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THE IMPACT OF DIRECTOR'S NETWORKING ON COMPANY CAPITALISATION

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Introduction:

Entering the global market, the company can get many advantages. The international market provides access to diverse customers, their needs and desires are opportunities for companies [1]. When entering the international market, companies often look for additional investments to expand, in turn, investors pay attention to indicators of the company itself.

Cost and capitalization factors can be quantitative and qualitative, tangible and intangible. There are three main groups of factors:

- 1) measurable efficiency factors (return on investment, economic profit, cash flow, profit level, etc.).
- 2) internal factors (factors of the value of individual assets – stocks, investments, debts, the state of production facilities, management team, brand, etc.).
- 3) external environmental factors (market, competitors, legislation, etc.) [2].

Among factors affecting the market value of companies, we are interested in the specific characteristics of a board of directors. Since the board of directors is the most important mechanism of corporate governance, the quality of its work is given special attention. The characteristics of directors are relevant to their function of monitoring the management and developing an adequate firm strategy. Both personal and professional characteristics of directors are important. But with the growing importance of information and competences, we are interested in the issue of directors' experience and inclusion in networking, shows a recent study by the authors [1]. Independent directors possess another combination of professional competences and personal disinterest.

We pose a research question: are networking and accumulated professional experience of directors valued by the financial market? Is it reflected in the company's capitalization?

1. Factors affecting market value: review of existing studies.

The market price of a commodity is determined by the interaction of supply and demand. Business is also a commodity. Consumer demands in the enterprise market depend on the usefulness of this product [3].

For a company, there are such indicators that help to determine the “price” more accurately, they are called market indicators.

Market indicators are a set of quantitative indicators that investors use to assess the financial condition and performance of a company. These indicators can give an idea of the general market sentiment towards the company and help investors make informed decisions about whether to buy or sell shares of the company. Some of the most used market indicators include:

— The share price is the current market value of the company's shares. Investors usually look at the stock price to assess the market's perception of the company's prospects.

— Market capitalization is the total value of the company's outstanding shares. This indicator is used to estimate the size of the company compared to similar companies and to track changes in the value of the company over time [4].

The market value can fluctuate over time and significantly depends on the economic cycle. Market values fall during bear markets that accompany recessions and rise during bull markets that occur during an economic upturn [5].

Despite the problems caused by the recent world events and the unpredictability of markets, the world's largest public companies managed to increase sales and profits last year. However, good profit and loss reports mask a new economic reality that lacks government stimulus and is characterized by a much lower stock price, as inflation and a bearish reversal in the market hinder economic recovery [6].

For our work, we selected the top 100 companies by Market Cap from Asia, USA, and Europe to determine what factors helped them stay in the top 100 even in such a difficult time [7]. Before the empirical analysis, let us turn to the earlier studies to determine the indicators that we can consider in our work, but already for the “fresh” period.

The analysis by Roberto Di Pietra et al (2008) was conducted in Italy, which is characterized by low legal protection of investors and pyramid structures of firms. The main results of the analysis are that the level of “employment” of corporate directors as an indicator of the effectiveness of the board of directors has a statistically significant and positive impact on the company's market performance [8].

Studies based on a longer period conducted by Mohammad Al-Afeef. The aim was to investigate the most factors that affect market capitalization. The results show that there is a statistically significant influence of each of the factors on the market capitalization, and there is also no statistically significant influence of the turnover ratio on the market capitalization [9].

In the work of C. Jayanthi and L. Jayanthi, the dependent variable was the market capitalization. The results of the study showed that only Net Profit and Total Assets were significant [10].

The results of the study by Richard L. et al (1991) suggest that changes in firm market values are positively related to changes in foreign ownership, changes in dividend growth, and changes in special reserves, and are negatively related to changes in individual ownership and dividend payout [11].

2. Empirical research of factors affecting the market capitalization

2.1 Data and Model

Based on the studied early works, we chose the market cap indicator as an indicator of the market value of international companies. Based on the top 100 companies of 2022, for our research we took companies such as: Apple, Microsoft Corporation, Amazon, Alphabet, Tesla, Meta Platforms and others. We have collected data on companies for 2022 from the WSJ Markets website and Global Ranking website [7].

