

Does Corporate Governance Affect the Market Value and Risk of Czech Joint-Stock Companies?

Iveta SIMBEROVA

Faculty of Business and Management, Department of Management, Brno University of Technology,
Brno, 612 00, Czech Republic

and

Alena KOČMANOVA, Marie PAVLAKOVA DOCEKALOVA, Stanislav SKAPA

Faculty of Business and Management, Department of Economics, Brno University of Technology,
Brno, 612 00, Czech Republic

ABSTRACT

The paper analyses relations and impacts between the corporate governance and the Firm Market Value and Firm Risk, including the financial performance in manufacturing industry companies. The empiric research was verified in 118 joint stock companies in the Czech Republic with over 250 employees according to the EU criterion. The data was acquired by empirical research in the Czech Republic, completed in 2012-2016. The aim of the paper is to propose a suitable model of Good Corporate Governance for unlisted Czech companies in the Czech Republic and to identify its impacts on the Firm Market Value, the Firm Risk and the Financial Performance. The methodology of research is based on modelling, using the structural equation modelling (SEM) for modelling the interrelationships and impacts between the GCG performance, the Firm Market Value, the Firm Risk and the Financial Performance. The empirical research has shown that responsible corporate governance has an impact on the Firm Market Value, both through the financial performance and through the stable risk. The investors are thus suggested that if good corporate governance and regulatory measures are introduced, thereby strengthening the corporate financial performance and the stable Firm Risk, then it will have a significant impact on the Firm Market Value.

Keywords: Corporate governance model, Firm Market Value, Firm Risk, Financial Performance model, Confirmative Factor Analysis, Structural Equations.

1. INTRODUCTION

The paper analyses relations and impacts between the corporate governance and the Firm Market Value and Firm Risk, including the financial performance in manufacturing industry companies. The empiric research was verified in 118 joint stock companies in the Czech Republic with over 250 employees according to the EU criterion. The data was acquired by empirical research in the Czech Republic, completed in 2012-2016. According to the OECD [1] the objective of governance is to create the environment of trust, transparency and accountability necessary to support long-term investment, financial stability and business integrity, thereby fostering growth and development of an inclusive society. Governance fundamentally influences other components of an enterprise, because it creates the structure through which the goals of the

enterprise are set and the means to achieve these goals determined. The G20 / OECD Corporate Governance Principles are the key standard for the companies that are publicly, and the Green Paper - EU Framework for Corporate Governance is the standard for companies operating in the European Economic Area. These standards address protection of the shareholders' rights, accessibility and transparency of business information, functioning of the supervisory and management boards. Since 2001, there is the Corporate Governance Code existing in the Czech Republic, based on the OECD principles and updated in 2004. High quality of CG is the guarantee of long-term trust between the shareholders and the corporate management. As follows from various empirical and theoretical research, the companies play a certain role in generating good corporate governance practices in the long run. Tangible positive outcomes of good governance are evident in a prosperous economy and markets [2]. The authors Bistrová and Láčková [3] have been focused on assessment of quality of CEE companies management and have created the Corporate Governance Quality Assessment Model, which assesses CG of the listed companies, and have come to the conclusion that the best results were gained by the companies on the Czech, Hungarian and Polish markets, mainly thanks to the high stability of the management team and its logical organizational structure. Their further research was focused on the relationship between stock yields and quality of corporate governance which was tested, using the CG rating model; according to their research, the positive significant effect of CG quality on stock returns has been confirmed positively. Evidence of further positive influence of the corporate governance on corporate value and stock yields has been demonstrated by other researchers [4, 5, 6]

In the paper based on a theoretical approach to the Good Corporate Governance (GCG), the empirical research analyses the interactions and impacts on the Firm Market Value (FMV), the Firm Risk (FR), and Financial Performance (FP) of non-listed joint - stock companies in the processing industry in the period 2012-2016. Most research studies deal with the listed companies and investigate the relationship between GCG and stock yields, etc., but there are only a few studies dealing with large non-listed joint-stock companies in relation to the Firm Market Value and Firm Risk. The authors of this paper have

focused on large, non-listed joint-stock companies in the Czech Republic and asked the question whether effective good corporate governance can increase shareholders' confidence by having a positive impact on the Firm Market Value and also impact on reduction of the Firm Risk. The objective of this paper is to propose an appropriate model of GCG for unlisted Czech joint-stock companies and to identify its impact on the Firm Market Value, Firm Risk and Financial Performance. The good management theory argues that good management practices can improve the relationship with stakeholders, resulting in better performance overall [7].

The research department of the Faculty of Business and Management at Brno University of Technology has studied sustainability at the corporate level since 2010 as part of grant projects of the Grant Agency of the Czech Republic and is currently working on a grant project from the GA CR called "Modelling and simulation of sustainable investment decision-making".

