National and Foreign-controlled Companies Operating in Development Activities in Czechia and Aspects of their Capital Structure Management

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Abstract

Research background: Entities operating in the field of development activities show significant specifics, including a high level of indebtedness. Given the nature of development projects, which are long-term, and their financial complexity, companies take, at the same time, high risks. Therefore, there is need of a high standard of financial management and risk management in this type of companies.
Purpose of the article: The aim of the paper was to provide information regarding return on equity and point out the risk factors of financial management. A partial aim of the conducted preliminary research was to identify and evaluate selected differences in financial management of national companies and foreign-controlled companies.
Methods: The research was conducted as mixed research. It started with the undertaking of qualitative research focused on textual analysis of the text and collection of selected relevant quantitative data. For evaluation, we used INFA methodology, which links financial controlling and risk controlling indicators. The data under investigation were those related to the evaluation of return on equity in relation to risks taken. The indicators of the assets, self-financing ratio and debt ratio were assessed, including the assessment of the impact of these factors on return on equity and taken risks.
Findings & Value added: The research provides new knowledge regarding the extent to which equity capital is used in the financial management of companies operating in the Czech Republic in development activities. The results indiciate that companies under foreign control and domestic companies show differences in financial structure and financial stability indicators, as well as in the effectiveness of using their capital.

Keywords: *capital structure; equity; intra-group transactions; debt ratio*

JEL Classification: *G32; H25; L74*

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1 Introduction

Overall, the Covid-19 pandemic is having an adverse effect on corporate cash flows (Ding et al., 2021). This, of course, negatively affects their liquidity (Ding et al., 2021). These problems can be addressed by having better access to credit lines, less debt, and less short-term debt (Ding et al., 2021). Furthermore, if we are talking about the construction industry, it is a sector in which financial leverage is used (Oh & Yoon, 2020). Meanwhile, this sector is dependent on the availability of credit (Oh & Yoon, 2020), a fact stemming from the high capital intensity of construction. This strategy, i.e., the leverage strategy, becomes prohibitively expensive in situations where the cost of equity and debt issuance is high (Chen et al., 2021). Companies primarily adjust their leverage by employing more equity (Huang & Kim, 2019). The availability of debt capital is improved by a company's higher liquidity and the ability to offer adequate collateral for debt (Diamond et al., 2020), something borrowers rely on most (Donaldson et al., 2020). Meanwhile, there is an indirect relationship between liquidity and the need for collateral: the higher the liquidity, the lower the need for collateral (Diamond et al., 2020). Existing studies also confirm the fact that companies with foreign owners tend to use debt financing more, as their role as a manager is far more separated from that of a business owner (Růčková and Heryán, 2015).

The results of the research made suggest that non-financial corporations choose their capital structure to make the best use of the resulting segmentation between debt and equity markets (Diamond, 2020). The asset and capital intensity of the sector undoubtedly also has a significant impact on risk management. However, there is a certain paradox: insufficient financial resources are also an obstacle to risk management (Rampini et al., 2020). The trade-off is to achieve efficiency between the value of assets after deduction of debts and financial independence; with low liquidity, financial freedom is preferred (Bolton et al., 2019). It is worth noting that foreign-controlled companies operate in an environment of segmented and imperfect financial markets, thus gaining advantages for reducing the cost of equity compared to national companies (Mihov and Naranjo, 2019). In the Czech Republic, real estate development, which is a part of the construction industry, is carried out by non-financial private enterprises, which are divided according to the unified European system into national and foreign-controlled enterprises (Kalová and Brychta, 2018). The main factors of production of these enterprises are capital and land, while the labour factor is used minimally (Kalová and Brychta, 2021).

As part of decision-making processes and risk management, owners compare the risk incurred with the return on equity (ROE) and the alternative cost of equity (re), which is the sum of the risk-free rate (rf) and the risk premium (Ministry of Industry and Trade, 2019[A]). The risk premium is naturally affected by the financial structure and stability, business risk, company size and liquidity of shares (Ministry of Industry and Trade, 2019[A]). The risk-free rate is generally considered to be the yield on 10-year government bonds (Ministry of Industry and Trade, 2019[B]). As Figure 1 shows, the risk-free rate in the industry was declining up to 2016, and subsequently only rising. In 2018, the risk-free rate increased and thus negatively affected the added economic value of companies.

