companies, a moderate negative correlation between ROS and TI was calculated ($r = -0.333$). All values are significant at the selected significance level. A weak dependence was unveiled in the group of companies between ROS and BSM ($r = 0.278$), AR ($r = 0.238$) and EQ ($r = 0.219$). In the group of all subjects, moderate correlation was found between ROS and EQ ($r = 0.365$), AR ($r = 0.352$), DR ($r = 0.295$), PC ($r = 0.243$), BSM ($r = 0.229$) and EMP ($r = 0.218$).

4. Discussion

Corporate governance is currently one of the most widely discussed topics and object of the research is its interactions with various areas and levels of business activities. Ortas et al. (2015) examine the impact of institutional and social context on corporate environment, social and governance performance of enterprises. The role of corporate governance in relation to corporate social responsibility and financial performance has been explored by e.g. Rodrigues-Fernandez (2016), Broadstock et al. (2019), Musa et al. (2014a). Gender quality and diversity, corporate performance and emotional intelligence in relation to corporate governance examined Báez et al. (2018), Musa et al. (2017). Corporate governance compliance for family and non-family firms in emerging markets is examined Briano-Turrent and Poletti-Hughes (2017). Corporate governance in emerging markets has also been investigated e.g. Bhaumik et al. (2019), Koirala et al. (2018), and Esqueda and O'Connor (2019).

In terms of long-term financial prosperity of business entities, the most important is research of the impact of corporate governance on financial management and decision-making processes and the relevant financial risks. Ali et al. (2018) or Shahid and Abbas (2019) examined whether the quality of corporate governance affects the risk of business failure, or what role corporate governance plays in relation to investors and investment decisions.

Also in this paper the impact of corporate governance on the financial performance and prosperity of the company is examined. The chosen determinants are divided according to their character into financial and non-financial. Financial determinants of corporate governance that significantly affect corporate performance as measured by ROA, ROE and ROS include EQ, DR, AR and PC. A significant non-financial determinant is BSM. From the results it is possible to identify a higher number of financial determinants of corporate governance, which should be taken into account in business management and decision-making processes. We did not find research using the same or similar methodology for the classification of variables and business entities, which is why our work can be considered as a contribution to the development of knowledge in the field of corporate governance.

5. Conclusion

To summarize the research findings, it can be concluded that each of the investigated financial and non-financial determinants of CG affects the financial performance of companies. At the same time, ROA, ROE and ROS are influenced in the group of share issuers by the amount of equity (EQ), AR and BSM, in PC banks. In the group of all enterprises they are influenced by EQ, DR, AR and BSM.

The EQ indicator in banks and the TI indicator in insurance companies have an influence on two performance indicators (ROA and ROS) at the same time. BSM affects both ROA and ROE (at the same time) in the group of companies.

By evaluating the impact of CG determinants on only one of the performance indicators, the research found the effect of EQ on ROA in banks, TI on ROA in insurance companies; the impact of AR, EMP and MAN on ROE in banks and TI on ROE in enterprises; the impact of EQ, EMP and PC in banks on ROS.

ROA is most strongly negatively influenced by TI in insurance companies (Pearson's $R = -0.813$, Sig. = 0.000), the highest positive correlation was found between ROA and BSM in companies (Somer's $d = 0.451$, Sig. = 0.016). ROE is most strongly influenced in banks by the MAN indicator (Pearson's $R = 0.597$, Sig. = 0.089). ROS is most strongly influenced by the EQ indicator in banks (Spearman $r = 0.608$, Sig. = 0.036).

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