2. CONCEPTUAL AND THEORETICAL ANALYSIS

The primary concern is how the CG may affect market value and what the key risk areas are. The valuation of the market value of the companies depends on the various strategic and managerial characteristics of joint stock companies, as well as on the area of relations with their stakeholders. Monitoring these characteristics, both inside and outside the stakeholder relationships, can be considered as one of the areas of risk. Strategic decisions which markets to focus on in the development of a company affect the market value and risks associated with it.

For example, there are conflicts between the stakeholders' interests: the authors Jia, Shi and Wang [8] did not express what happens when majority and minority shareholders have other competitive interests out of competition to gain reasonable value, and such diverse goals can contribute to a greater dispersion of their behaviour beyond what can be predicted in terms of value creation. Majority shareholders are interested in maximizing value. Shareholders can also accept multilateral objectives [9]. Firth et al. [10] and Guillen and Capron [11] found that the majority of stakeholders could have a greater influence on state-controlled enterprises when they put pressure on them to speed up reform, and local self-government which controls listed companies may be more generous in doing so to settle minority shareholders in order to attract more investment into their jurisdiction in the future.

There is also a link between the control of the founders, the ownership structure and the value of the company, as reported by Xia [12]. A number of authors [13, 14] examine the circumstances of the current listed companies with external funding and find strong evidence of separating the control and ownership. They also argue that effective control of agent problems is strongly influenced by the size and nature of the organization. In an empirical study, La Pota et al. [15] notes that strong investor protection is associated with effective corporate governance, which is reflected in broad financial markets, dispersed share ownership and efficient capital allocation between businesses. A number of studies in the Chinese market have also confirmed a positive association between corporate governance and company value e.g. [16, 17].

Another area of risk consisting in monitoring the market value trends within individual sectors, which is a prerequisite for assessing their attractiveness for future investors. There is a

causal link: if the value of most companies increases in a particular sector, this can be seen as a positive signal for new investors. Conversely, after a long-term decline in the value of most companies in the sector, its attractiveness and the related interest in investing are declining [18].

The authors Deev and Khazalia [19] examined the impact of corporate governance (in particular the corporate governance system, the duality of the Chairman of the Board of Directors and the CEO, or the structure and diversity of the Board of Directors), and the impact of corporate social responsibility on the economic performance of European financial corporations and the results of their study confirm a significantly positive effect of these factors on economic results.

A positive correlation between the value of the company and the quality of corporate governance of the 300 largest European companies (FTSE Eurotop 300) is suggested by Dutch scientists Bauer, Guenster, Otten [20]. A contrary situation in Japan was revealed by Aman and Nguyen [6], who found that poorly managed companies outperform well-managed companies. The results were statistically insignificant, but the study clearly showed that considerably higher risk is attributed to poorly managed companies.

Based on latest theoretical knowledge, it can be assumed that there are causal relationships between GCG and, Firm Market Value Firm Risk and Financial Performance. The assumption of the relationship between the GCG and, Firm Market Value Firm Risk and Financial Performance are formulated by hypotheses.

GCG should increase confidence of the investors. Its main task is to increase the Firm Market Value and at the same time to promote transparency of the company.

H1: Enhanced adoption of Good Corporate Governance will strengthen the Firm Market Value.

Good corporate governance has an important role in risk management. Implementation of good corporate governance can encourage adequate internal and whole risk control.

H2: Enhanced adoption of Good Corporate Governance will reduce the Firm Risk.

H3: Enhanced adoption of Good Corporate Governance will improve Financial Performance.

Risks can be both a threat and an opportunity for the company, and affect value of the company. The risk is related to the investments, if the risk is higher and the investment is successful, value of the company will be increased, but if the investment is unsuccessful, it will reduce value of the company. Therefore, it is necessary to have thorough information about the risk so that the managers and investors can make the right decisions.

H4: Better Financial Performance will reduce the Firm Risk.

H5: The Firm Risk will increase the Firm Market Value.

H6: Stable Firm Risk will increase Market Value

Good corporate governance is imperative in ensuring the values required by various stakeholder groups and improving company performance [21]. Effective good corporate governance can help the company to achieve its goals.

3. RESEARCH METHODOLOGY

The prerequisite for establishing appropriate methods and performance indicators. It is an important prerequisite for modelling the relationships and hypotheses between the GCG performance, the Firm Market Value, the Firm Risk and the Financial Performance. These relationships and hypotheses are

reflected graphically in Figure 1. Structural modelling is applied to test these hypotheses, as it is suitable for testing such complex relationships. The theoretical model includes the indicators relating to the sector of corporate governance and the financial, including the Firm Market Value and the Firm Risk.

Empirical research is based on corporate governance and financial performance indicators [22] of the Czech processing industry companies. The corporate governance indicators have been chosen from the annual reports of large Czech joint-stock companies.

