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## FINANCIAL INDICATORS OF THE COMPANY FROM ELECTRICAL ENGINEERING INDUSTRY: THE CASE STUDY OF TESLA, INC.

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### Abstract

Enterprise performance assessment and analysis is a key part of business management. The quantification of the impact of the relevant analytical indicators, which determining the overall profitability of the business entity, is the basis for an appropriate interpretation of the financial indicators. The aim of this paper is to analyze the financial indicators of the Tesla, Inc. that is the company operating in the electrical engineering industry in Slovakia, during the period 2012-2016. The absolute and the relative impacts of the analytical factors on the economic criterion of efficiency, were compared by using the methods of quantifying the influence of determining factors. In addition, the development of company's indicators with indicators for the whole Slovak electrical engineering industry were compared. Company's data were obtained from the Register of Financial Statements of the Slovak Republic; data of the whole industry were obtained from the CRIBIS database. This case study provides information for the financial management of the analyzed company.

*Keywords:* financial analysis, financial indicators, industry, company, Slovakia

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### 1. INTRODUCTION

The skills of the financial analysis are important to a wide range of people, including investors, creditors, and regulators. But nowhere are they more important than within the company. Owners and managers of companies should have an idea of the future development of the company. The underlying assumption is to find out how

well the company operates currently. Regardless of functional specialty or company size, managers who possess mentioned skills of the financial analysis are able to diagnose their firm's ills, prescribe useful remedies, and anticipate the financial consequences of their actions (Higgins, 2012). In today's turbulent world, financial analysis that is one of the financial management tools helps quantify the impacts

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of business activity, and helps assess the economic efficiency that is understood through indicators of business and financial success.

The aim of this paper is to analyze the financial indicators of the Tesla, Inc. that is the company operating in the electrical engineering industry in Slovakia. Within the period 2012-2016, we present the development of the financial ratios of the selected items from the balance sheet and the profit and loss statement of this company; and in addition, we look at the impact of factors on the return on equity by applying logarithmic and functional method. The most important contribution within our case study is providing information for the financial management of the analyzed company.

The remainder of the paper is organized as follows. Section 2 provides a review of related literature. Section 3 delineates company analyzed in our case study. In Section 4, we introduce the methods of quantifying the influence of determining factors in the pyramidal system of financial indicators; we describe pyramidal models, functional and logarithmic method. In Section 5, we discuss the results of the financial analysis of Tesla, Inc., and Section 6 concludes.

## 2. LITERATURE BACKGROUND

The essence of the financial analysis is the effort to continually evaluate the financial situation of the company. The financial situation can be understood as a complex multi-criteria model consisting of many partial components, characteristics and links. At present, there are many authors dealing with the theory of financial model decomposition, the most important of which

are Kislingerová and Hnilica (2005), Pavelková and Knápková (2005), Klečka (2007), Dluhošová (2008), Scholleová (2008, 2009), Růčková and Roubíčková (2012), Zmeškal et al. (2013), Zalai et al. (2013), Boďa and Úradníček (2016).

As suggested in Růčková and Roubíčková (2012), or in Růčková (2011), a suitable financial model should explain the impact of changing one or more indicators on the company's economy, facilitate and streamline the analysis of the company's current development, provide the background material for decision-making in terms of internal or external objectives. Zalai et al. (2013) says that the system of indicators of the company's rating is a system of indicators, which was constructed with respect of request on the most faithful reproduction and description of examined economic reality.