The level of risk in the development sector, measured by the amount of the alternative cost of equity, decreased significantly from 24.63% in 2008 to 13.63% in 2018. It can be stated that the average return on equity reflects the development of construction activity in the Czech Republic (Růčková, 2015). The return on equity (ROE) in the industry in 2018 was 12.69%, the alternative cost of equity was 13.63% and the risk-free rate reached 1.98% (Ministry of Industry and Trade (2019[B])

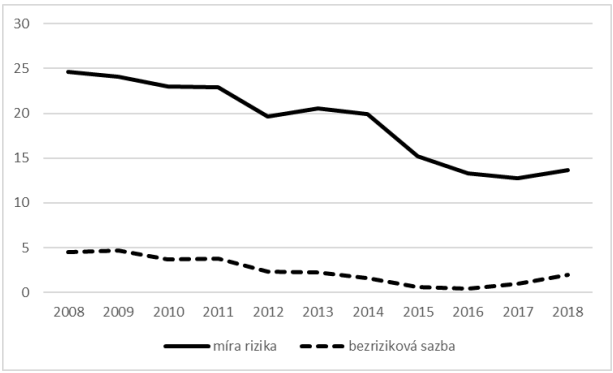

Figure 1. Development of the level of risk in the sector and the risk free rate in % (2008 – 2018)

Source: Ministry of Industry and Trade (2019[B])

2 Aim and Methods

The paper aims to provide information on the return on equity in connection with the risk taken by selected companies. First, a primary survey of financial indicators of the Development of building projects sector (NACE 41.1) was carried out. Subsequently, INFA methodology (Ministry of Industry and Trade, 2019[A]) was used for the research conducted for a selected sample of companies. This methodology links indicators of financial controlling and risk controlling (Ministry of Industry and Trade, 2019[A]). The research examined the published financial statements and reports on relations concerning the period of 2018. The subject of the research were entities that are members of the Association of Developers, z.s. (hereinafter referred to as the "Association"), which on June 30, 2021 had 33 members. Members that did not publish financial statements consisting of a balance sheet, a profit and loss statement and appendices were excluded. The total number of investigated subjects was then 29. According to the ESA2010 methodology (EU, 2013), the members of the Association were divided into two groups: national enterprises (19 members) and foreign-controlled enterprises (10 members). The return on equity against the risk-free rate (rf) and against the alternative cost of equity (re) for the period of 2018 for both groups of companies was assessed. The evaluation criteria for evaluating the success of companies used for the purposes of this paper are listed in Table 1.

Table 1. Company success evaluation criteria

Category	Indication	Characteristics
I.	Value-creating companies	$ROE > r_e$
II.	Companies in the interval	$r_f < ROE \leq r_e$
III.	Profitable companies	$0 < ROE \leq r_e$
IV.	Making loss companies	$ROE < 0$

Source: Ministry of Industry and Trade (2019[A])

The formulas for the calculations performed are given below. According to Neumaier and Neumaier (2014), this is a selected group of indicators that affect the amount of ROE (Return on Equity) and the value of the Spread indicator. These include the Return on Assets (ROA), Return on Sales (ROS) and the asset turnover indicator. These indicators explain the ability of companies to create production (Neumaier and Neumaier, 2014). However, the decisive

factor is how the indicators affect the return on equity (ROE) and the degree of risk (re) (Ministry of Industry and Trade, 2019[B]).

$$Return\ on\ equity\ (ROE) = \frac{Profit\ for\ accounting\ period}{Equity} * 100 \quad (1)$$

$$Return\ on\ equity\ against\ risk\ (Spread) = ROE - re \quad (2)$$

$$Production\ power\ value\ (ROA) = \frac{Earnings\ Before\ Interest\ and\ Taxes}{Assets} * 100 \quad (3)$$

$$Return\ on\ Sales\ (ROS) = \frac{Earnings\ Before\ Interest\ and\ Taxes}{Net\ Sales} * 100 \quad (4)$$

$$Net\ Sales = Revenues - (change\ in\ inventory + activations) \quad (5)$$

$$Asset\ turnover\ indicator = \frac{Revenues}{Assets} \quad (6)$$

$$Economic\ value\ added\ (EVA) = Spread * Equity \quad (7)$$

3 Results and Discussion

3.1 Return on equity and risk premium for financial structure

Development activities in 2018 were performed by 808 enterprises (EUROSTAT, 2021) which, in terms of size structure, comes under the category of micro-enterprises (EUROSTAT, 2020). The ROE value in the sector in 2018 was 12.69% (Ministry of Industry and Trade, 2019B). This and higher values were achieved by 9 out of 29 companies (26% national, 40% under foreign control). Return on equity in 2018 was in the range of ⟨-865;+84⟩ for national enterprises and in the range of ⟨-101;+314⟩ for foreign-controlled enterprises. The median return on equity for national enterprises was -1.2% and 9.6% for foreign-controlled enterprises.