The financial indicators have been chosen on the basis of availability of the data from the Amadeus database. For modelling, the data for the period 2012 - 2016 according to CZ_NACE were obtained from 87 joint-stock companies with over 250 employees. Financial performance includes the indicators I_{Eco1} - $EAT / Equity$ (ROE); I_{Eco2} - $EBIT / Total Assets$ (ROA); I_{Eco3} - $EBIT / Sales$ (ROS); I_{Eco4} - $ROCE = EBIT / Equity + Long-term liabilities$; I_{Eco5} - $Cash Flow / Total Assets$; I_{Eco6} - EAT .

GCG includes the indicators I_{Cg2} - Number of members of the board of directors; I_{Cg1} - Information about financial results; I_{Cg2} - Collective agreement; I_{Cg3} - Reports from environmental and social areas; I_{Cg4} - Code of Ethics; I_{Cg5} - Site of the board of directors and the supervisory board; I_{Cg6} - Number of women in the board of directors and in the Supervisory Board to the size of CG; I_{Cg7} - Stability of the board of directors and the supervisory board to the size of CG; I_{Cg8} - Number of independent members of the board of directors and the supervisory board to the size of CG; I_{Cg9} - Remuneration of the members of the board of directors and the supervisory board (CZK thousand). 9 I_{Cgk} indicators have been chosen from the sector of GCG performance, 6 $I_{Eco k}$ indicators – from the sector of Financial Performance; the explorative factor analysis of the main components (Principal Component Analysis, PCA) and the confirmatory factor analysis were used to reduce the indicators. Firm Risk. The CAPM model nowadays belongs among the most widely used models determining the relationship between the risk and the yield. The starting point of the CAMP model is to divide the overall risk, associated with investment into the stock, into the systematic and non-systematic risk. The CAMP model includes the risk-free interest rate, the risk premium and the value of the coefficient β according to the formula below:

$$r_e = r_f + \beta x (r_m - r_f) \quad (1)$$

r_e – cost of equity (%);

r_f – risk-free interest rate β corresponds in the majority of cases to the interest rate of ten-year government bonds;

β – the coefficient expresses the relative risk rate of a certain enterprise in relation to the average market risk rate;

r_m – average return on the capital market;

$(r_m - r_f)$ – risk premium of the capital market;

The coefficient β expresses sensitivity of the investment towards the market and determines the systematic risk. This coefficient is based on the non-debt ratio β of similar enterprises. Information about these coefficients has been taken from professor Damodaran [23]. Calculation of the debt ratio β for unlisted companies is made according to the formula below:

$$\beta_z = \beta_N x \left(1 + (1 - T)x \frac{CK}{VK} \right) \quad (2)$$

β_z – β of equity in the indebted enterprise

β_N – β of equity in case of zero debt

T – income tax rate (19 %)

CK – foreign capital

VK – equity capital

Value of the risk premium is based on the rating for the Czech Republic, and information about the risk premium has also been taken from professor Damodaran [23]. Firm Market Value. The value of the company is reflected by the indicator, which has been determined, using the method of comparable unlisted companies. The basic prerequisite of a comparable company is that it should be comparable in terms of income return and risk. Three comparable companies listed on the stock exchanges have been chosen, complemented by other features, namely industry branch, business, manufactured products and size. A suitable P/E ratio multiplier, determining the market value of the share, has been chosen.

The modelling, using structural equations (SEMs), has been used to model mutual relationships between the indicators of corporate governance performance, financial performance, the Firm market Value and the Firm Risk, as it enables to model statistically and test the complex phenomena and is therefore particularly suited to model the Firm Market Value related phenomena. The structural modelling involves the statistical methods intended to construct the causal models, i.e. besides the confirmatory factor analysis even the path analysis, regression analysis, scattering analysis, etc. The objective of the confirmative factor analysis and the structural modelling is to identify latent variables, using a set of manifest variables, and to evaluate the hypotheses concerning relations between the latent variables afterwards [24]. To determine validity of the model, the so-called indices of coincidence have been developed, which are also used during modelling to modify and refine the model. The used indices of coincidence are as follows: the chi square to the number of degrees of freedom (χ^2/df), the Comparative Fit Index, the Root Mean Square Error of Approximation, the Normed Fit Index, the Tucker Lewis Index, and the Incremental Fit Index [25, 26]. Therefore, the structural modelling (SEM) is applied to test the shown hypotheses as it is suitable for testing such complex relationships. The conceptual framework of the model proposed in this paper is as shown in Fig. 1.