The first pyramid model, known as the Du Pont decomposition, was applied to the chemical company Du Pont de Nemours. The term Du Pont refers to the company E. I. du Pont de Nemours and Company that was established by Éleuthère Irénée du Pont de Nemours, in 1802. The author of this model was Frank Donaldson Brown (Marek, 2009) and his decomposition was focused on the return on equity. A lot of foreign authors dealt with the analysis of Du Pont model in the manufacturing industries, e.g., Vasíu, et al. (2012), Lubinski et al. (2013), Carvalho et al. (2017), Mihola and Kotesovcova (2015), Rudrajeet and Aneja (2017), Vitkova and Semenova (2015). Pyramidal models of financial corporations were studied by authors Zhang et al. (2016). As is stated in Burja and Mărginean (2014), DuPont model can be written as:

$$ROE = ROA \cdot FL = \frac{NI}{TA} \cdot \frac{TA}{Eq} \quad (1)$$

$$ROE = ROS \cdot TAT \cdot FL = \frac{NI}{Tu} \cdot \frac{TA}{TA} \cdot \frac{TA}{Eq} \quad (2)$$

where *ROE* is Return on Equity, *ROA* is Return on Assets, *FL* denotes Financial Leverage, *NI* denotes Net Income, *TA* is Total Assets, *Eq* means Equity, *TAT* is Total Assets Turnover, and *Tu* means Turnover. Mentioned authors noted that taking into account the specifics of each of the three rates of return involved in the model, this pattern of factorial analysis provides the opportunity to highlight the factors, which exert a positive or negative influence on *ROE*.

The electrical engineering industry was significantly determined by the process of globalization. This industry, as a specific carrier of the latest in technology, provides a synergistic effect that significantly improves the quality of production in other industries. Besides that, it has a stable position in the structure of the economy, and is still a main contributor to the three key sectors of exports, production, and employment (Jenčová et al., 2017). Authors Jenčová and Litavcová (2013), Jenčová et al. (2016), Jenčová et al. (2017), Litavcová, et al. (2017) studied in detail non-financial corporations of the electrical engineering industry, which taking into account the volume of sales represents the entire manufacturing electrical engineering industry.

In Slovakia, it is possible to obtain from the CRIBIS database the average values of the financial ratios that can be used to assess the financial situation of the company using, for example, graphic analysis (Jenčová et al., 2016). Taking into account the SK NACE 26 (Manufacture of computer, electronic and optical products) classification, in 2014, based on the mentioned database, the financial indicators of Slovak electrical

engineering industry enterprises reached average value of return on equity (ROE) equal to 6.57%, upper quartile was 35.24%, and lower quartile was -10.67%. Return on assets measured by EBIT (earnings before interest and taxes) was negative and reached value -1.2%, profit margin was -0.9%, assets turned on average 1.2 times a year. Inventory turnover was on average 9.08 days, debt ratio amounted to 52.34%. The median of the average collection period was 61.68 days, and the median of the creditor's payment period was 113.36 days. In 2014, the overall liquidity ratio was 1.61 for these enterprises. The new created value to sales ratio was 4.55%, and the value added to sales ratio was 26.01%.

### 3. POSITION OF TESLA, INC. IN ELECTRICAL ENGINEERING INDUSTRY

The aim of this paper is to analyze the financial indicators of the Tesla, Inc. that is the company operating in the electrical engineering industry in Slovakia. In the monograph of authors Jenčová and Litavcová (2013) were provided financial and economic analysis of Tesla, Inc., since 2008, and were applied mathematical and statistical methods. The obtained results are very similar to the financial indicators for the manufacturing industry as well as the average values that are quantified for the entire electro-technical industry. On the basis of the volume of sales among non-financial companies within the electrical engineering industry in Slovakia, ranked Tesla, Inc. 43rd. Based on the requirement of the financial management and on the basis of regular consultations with the financial director of the analyzed company Tesla, Inc., there has been and is constantly required to implement

pyramid systems of financial indicators as a result of increasing the company's performance. Using the competitiveness coefficients proposed by Chajdiak (2015), this company was included in the group A – competitive companies. Using method of distance from a fictitious object, which is one of the multi-criteria comparison methods (Stankovičová & Vojtková, 2007), this company occupied 22nd place. Mentioned method indicates the distance of the company from the ideal object, with regards to all indicators, namely basic earning power, return on sales, financial performance, and financial labor productivity. According to the standardized variable method, this company occupied 19th place within the electrical engineering industry in Slovakia.