The financial structure and financial stability of companies in the sector are shown in Table 2 and Table 3. In 2018, most of the monitored entities owned assets (hereinafter referred to as "A") with a value of more than CZK 50 million (19 out of 29). Negative equity was reported by 6 out of 29 enterprises, with foreign-controlled enterprises predominating (5 out of 6). Equity (hereinafter referred to as "E") with a value of more than CZK 100 million was reported by 10 out of 29 companies, mainly national companies (7 out of 10). A summary is given in Table 2.

Table 2. Financial structure of Association members (2018)

Enterprises	Assets in CZK million			Equity in CZK million			
	A < 50	50 ≤ A < 100	A ≥ 100	E < 0	0 ≤ E < 100	100 ≤ E < 1000	E ≥ 1000
National	5	6	8	1	11	4	3
Under foreign control	5	0	5	5	2	2	1
Total	10	6	13	6	13	6	4

Source: Own processing – financial statements (Ministry of Justice, 2021)

For most companies in the sector, the Equity Ratio (ER) ranged from 0% to 50% (13 of 29) and the Debt Ratio (hereinafter DR) from 50% to 100% (17 of 29), see Table 3. As half of the foreign-controlled enterprises achieved negative equity (5 out of 10), its DR exceeded

100%. Most national enterprises reported positive equity (18 out of 19) and DR, and the same applied for foreign-controlled enterprises, at which it ranged from 50% to 100% (13 out of 19). A summary is provided in Table 3 below.

Table 3. Financial stability of Association members

Enterprises	Equity Ratio (E/A*100) in %			Debt Ratio (D/A*100) in %		
	ER < 0	0 ≤ ER < 50	ER ≥ 50	DR < 50	50 ≤ DR < 100	DR ≥ 100
National	1	11	7	6	13	0
Under foreign control	5	2	3	1	4	5
Total	6	13	10	7	17	5

Source: Own processing – financial statements (Ministry of Justice, 2021)

Both national and foreign-controlled companies finance their assets primarily from external sources. Foreign-controlled enterprises, due to negative equity and a high share of external resources, pose a greater risk to investors than national enterprises.

3.2 Return on assets and risk premium on business risk

The Return on Assets Indicator (ROA) provides information on the value of a company's output regardless of the origin of capital (Ministry of Industry and Trade, 2019[B]) and is a part of the company's business risk assessment (Ministry of Industry and Trade, 2019[A]). High and stable production strength has a positive effect on ROE, but if it is not sufficient, ROE is getting worse due to higher indebtedness (Ministry of Industry and Trade, 2019[B]). The median ROA value for national enterprises was 2.5% and -6.4% for foreign-controlled enterprises. ROA values for national enterprises were in the range of ⟨-75; +84⟩ and for foreign-controlled enterprises in the range of ⟨-218; +35⟩. National companies manage their assets more efficiently, thus achieving better performance (higher profitability).

The creation of production power is influenced by the Return on Sales (ROS) and Asset turnover indicators. National enterprises achieved ROS values in the range of ⟨–40; +62⟩ and for foreign-controlled enterprises in the range of ⟨–133; +26⟩. The median ROS for national enterprises was 6.6% and for foreign-controlled enterprises it was –5.7%. National companies have a higher share of net profit per crown of sales, however, it would be more appropriate to evaluate this indicator over a longer period, due to the long implementation period for development projects. Asset Turnover ranged from (0.04; 2.50⟩ for national enterprises and ⟨0.07; 3.25⟩ for foreign-controlled enterprises. The median Asset turnover was 0.61 for national enterprises and 0.91 for foreign-controlled enterprises. The median of this indicator for all monitored enterprises was 0.73. This indicator is used by investors to evaluate the efficiency of companies operating in the same field. Foreign-controlled enterprises are more efficient than national enterprises and make better use of their assets to generate revenue.