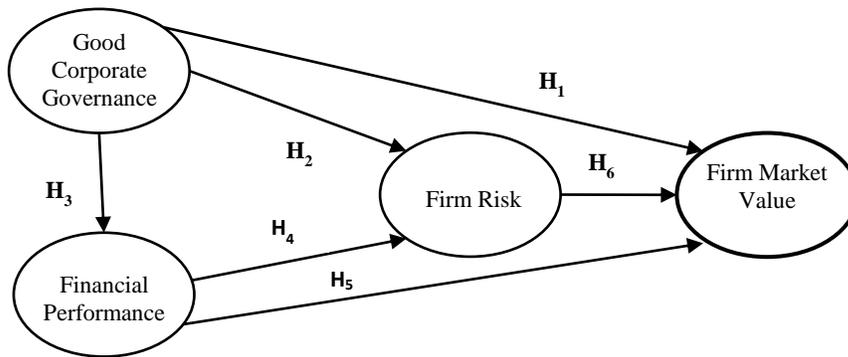


Figure 1. Theoretical model of structure of the relationships of CG performance, the Firm Market Value, the Firm Risk and financial performance

To verify hypotheses in Fig. 1, the linear regression models were used. This functional relationship can be put down for the “i” monitored variables of y as follows [27]:

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_k X_{ik} + \varepsilon_i \quad (3)$$

β_0, β_1, \dots are unknown coefficients determining linear dependence and ε_i is random error.

4. RESULTS AND DISCUSSION

15 indicators have been chosen for the model of corporate governance performance and the model of financial performance. It is clear that working with such a high number of indicators would be rather complex, and it is therefore advisable to select representative model indicators from the basic set of indicators. These indicators are reduced by the factor analysis.

To obtain a data overview, it is at first necessary to calculate the selected descriptive statistics. The descriptive statistics analysis appears in Table 1. With respect to significant sloping of the numerical indicators, an adjustment of these variables according to the formula $\log_{10}(\text{abs}(x) + 1)$ was made prior to commencing the factor analysis. Further analyses are performed on the modified variables. The explorative factor analysis was performed for data surveying. At first, it was assessed, whether or not the selected indicators are suitable for the factor analysis using Kaiser - Meyer - Olkin statistics and Bartlett sphericity test. It can be stated that the condition for using the factor analysis of interdependence of variables has been met. The Principal Component Analysis (PCA) has been chosen for factor extraction. Outcome of the explorative factor analysis is shown in Table 2. Before structural modelling, it is necessary to verify the correctness of the factor structure.

Table 1. The descriptive statistics

Variables and Indicators	Minimum	Maximum	Mean	Std. Deviation
Corporate governance indicators performance				
<i>I_{CG1} - Inform about financial results</i>	0.022	0.978	0.958	0.124
<i>I_{CG2} - Collective agreement</i>	0.474	0.526	0.499	0.023
<i>I_{CG3} - Reports from environmental and social areas</i>	0.397	0.603	0.526	0.088
<i>I_{CG4} - Code of ethics</i>	0.301	0.699	0.556	0.171
<i>I_{CG5} - Size of the Board of Directors and the Supervisor Board</i>	0.000	1.000	0.695	0.334
<i>I_{CG6} - Number of women in the Board of Directors and the Supervisory Board to the CG size</i>	0.000	33.333	11.405	9.522
<i>I_{CG7} - Stability the Board of Directors and the Supervisory Board to the CG size</i>	0.000	66.676	7.211	11.721
<i>I_{CG8} - Number of the independent members in the Board of Directors and the Supervisory Board to the CG size</i>	0.000	62.500	20.422	21.125
<i>I_{CG9} - Remuneration of the members the Board of Directors and the Supervisory Board</i>	180	145537	21949.961	23316.417
Economic indicators performance				
<i>I_{Eco1} - EAT / Equity (ROE)</i>	0.300	54.770	10.646	7.932
<i>I_{Eco2} - EBIT / Total Assets (ROA)</i>	0.140	26.800	6.942	4.979
<i>I_{Eco3} - EBIT / Sales (ROS)</i>	-5.260	20.700	5.519	4.219
<i>I_{Eco4} - ROCE = EBIT / Equity + Long-term liabilities</i>	-7.200	47.230	10.087	7.488
<i>I_{Eco5} - Cash Flow / Total Assets</i>	0.020	2.000	0.131	0.181

$I_{Eco6} - EAT$	714000	1016092000	92973937	143956714
<i>Firm Market Value of Shares</i>	62	112930	10493	18667
<i>CAMP</i>	1.920	21.485	6.589	3.314

Table 2. Indicators of corporate governance performance and financial performance (Source: Author's own source)

Indicators of corporate governance performance		
Indicators	Factors	Measure (Unit)
I_{CGk} - Corporate governance indicators	<i>CG factor 1 –CG Responsibility</i>	I_{Cg2} - Collective agreement. [yes = 0.53; no = 0.47]; I_{Cg8} - Number of independent members in the board of directors and in the supervisory board to the CG size;
	<i>CG factor 2 –CG Stability</i>	I_{Cg7} -Stability of the board of directors and of the supervisory board to the CG size; I_{Cg5} – Size of the board of directors and of the supervisory board; I_{Cg9} - Remuneration to the members of the board of directors and of the supervisory board (CZK thousand);
Indicators of financial performance		
I_{Ecoi} - Financial indicators	<i>FIN factor - Profitability</i>	I_{Eco1} - EAT / Equity (ROE); I_{Eco2} - EBIT / Total Assets (ROA); I_{Eco3} - EBIT / Sales (ROS); I_{Eco5} – Cash Flow / Total Assets; I_{Eco6} - EAT;