#### **4. THE METHODS OF QUANTIFYING THE INFLUENCE OF DETERMINING FACTORS IN THE PYRAMIDAL SYSTEM OF FINANCIAL INDICATORS**

As we have already mentioned, the well-known pyramid system is Du Pont decomposition. Boďa and Úradníček (2016) proposed the definition of the static pyramidal decomposition. “Static pyramidal decomposition is a decomposition of the peak synthetic indicator into a series of partial factors, between which there are precise mathematical-logical and economic-causal relations. This requirement implies that the change of each partial factor at the higher decomposition stage affects the change of all other analytical factors in the appropriate decomposition branch upwards. Then it also affects the change of the peak synthetic indicator assuming *ceteris paribus*”. Mentioned authors also pointed out

that for the purpose of further exploring linkages between factors, it is appropriate to analyze static pyramidal decompositions in a certain chronological sequence. Then the pyramidal decomposition becomes to a certain extent more dynamic. In valuable papers of Boďa (2014) and Úradníček (2014) is pointed to the inclusion of weights express subjective importance into the dynamic multiplier pyramidal decomposition of the financial metrics.

To quantify the impact of analytical factors on the return on equity of Tesla, Inc., in this paper, the logarithmic and functional method within the multiplicative interaction, was applied.

In the pyramid system, using appropriate methods, it is possible to quantify the intensity of the influence of the individual sub-indicators on the peak indicator and thus explain the development of the financial situation of the company between selected periods. In addition, it is possible to evaluate differences between the real and planned value of the peak indicator, to compare the company's performance with competitors, to monitor the differences between company's performance and performance of the whole industry or the best companies in the given industry, to predict future development resulting from the causal links between indicators (Sedláček, 2007; Jenčová, 2016). In additive interactions between the indicators, the influence is quantified by the elementary method, using the standard shape, using the ratio of the change and the corresponding overall change multiplied by the impact of the corresponding peak financial indicator.

The implementation of the logarithmic method in the analyzed company is based on the indices of differences of the individual analytical indicators, which are

interconnected by multiplicative product and quotient interactions and acquire the values, which are valid for applying the logarithmic method (Kucharčíková et al., 2011). As it is stated in Zmeškal et al. (2013), and in Dluhošová (2008), the logarithmic method is given by the formulas (3), (4), (5), (6), (7):

$$I_x = \frac{x_1}{x_0} = \frac{a_{1,1}}{a_{1,0}} \cdot \frac{a_{2,1}}{a_{2,0}} \cdot \dots \cdot \frac{a_{n,1}}{a_{n,0}} \quad (3)$$

$$= I_{a_1} \cdot I_{a_2} \cdot \dots \cdot I_{a_n} = \prod_i I_{a_i}$$

$$I_x^{\left(\sum_i \frac{\Delta x_{a_i}}{\Delta y_x}\right)} = \prod_i I_{a_i} \quad (4)$$

$$\left(\sum_i \frac{\Delta x_{a_i}}{\Delta y_x}\right) \cdot \ln I_x = \sum_i \ln I_{a_i} \quad (5)$$

$$\sum_i \Delta x_{a_i} = \frac{\sum_i \ln I_{a_i}}{\ln I_x} \cdot \Delta y_x \quad (6)$$

$$\Delta x_{a_i} = \frac{\ln I_{a_i}}{\ln I_x} \cdot \Delta y_x \quad (7)$$

where  $x_0$  is the basic value of analyzed indicator  $x$ ,  $x_1$  is the current value of analyzed indicator  $x$ ,  $a_i$  are analytical factors,  $y$  is immediately previous synthetic factor, and  $I$  denotes index.