3.3 Economic profit in terms of financial controlling and risk controlling

Businesses are sufficiently productive if they achieve a profit (Ministry of Industry and Trade, 2019[B]). 13 out of 29 companies reported profits for the accounting period. According to the business success criteria, 7 out of 29 companies were profitable and 9 out of 29 companies created value for their owners. Three foreign-controlled enterprises, although they posted losses for the accounting period and despite their negative equity, achieve very high

positive ROE values and were included among the value-creating companies. There is a high share of loss-making enterprises in the monitored group (13 out of 29). Enterprises whose profitability ranged from ⟨rf; re⟩ was 6 out of 29. 60% of foreign-controlled enterprises and 47% of national enterprises posted losses for the accounting period of 2018. The return on equity with respect to the risk taken is very low for both groups of companies.

The Spread value, which takes into account the return on equity and the amount of the alternative cost of equity, ranged from ⟨-878; +70⟩ for national enterprises and ⟨-115; +300⟩ for foreign-controlled enterprises. The median Spread for national enterprises was -14.83 and -4.00 for foreign-controlled enterprises. See Table 4 for a summary.

Table 4. Summary of evaluation of indicators

Enterprise categorization	ROE > 12.69 %	ROE > 1.98 %	ROE > ROA	ROS < 0	Asset turnover indicator > 0,73
National	26 %	42 %	37 %	26 %	47 %
Under foreign control	40 %	70 %	70 %	60 %	50 %

Source: Own processing – financial statements (Ministry of Justice, 2021)

As Table 4 shows, foreign-controlled companies use equity and debt more efficiently. In most cases, their return on equity exceeds the risk-free rate, they use foreign capital more efficiently and they have a positive effect of financial leverage. Foreign-controlled companies also achieve higher Spread values. It should be emphasized that most of the monitored companies achieved negative Spread values (20 out of 29). The results indicate that national companies show better solvency. Foreign-controlled companies are far riskier, but also more profitable due to the financial leverage effect. Both groups of companies use intra-group financing, which entails additional risks. With the growth of indebtedness, a greater part of the EBIT share will remain with creditors, and in the case of foreign-controlled companies, these profits flow outside the Czech Republic. National enterprises report higher values of equity and are therefore less risky. Foreign-controlled enterprises show much greater negative equity. Negative equity was reported by 5% of national enterprises and 50% of foreign-controlled enterprises.

4 Conclusion

The research performed, which is the basis for subsequent quantitative research, indicates the following assumptions (hypotheses). National enterprises, in contrast to enterprises under foreign control, in most cases, report positive equity. It can be stated that national companies manage their assets more efficiently and thus achieve higher profitability – they show a higher share of net profit per crown of sales. Regarding the effectiveness and if the take account of the Asset Turnover indicator, we come to the opposite conclusion – companies under foreign control are more efficient and make better use of their assets to generate revenue. As part of the assessment of the return on equity with regard to the risk taken, it can be stated that it is very low for both categories of companies. However, the Spread value shows very significant differences between national and foreign-controlled enterprises.

At the same time, it is possible to conclude that companies under foreign control use equity and debts more effectively. In most cases, their return on equity exceeds the risk-free rate, they use foreign capital more efficiently and they have a positive effect of financial leverage. Though in most cases foreign-controlled enterprises also achieve higher Spread values, a majority of the monitored enterprises achieved negative Spread values (20 out of 29). National enterprises, on the other hand, show better solvency. Foreign-controlled companies are riskier but, thanks to the leverage effect, also more profitable. Economic

performance and its evaluation is very closely connected with another issue, which is the correct setting of the so-called transfer prices between related parties, because both national companies and foreign-controlled companies often establish very complex holding structures, where each member of the holding performs a certain function, and receives/provides a certain type of performance. With respect to companies under foreign control, it must be taken into account that any profits flow outside the Czech Republic. This phenomenon is not in principle "wrong", but it is necessary to achieve a state where the allocation of profits is fair.

There is a need to stress that the conclusions of the research made, are determined by the fact that a situation (indicators) in one specific year was (were) under investigation – in terms of further evaluation, it will be necessary to cover a wider time horizon, as development projects are in principle of a long-term nature.

Acknowledgements

This paper was supported by Internal Grant Agency of the Brno University of Technology, Grant No. FP-S-20-6466 (Predicting Models in Finances – specifics of SMEs).

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