Model balancing is assessed by the indices CFI (Comparative Fit Index), RMSEA (Root Mean Square Error of Approximation), NFI (Normed Fit Index), TLI (Tucker Lewis Index) and IFI (Incremental Fix Index). With respect to value of the criteria, the model can be accepted. Based on the results of the exploratory factor analysis, two variables grouped under one latent variable

– *CGfactor1_CG Responsibility* were inserted into the Confirmatory Factor Analysis (CFA) to analyse the correctness of the factor structure; 3 variables were inserted under the second latent variable – *CGfactor2 – CG Stability*; for the third latent variable *FIN factor - Profitability* was introduced with 5 variables, the resulting CFA model, see Fig. 2.

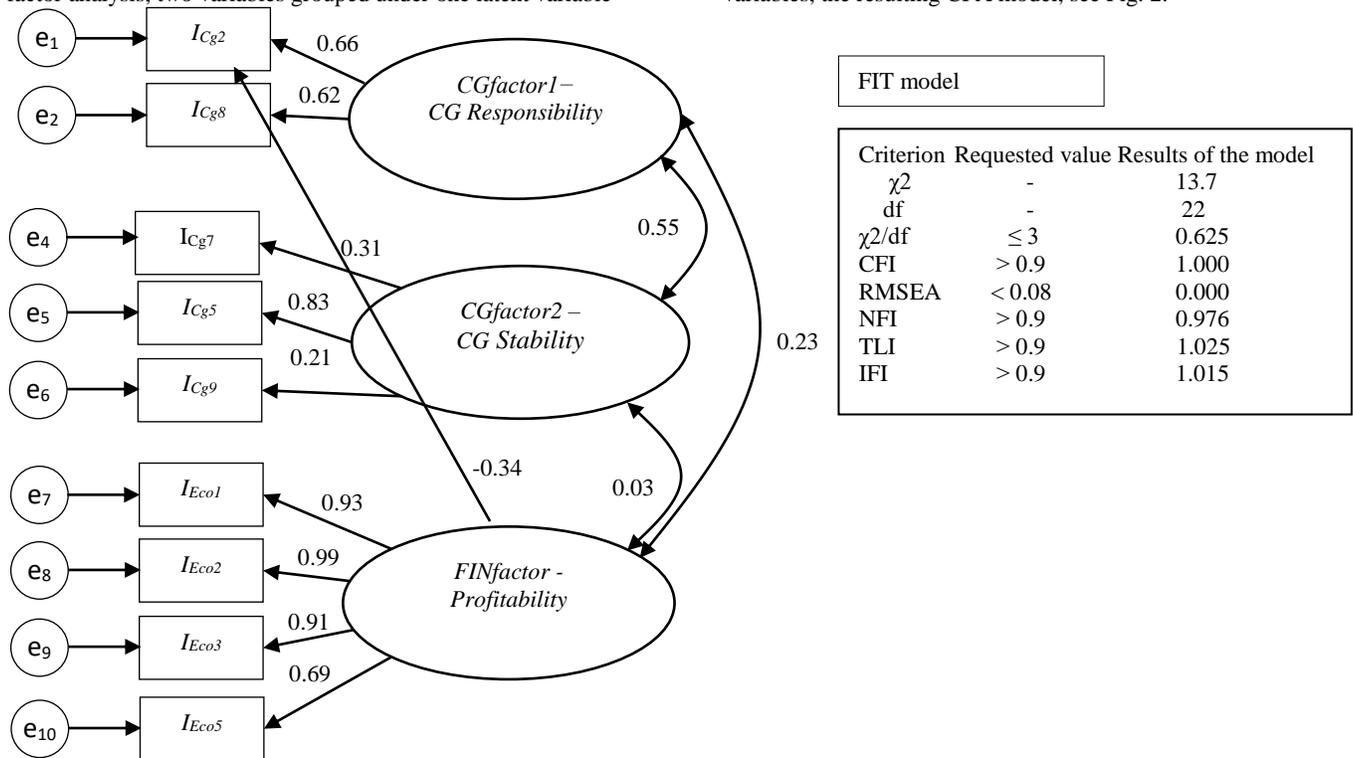


Figure 2. CFA Good Corporate Governance model and Financial Performance model (Source: Author's own source)

The resulting reduced indicators are represented by a structural model, which also includes the assumption of causality of the relationship between the GCG (*CGfactor1 a CGfactor2*), the *Firm Market Value (FMV)*, the *Firm Risk (FR)* and the *Financial Performance (FP)* expressed by the hypotheses H1, H2, H3, H4, H5 and H6 as above. The results of hypotheses testing can be seen in Table 3. The test results for indirect effect between variables can be seen in Table 3.