Using functional method one can determine discrete revenue ( $DV$ ,  $R_x$ ). Taking into account four indicators, calculation is given by equations (10), (11), (12), (13). Functional method, in which are applied two indicators, is given by equations (8), (9),

$$\Delta X_{\rightarrow a} = X_0 \cdot \frac{\Delta a}{a_0} \cdot \left(1 + \frac{b}{2}\right) = X_0 \cdot DV_a \cdot \left(1 + \frac{DV_b}{2}\right) \quad (8)$$

$$\Delta X_{\rightarrow b} = X_0 \cdot DV_b \cdot \left(1 + \frac{DV_a}{2}\right) \quad (9)$$

$$\Delta X_{\rightarrow a} = X_0 \cdot DV_a \cdot \left(1 + \frac{DV_b + DV_c + DV_d}{2}\right) + \frac{(DV_b \cdot DV_c) + (DV_b \cdot DV_d) + (DV_c \cdot DV_d)}{3} + \frac{DV_b \cdot DV_c \cdot DV_d}{4} \quad (10)$$

$$\Delta X_{\rightarrow b} = X_0 \cdot DV_b \cdot \left(1 + \frac{DV_a + DV_c + DV_d}{2}\right) + \frac{(DV_a \cdot DV_c) + (DV_a \cdot DV_d) + (DV_c \cdot DV_d)}{3} + \frac{DV_a \cdot DV_c \cdot DV_d}{4} \quad (11)$$

$$\Delta X_{\rightarrow c} = X_0 \cdot DV_c \cdot \left(1 + \frac{DV_a + DV_b + DV_d}{2}\right) + \frac{(DV_a \cdot DV_b) + (DV_a \cdot DV_d) + (DV_b \cdot DV_d)}{3} + \frac{DV_a \cdot DV_b \cdot DV_d}{4} \quad (12)$$

$$\Delta X_{\rightarrow d} = X_0 \cdot DV_d \cdot \left(1 + \frac{DV_a + DV_b + DV_c}{2}\right) + \frac{(DV_a \cdot DV_b) + (DV_b \cdot DV_c) + (DV_a \cdot DV_c)}{3} + \frac{DV_a \cdot DV_b \cdot DV_c}{4} \quad (13)$$

where  $X$  is the synthetic indicator (in this paper ROE),  $X_0$  is the basic value of analyzed indicator  $x$ ,  $DV$  means discrete revenue, and  $a, b, c, d$  are analytical factors.

According to Zmeškal et al. (2013), discrete revenue is denoted as

$$R_{aj} = \frac{\Delta a_j}{a_{j0}} \quad \text{and} \quad R_x = \frac{\Delta x}{x_0} \quad (14)$$

where  $R_{aj}$ ,  $R_x$  mean discrete revenue,  $a_j$  is



analytical factor,  $x$  is the synthetic indicator, and  $x_0$ ,  $a_{j0}$  are the basic value of analyzed indicator.

Functional method, in which are applied two indicators, is given by equations (15), (16), (17). This method removes the problem of negative indexes of the indicators.

$$\Delta x_{a_1} = \frac{1}{R_x} \cdot R_{a_1} \cdot \left(1 + \frac{1}{2} \cdot R_{a_2}\right) \cdot \Delta y_x \quad (15)$$

$$\Delta x_{a_2} = \frac{1}{R_x} \cdot R_{a_2} \cdot \left(1 + \frac{1}{2} \cdot R_{a_1}\right) \cdot \Delta y_x \quad (16)$$

$$\Delta x_{a_1} = \frac{1}{R_x} \cdot R_{a_1} \cdot \left(1 + \sum_{j \neq 1} \frac{1}{2} + \sum_{\substack{j \neq 1 \\ k > j}} \sum_{m \neq 1} \frac{1}{3} \cdot R_{a_j} + \sum_{\substack{j \neq 1 \\ k > j \\ m > k}} \sum_{l \neq 1} \frac{1}{4} \cdot R_{a_j} \cdot R_{a_k} + \dots\right) \cdot \Delta y_x \quad (17)$$

Regarding to methodology of pyramidal models, different authors use various symbols and terms of individual components. Metrics are divided by importance on synthetic and analytical (partial, sectional). To mark the main indicator, they use terms like synthetic, peak, top, cardinal, and so on. Individual factors are divided in the direction of the pyramid from top to bottom, and always generate additive, multiplicative, or combined influences.