Our model:

$$MC = \beta_0 + \beta_1 * SP + \beta_2 * TA + \beta_3 * Eb + \beta_4 * Ind + \beta_5 * BD + \varepsilon_t, \text{ where:}$$

Table 1 – Variables description

Variable	Brief explanation	Description	Source
Dependent			
MC	Market cap, billion USD	Market capitalization refers to the total market value of a company's outstanding shares of stock. This variable represents the size of the company in the eyes of the market and reflects investors' expectations about the company's future prospects [12].	Global Ranking website
Independent			
SP	Share price, USD	The share price of a company refers to the price at which its shares are traded in the market. This variable reflects the market's perception of the company's financial health, growth prospects, and overall performance [13].	Global Ranking website
TA	Total assets, millions USD	Total assets refer to the total value of all assets owned by the company, including property, plant, and equipment, investments, and cash and cash equivalents. This variable represents the size of the company and its ability to generate revenue and profits [14].	WSJ Markets website
Eb	Ebitda, millions USD	EBITDA stands for earnings before interest, taxes, depreciation, and amortization, and is a measure of a company's operating performance. This variable reflects the company's ability to generate cash flow from its operations and is often used as a proxy for its profitability [15].	WSJ Markets website

Ind	Independent directors, number of people	Independent directors are members of a company's board of directors who are not employed by the company and do not have any other significant financial ties to it. This variable reflects the company's corporate governance structure and may indicate a higher level of transparency and accountability [16].	WSJ Markets website
BD	Busy directors, number of people	Busy directors are members of a company's board of directors who serve on multiple boards of directors simultaneously. This variable reflects the level of engagement and focus of the company's board of directors and may indicate a higher or lower level of risk-taking behavior [17].	WSJ Markets website

So, our model uses a combination of financial and governance-related variables to explain the market capitalization of a company. These variables reflect the company's financial health, growth prospects, and corporate governance structure, and can provide insights into the factors that investors consider when valuing a company's stock.

2.2 Methodology

We have 100 observations for the year 2022 (100 companies for 1 year), so we base on the cross-sectional data analysis. For our analysis, we use the popular OLS model method because it is easy to use and gives decent results.

In table 1 summary statistics are presented. We took a logarithm of market capitalization, price per share, EBITDA, and total assets to make our model more stable. As we can see all the values are in the interval from 0 to 100.

Table 2 – Summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Market cap., billion \$	100	25.91078	.7457501	25.01755	28.58173
Price, \$	100	5.062862	.7840563	2.958549	6.704292
EBITDA, million\$	100	16.42648	1.070587	11.7981	20.3623
Total assets, millions \$	100	18.54162	1.153789	16.37846	22.0223
Independent directors	100	8.94	2.073498	3	14
Busy directors	100	8.27	2.2912	1	15
Dependent directors	100	2.88	1.776843	0	10

To see correlation between variables we presented above, we made a matrix of correlations.

From table 3 we can see a medium positive correlation between market capitalization and total assets and EBITDA. At the same time, there is a medium negative correlation between market capitalization and number of independent and busy directors. Thus, our hypothesis is that a sum of total assets and EBITDA can influence positively on the market capitalization, while the number of busy directors can have a negative impact.

Next thing we should do is to test our model on the most common econometric problems. Results of Breusch-Pagan test show that our model has a problem of heteroscedasticity (p -value < 0.001). VIF test shows that our model

has no multicollinearity ($1.64 < 7$). Problem of autocorrelation will not exist as we have cross-sectional data. So, to make our results significant we will correct our model to heteroscedasticity using the “robust” option in Stata software.

Table 3 – Correlation matrix

	Independent directors	Busy directors	Price	Dependent directors	Market cap	Total assets	EBITDA
Independent directors	1						
Busy directors	0,3904	1					
Price	0,0065	-0,0058	1				
Dependent directors	-0,501	0,1792	-0,0028	1			
Market cap	-0,2318	-0,2524	-0,0164	0,1211	1		
Total assets	0,0749	0,1272	-0,3755	0,1669	0,321	1	
EBITDA	-0,0825	-0,1445	-0,1375	0,0149	0,5877	0,4402	1

2.3 Discussion and results

After all tests and corrections, final results are presented in table 4.