Table 3. The results of hypotheses testing

Hypotheses	Hypothesized Relationships	Path Loading	p-value	Remarks
H1	$CGfactor1 \rightarrow FMV$	-0.47	0.003	Significant
	$CGfactor2 \rightarrow FMV$	0.21	0.561	Not significant
H2	$CGfactor1 \rightarrow FR$	-0.23	0.052	Not significant

	$CGfactor2 \rightarrow FR$	0.61	0.027	Significant
H3	$CGfactor1 \rightarrow FP$	0,15	0.323	Not significant
	$CGfactor2 \rightarrow FP$	-0.05	0.704	Not significant
H4	$FP \rightarrow FR$	0.11	0.326	Not significant
H5	$FP \rightarrow FMV$	0.27	0.020	Significant
H6	$FR \rightarrow FMV$	-0.30	0.123	Not significant

Within the resulting structural model (Fig. 3), a total of 6 hypothetical relationships were tested relating to the Firm Market Value (FMV).

Summary of tested hypotheses results.

H1. Results of testing the influence of GCG performance, *CGfactor1*, on the *Firm Market Value* show the value of the path coefficient -0.47, p-value $0.003 < 0.05$, in this case the corporate governance is negative with respect to the value of the company. This suggests that GCG affects the *Firm Market Value* in case of the *CGfactor1*, which is created by the indicators *Ic_{g2}* - *Collective agreement* and *ICg8* - *Number of independent members in the board of directors and in the supervisory board*