## 5. RESULTS

In this paper, the suggest pyramidal model was suggested, which is determined by 28 indicators, from which 7 are ratios, and 21 are absolute indicators. Peak indicator is given by the ratio of the profit for the accounting period per unit of embedded equity. On the basis of DuPont model, in the

first degree of decomposition, we disaggregated synthetic indicator to four branches, which are represented by basic earning power, interest rate reduction of profit, tax reduction of profit, multiplier of equity. Return of assets is disaggregated to the product of return on sales and total asset turnover ratio in the third degree of decomposition. In the fourth and fifth degree of decomposition there are additive interactions.

In Table 1, we present the development of the financial ratios of the selected items from balance sheet, and profit and loss statement (in €) in Tesla, Inc. for the period 2012-2016. For each item is calculated the absolute increase, index, growth rate, and logarithm of index by using multiplicative interaction.

Due to the limited scope of the contribution, Table 2 presents the final detailed results of the influences of the pyramidal model analytical factors on the synthetic indicator using the logarithmic (LogMet) and functional method (FunMet).

Based on the logarithmic method analysis we obtain following findings. In the period 2014-2015, the decline in ROE (-8.56%) was the most affected by the decline in ROA (-15.7%). The ROS indicator with its negative decline (-18.97%) contributed to the overall decline in economic efficiency by a decrease of (-16.65%). The decrease in ROS was impacted by the decrease of EBIT by 87010 € (-5.5%), and this overall determined the decline in ROE (-5.42%). Taking into account operating expenses, expenditure costs and wage expenses most affected the drop in profitability. Total cost ratio has led to a decline in profitability (-16.50%). In 2016, compared to the previous year, ROE declined significantly (-41.83%). ROA declined (-37.19%), and thus reducing the ROE (-35.91%), and the ROS (-40.00%), tax

Table 1. Development of financial indicators in the Tesla, Inc.

Level	Indicator	2012	2013	2014	2015	2016
0	Return on equity (ROE)	0.0733	0.066381	0.084573	0.077330	0.044982
1a	Return on assets (ROA)	0.0776	0.078328	0.092892	0.078781	0.049476
1b	Tax reduction of profit (EAT/EBT)	0.7913	0.718195	0.763497	0.774134	0.705943
1c	Interest rate reduction of profit	0.9829	0.985770	0.995987	0.995166	0.978551
1d	Financial leverage (FL)	1.2141	1.197050	1.197272	1.274128	1.316127
2a	Return on sales (ROS)	0.0583	0.063626	0.074932	0.062961	0.037502
2b	Asset turnover (TA)	1.3319	1.231058	1.239680	1.251268	1.319280
3a	Net turnover	21021136	19822843	21071182	23695557	26077164
3b	Assets	15782270	16102279	16997281	18937233	19766206
4a	Fixed assets	6089728	5940931	5826374	6517761	6270598
4b	Working capital	9635108	10144898	11154330	12402079	13478210
4c	Accruals/deferrals - total	57434	16450	16577	17393	17398
5a	Inventory	2719376	2579571	2412970	3148196	3442672
5b	Receivables	5133100	5028371	5111975	6358392	8774951
5c	Financial accounts (total)	1782632	2536956	3629385	2895491	1260587
5d	Non-current intangible assets	20714	30609	19199	72215	56263
5e	Property, plant and equipment - total tangible assets	6069014	5910322	5807175	6445546	6214335
3c	EBIT	1224718	1261255	1578905	1491895	977948
4d	Profit/loss from operations	24963278	23528785	24935619	27956813	29412954
4e	Operating expenses	23738560	22267530	23356714	26464918	28435006
5f	Cost of merchandise sold	587846	156277	63533	66579	69506
5g	Consumed raw materials, energy consumption, and consumption of other non-inventory supplies	9196112	8357872	8777424	10180401	11522174
5i	Services	3813647	3530193	3450348	4222852	4741297
5j	Personnel expenses total	7579511	7789111	8647070	9511864	9296291
5k	Taxes and fees	1744006	205852	172215	177936	182563
5l	Amortization and value adjustments to non-current intangible assets and depreciation and value adjustments to property, plant and equipment	2053175	2010753	2040616	1975107	2024786
5m	Carrying value of non-current assets sold and raw materials sold	280529	143065	140275	117485	257301
5n	Other operating expenses	53334	123229	83616	276800	334958

reduction of profit (-7.11%), financial leverage has been involved in raising the indicator only by 2.5%. Total assets turnover ratio with a growth rate of 5.4% contributed to an increase in the synthetic indicator by 4.08%. For the other reporting periods, the influences of the factors are shown in absolute terms in Table 2.