Table 4

	1	2	3	4	5
VARIABLES	lMarketcapbillion	lMarketcapbillion	lMarketcapbillion	lMarketcapbillion	lMarketcapbillion
lPrice1	0.273***	0.276***	0.247***	0.281***	0.259***
	(0.0744)	(718)	(0.0772)	(0.0738)	(0.0694)
ltotalassetsUSD Millions	0.172*	0.177*	0.121	0.175*	0.151
	(0.101)	(0.0991)	(0.101)	(0.100)	(0.0967)
lebitdaUSDMillions	0.342**	0.341**	0.388***	0.345**	0.364***
	(0.131)	(0.131)	(0.136)	(0.131)	(0.132)
Ind	-0.0413	-0.0489*			-0.0710***
	(0.0362)	(0.0264)			(0.0269)
Busy	-0.0596**	-0.0556**		-0.0724***	
	(0.0282)	(0.0247)		(0.0242)	
dep	0.0131		0.0291		
	(0.0352)		(0.0274)		
Constant	2.923***	2.957***	2.271***	2.636***	2.848***
	(0.587)	(0.588)	(0.557)	(0.568)	(0.576)

Observations	100	100	100	100	100
R-squared	0.469	0.469	0.412	0.453	0.445

Robust standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

We used several models with different sets of variables to show the stability of our final model. As we can see model 1 has the biggest R-squared - 47%. Also, it is worth noting that coefficients are consistent from model to model.

From our results we found out that such variables as total assets and EBITDA have a positive impact on market capitalization. Total assets show a low level of importance as a variable. EBITDA has more importance over total assets, which makes it a key indicator for market. The conclusion from this is that profitability is more important to the market than company size.

Number of busy directors influences market capitalization negatively, same as number of independent directors. However, independent directors are less important in the main model. This shows that market values neither busy directors, nor independent directors. There are several reasons why this happens for each kind of directors. A refutation of our hypothesis can be triggered for the following reasons. The first one is that the number of independent directors in companies is too small to have a significant impact on the company's performance. The second one is that investors do not consider independent directors and their specifics significant enough within the company's activities, despite recommendations from researchers [17]. For busy directors, it is:

- Lack of time and attention: Busy directors may not have enough time or attention to devote to their roles in the company, leading to suboptimal decision-making and oversight. This can result in poor performance and lower market value.
- Conflicts of interest: Busy directors may serve on multiple boards, which can create conflicts of interest if they are involved with companies that compete with or have conflicting interests with the company they are serving. This can lead to distrust from investors and a decline in market capitalization.
- Perception of weakness: If a company has too many busy directors, it may be seen as lacking in leadership and direction. This can lead to a loss of investor confidence and a decrease in market value.
- Overcommitment: Directors who are too busy may become over-committed and unable to fulfill their obligations to the company. This can lead to missed opportunities, delays, and other problems that can hurt the company's reputation and market value.

Overall, having too many busy directors can signal a lack of focus and dedication to the company, leading to a decline in market capitalization. It is important for companies to carefully consider the number and availability of their directors to ensure they are providing effective oversight and leadership. These findings are consistent with already existing literature: for instance, Stephen P. Ferris (2018) found that "in the aggregate, busy boards have a negative effect on firm value" [17]. It was also confirmed by A. Falato et al (2014) [18] and numerous other authors and organizations, including Institutional Shareholders Service [17].

However, some authors claim that firms with features are proved to have an opposite effect of busy boards on the market value. Field et al. (2013) have discovered that busy directors can contribute to the success of newly public firms. The authors suggest that these directors are especially effective due to their experience dealing with the various marketing, legal, and accounting challenges that typically arise during an IPO. Moreover, they found that the positive correlation between board busyness and firm performance tends to decline after five or ten years post-IPO. Therefore, it is possible that busy directors are most beneficial to newly listed or very young firms [19]. Returning to Ferris's findings, he confirms this hypothesis. In our study, the majority of firms are not newly listed, so the general relationship between busy directors and market value is completely consistent with past studies.

Impact of dependent (directors that are employees of the current company) is insignificant in all five models. On the other hand, the number of independent directors became significant only after we excluded the number of dependent directors and increased its significance when the number of busy directors was also excluded from the model. The coefficient for this variable is consistently negative: in model 2 it is -0.0489 (significant at 10%) and in model 5 it is -0.0710 (significant at 1%). These results suggest that the number of independent directors also negatively affects the market value of the firm. To explain these findings, it is important to highlight the difference between busy directors and independent directors. According to the definition we gave in Table 1, independent directors are not employed by the company, while busy directors may occupy a position in it while serving on boards of directors of other companies. These numbers have much in common which is proved by summary statistics: the mean value and standard deviation are very close. Generally, the reasons between the negative relation are the same as for busy directors: lack of time and attention, conflict of interest, perception of weakness and overcommitment. However, being employed in the company is a less important factor for market value decline than occupying a position in the board of directors in another company. This brings to mind that the problem of conflicts of interests is a serious issue for the observed companies.

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