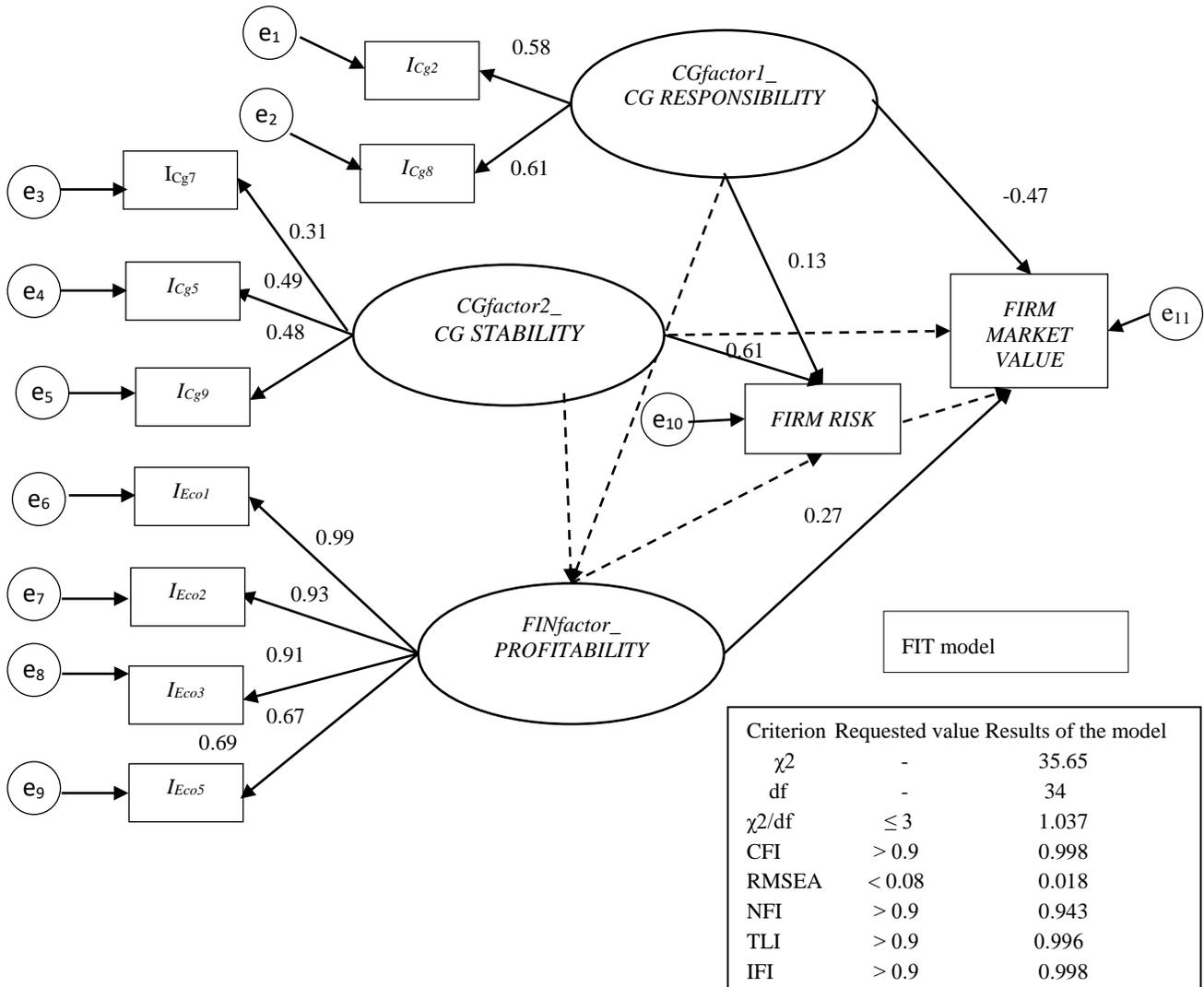


Figure 3. Structural model using SEM. (Source: Author's own source)

Some statistically insignificant regression relationships were excluded when optimising the structural model, see Table 3. The resulting optimised model is shown graphically in Fig. 3. It consists of three endogenous latent variables. The numerical values shown in the graph are standardised values of the structural coefficients for each regression relationship.

Figure 3 shows standardised coefficients of statistically significant relationships. The statistically insignificant relationships tested in the model are shown with the dashed line.

to *CG size*, this hypothesis has not been rejected. In case of *CGfactor2* with the path coefficient 0.21, p-value $0.561 < 0.05$, the hypothesis has been rejected. Subsequently, the mediator *Firm Risk* was inserted into the relationship and the indirect GCG effect on the *Firm Market Value* was calculated.

H2. The test results of the influence of the GCG performance, *CGfactor1*, to the *Firm Risk* shows the path coefficients -0.23, with p-value $0.052 > 0.05$, the hypothesis has been rejected. Another positive result has been reached in *CGfactor2* of the path coefficient 0.61, p-value $0.027 < 0.05$, which shows stability of corporate governance, conditioned by the indicators

ICg7- Stability of the board of directors and the supervisory board to CG size; ICg5 - Size of the board of directors and of the supervisory board; ICg9- Remuneration for the members of the board of directors and of the supervisory board, it has a significant influence on the Firm Risk, GCG can reduce the Firm Risk. GCG plays a significant role for Firm Risk management, as good management of the company can reduce the risks which can appear in the company. The hypothesis has been verified.

H3. The results of testing the influence of GCG performance, CGfactor1, on Financial Performance shows the value of the path coefficient 0.15, p-value $0.323 < 0.05$ and value of the path coefficient -0.05 , p-value $0.704 < 0.05$ with CGfactor2; in the case of CGfactor2, these hypotheses have been rejected, no significant influence of GCG on a better Financial Performance of the company has been confirmed.

H4. The results of testing the influence of Financial Performance of companies to the Firm Risk shows the value of the path coefficient 0.11, p-value $0.326 < 0.05$, this hypothesis has been rejected, no significant influence on the Firm Risk has been confirmed, i.e. the Financial Performance does not affect the risk.

H5. The results of testing the influence of Financial Performance of the companies to the Firm Market Value shows the value of the path coefficient 0.27, p-value $0.020 < 0.05$, this hypothesis has been rejected, no significant influence on the Firm Risk has been confirmed.

H6. The results of testing the influence of the Firm Risk to the Firm Market Value shows the value of the path coefficient -0.30 , p-value $0.123 < 0.05$, this hypothesis has been rejected, no significant influence on the Firm Market Value has been confirmed.

5. CONCLUSIONS

These results imply that good corporate governance, especially consisting in the independence of the members of the Board of Directors and the Supervisory Board, as well as social factors arising out of a collective agreement, have an impact onto the Firm Market Value. The investors really consider the companies that apply the principles of good corporate governance, including the regulatory measures, to boost performance and the Firm Market value. For investors, this implies that if good and stable corporate governance and regulation measures are implemented, the firm risk will decrease, thus having a significant impact onto the Firm Market Value. The financial corporate governance indicators can provide investors with important information about investment decisions in the companies of the processing industry in the Czech Republic.

ACKNOWLEDGEMENTS

This paper is supported by the Czech Science Foundation. The title of the Project: Modelling and simulation of sustainable investment decision-making.