## 6. CONCLUSION

The electrical engineering industry has a long-standing tradition in Slovakia; it is the third strongest manufacturing sector just behind the engineering and automotive industries. Slovakia is an industrial country, and forecasts showing that the future of the industry is not threatened, but one threat results from the lack of qualified labor. In this paper was provided a detailed financial and economic analysis of the return on equity in the Tesla, Inc., which is the manufacturing business entity from Slovak

electrical engineering industry.

In order to quantify the impact of the individual components of the financial equilibrium we have applied methods for additive, multiplicative and combined linkages between financial indicators. Research suggests that it is still appropriate to implement a functional method that eliminates the disadvantages of other methods; i.e., the logarithmic method may have a problem with negative indexes.

Analysis of the ROE indicator showed that over the five-year period it had its year-on-year decline, with the exception of the period 2013-2014. Financial management of the Tesla, Inc. orients its focus on the operating profit margin, the use of assets and the basic earning power of the enterprise, because these components most determine the appreciation of equity in the company. Research of Jenčová et al. (2016) applied to all electrical engineering companies also reached approximately such sequence of influence of the individual factors. In the

Table 2. Impact of factors on ROE by applying logarithmic (LogMet) and functional method (FunMet) in the Tesla, Inc. in the period 2012-2016

Influence	2013-2012		2014-2013		2015-2014		2016-2015	
	LogMet	FunMet	LogMet	FunMet	LogMet	FunMet	LogMet	FunMet
0	-	-	-	-	-	-	-	-
1a	0.00065	0.00065	0.0128	0.0128	-0.0133	-0.0134	-0.0278	-0.0277
1b	-0.00676	-0.00676	0.0046	0.0046	0.0011	0.0011	-0.0055	-0.0056
1c	0.00021	0.00021	0.0008	0.0008	-0.0001	-0.0001	-0.0010	-0.0010
1d	-0.00099	-0.00099	0.0000	0.0000	0.0050	0.0050	0.0019	0.0020
1a/2a	0.00615	0.00617	0.0123	0.0123	-0.0141	-0.0141	-0.0309	-0.0309
1a/2b	-0.00550	-0.00552	0.0005	0.0005	0.0008	0.0008	0.0032	0.0032
1a/2b/3a	-0.00410	-0.00411	0.0046	0.0046	0.0095	0.0096	0.0057	0.0058
1a/2b/3b	-0.00140	-0.00141	-0.0041	-0.0041	-0.0087	-0.0088	-0.0026	-0.0026
1a/2b/3b/4a	0.00065	0.00065	0.0005	0.0005	-0.0031	-0.0031	0.0008	0.0008
1a/2b/3b/4b	-0.00223	-0.00224	-0.0046	-0.0046	-0.0056	-0.0057	-0.0033	-0.0034
1a/2b/3b/4c	0.00018	0.00018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1a/2b/3b/4b/5a	0.00061	0.00061	0.0008	0.0008	-0.0033	-0.0033	-0.0009	-0.0009
1a/2b/3b/4b/5b	0.00046	0.00046	-0.0004	-0.0004	-0.0056	-0.0057	-0.0077	-0.0079
1a/2b/3b/4b/5c	-0.00330	-0.00332	-0.0050	-0.0050	0.0033	0.0033	0.0050	0.0052
1a/2b/3b/4a/5d	-0.00004	-0.00004	0.0001	0.0001	-0.0002	-0.0002	0.0001	0.0001
1a/2b/3b/4a/5e	0.00069	0.00070	0.0005	0.0005	-0.0029	-0.0029	0.0007	0.0007
1a/2a/3c	0.00205	0.00206	0.0169	0.0169	-0.0046	-0.0046	-0.0252	-0.0251
1a/2a/3c/4d	-0.08053	-0.08087	0.0747	0.0748	0.1592	0.1597	0.0714	0.0712
1a/2a/3c/4e	0.08258	0.08293	-0.0579	-0.0579	-0.1638	-0.1643	-0.0967	-0.0963
1a/2a/3c/4e/5f	0.02423	0.02433	0.0049	0.0049	-0.0002	-0.0002	-0.0001	-0.0001
1a/2a/3c/4e/5g	0.04706	0.04726	-0.0223	-0.0223	-0.0739	-0.0741	-0.0658	-0.0656
1a/2a/3c/4e/5i	0.01591	0.01598	0.0042	0.0043	-0.0407	-0.0408	-0.0254	-0.0253
1a/2a/3c/4e/5j	-0.01177	-0.01182	-0.0456	-0.0456	-0.0456	-0.0457	0.0106	0.0105
1a/2a/3c/4e/5k	-0.00177	-0.00177	0.0018	0.0018	-0.0003	-0.0003	-0.0002	-0.0002
1a/2a/3c/4e/5l	0.00238	0.00239	-0.0016	-0.0016	0.0035	0.0035	-0.0024	-0.0024
1a/2a/3c/4e/5m	0.00772	0.00775	0.0002	0.0002	0.0012	0.0012	-0.0069	-0.0068
1a/2a/3c/4e/5n	-0.00118	-0.00119	0.0005	0.0005	-0.0078	-0.0078	-0.0063	-0.0063