REFERENCES

- [1] OECD. **Země G20/OECD Principy správy a řízení společností**. Paris/Czech Institute of Directors: OECD Publishing, 2017. DOI <https://doi.org/10.1787/9789264274075-cs>
- [2] J. F. Cotter, A. Shivdasani, M. Zenner, "Do independent directors enhance target shareholder wealth during tender offers?", **Journal of Economics**, Vol 43, No. 2, pp. 195-218, 1997.
- [3] J. Bistrova, N. Lāce. **Shareholder Value Sustainability in Equity Investing**. Riga technical University Publishers. 2014.
- [4] P. Gompers, J. Ishii, J., A. Metrick, "Corporate governance and equity prices.", **The Quarterly Journal of Economics**, Vol. 118, pp. 107-155, 2003.
- [5] W. Drobetz, A. Schillhofer, H. Zimmermann, "Corporate Governance and Expected Stock Returns: Evidence from Germany", **European Financial Management**, Vol. 10, pp. 267-293, 2004.
- [6] H. Aman, P. Nguyen. "Do Stock Prices Reflect The Corporate Governance Quality Of Japanese Firms?", **Journal of the Japanese and International Economies**, Vol.22, pp. 647-662, 2007.
- [7] S. Waddock, N. Smith. "Corporate responsibility audits: Doing well by doing good", **Sloan Management Review**, Vol 41, pp.75-83, 2000.
- [8] N. Jia, J. Shi, Y. Wang, "Value Creation and Value Capture in Governing shareholder Relationships: Evidence from a Policy Experiment in an Emerging Market", **Strategic Management Journal**, Vol. 39, pp. 2466-2488, 2018.
- [9] D. C. Hambick, A. V. Werder, E. J. Zajac, "New Directions in Corporate Governance Research", **Organisation Science**, Vol.19, pp.381-385, 2008.
- [10] M. Firth, C. Lin, H. Zou, "Friend or Foe? The Role of State and Mutual Fund Ownership in the Split Share Structure Reform in China", **Journal of Financial and Quantitative Analysis**, Vol.45, pp.685-706, 2010.
- [11] M. F. Guillen, L. Capron. "State Capacity, Minority Stakeholder Protections, and Stock Market Development". **Administrative Science Quarterly**. 2015. Vol.61, pp.125-160.
- [12] L. Xia, "Founder Control, Ownership Structure and Firm Value: Evidence from Entrepreneurial Listed firms in China", **Asia Pacific Business Review**, Vol. 1, pp. 31-49, 2008.
- [13] M. Jensen, W. H. Meckling, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", **Journal of Financial Economics**, Vol. 4, pp. 305-360, 1976.
- [14] E. F. Fama, M. Jensen, "Agency Problems and Residual Claims", **Journal of Law and Economics**, Vol 26, 1983.
- [15] R. La Porta, F. Lopez-de-Silanes, A. Shleifer, R. Vishny, "Investor Protection and Corporate Valuation", **Journal of Finance**, Vol. 37, pp. 1147-1170, 202.
- [16] X. Chen, D. Chen, K. Zhu, "Ownership Structure and Firm Performance in China: A Survey", **China Accounting and Finance Review**, Vol. 6, pp. 1-47, 2004.
- [17] Y. I. Cheung, P. Jiang, P. Limpaphayom, T. Lu, "Corporate Governance in China: A Step Forward", **European Financial Management**, Vol 16, pp. 94-123, 2010.
- [18] R. Cada, "Growth in Market Value of Companies in the Period 2018", Kreston A & CE, 2018. Available on: <http://www.ace.cz/informace/danove-novinky/rust-trzni-hodnoty-firem-v-obdobi-2018.html>
- [19] O. Deev, N. Khazalia, "Corporate governance, social responsibility and financial performance of European insurers", **Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis**, Vol. 65, No. 6, pp. 1873-1888, 2017.

- [20] R. Bauer, N. Gunster, R. Otten, "Empirical Evidence on Corporate Governance in Europe", **Journal of Asset Management**, Vol.5, pp. 91-104, 2004.
- [21] M.C. Ganescu, A.D. Gangone, "Methodology for Measuring Responsible Corporate Governance in Countries of Emerging Europe", **The USV Annals of Economics and Public Administration**, Vol. 12, pp.129-139, 2012.
- [22] A. Kocmanova, M. Pavláková Dočekalová, Ž. Šimanavičienė, "Corporate Sustainability Measurement and Assessment of Czech Manufacturing Companies using a Composite Indicator", **Engineering Economics**, Vol. 28, pp. 88-100, 2017.
- [23] A. Damodaran. **Investment Valuation: Tools and Techniques for Determining the Value of Any Asset**. Hoboken, New Jersey: John Wiley & Sons, 2012.
- [24] W. Gallagher, M. and T. A. Brown. **Introduction to Confirmatory Factor Analysis and Structural Equation Modeling**. In: Teo T. (Ed.). Handbook of Quantitative Methods for Educational Research. Rotterdam: Sense Publishers, 2013.
- [25] K. N. Bowen, **Structural equation modelling**, Oxford: Oxford University Press, 2011.
- [26] B. Schreiber, J.A. Nora, F.K. Stage, E. A. Barlow a J. King, "Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review", **The Journal of Educational Research**, Vol 99, pp. 323-338, 2006.
- [27] J. H. Aldrich, F. D. Nelson, **Linear Probability, Logit, and Probit Models: Quantitative Applications in the Social Sciences**, University of Minnesota and Iola, London: Sage Pub, Inc., 1984.