course of future analyzes, it is not necessary to apply dozens of financial ratios, for the quick orientation it is sufficient to apply the basic factors of the Du Pont equation.

For professionals, accountants, or financial managers, the implementation of the system of indicators is of great importance. Financial metrics systems help financial managers to generate the concept of development, to choose the right strategy, as well as to plan all financial aspects in the short or long term. Therefore, the company's management should emphasize and increasingly implement financial models in its financial and economic analyzes. Defining the interrelationship between financial metrics should have the greatest telling ability in the area of investment controlling or financial management, because that would greatly help in various

important managerial decisions. Financial analysis is of no importance without quality factor analysis presented by a detailed pyramid system of financial indicators, and without quantification of disaggregation of partial factors. In this case, it is only a cheap elementary support of the financial situation in the business entity of Tesla, Inc.

As we mentioned, pyramidal decompositions are constructed to respect the mathematical-logical relationships between the indicators (i.e. synthetic indicator must be a mathematical function of the partial indicators), and to respect the economic-causal relationship between the indicators (i.e. partial indicators must prevent and determine the synthetic indicator causally). Unfortunately, their use does not take into account that partial indicators may have different meanings and different



importance when influencing a synthetic indicator. For each company, other framework factors influencing its results are indicated and their importance should be taken into account when evaluating the company's development. These factors depend on the subject of its business. Therefore, it is appropriate to include weights on partial factors when using pyramidal decompositions in the future. Issues dealing with weights are mentioned in Bod'a and Úradníček (2016).

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## ФИНАНСИЈСКИ ПОКАЗАТЕЉИ ПРЕДУЗЕЊА ИЗ ЕЛЕКТРО-ИНЖИЊЕРИНГ ИНДУСТРИЈЕ: СТУДИЈА СЛУЧАЈА КОМПАНИЈЕ ТЕСЛА

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### Извод

Процена и анализа успешности предузећа је кључни део пословног управљања. Квантификација утицаја релевантних аналитичких показатеља који одређују укупну профитабилност привредног субјекта је основа за одговарајућу интерпретацију финансијских показатеља. Циљ овог рада је анализа финансијских показатеља компаније Тесла, која послује у електро-инжињеринг индустрији у Словачкој, за период 2012-2016. У раду је упоређен апсолутни и релативни утицај аналитичких фактора на економски критеријум ефикасности, користећи методе квантификације утицаја одређујућих фактора. Поред тога, упоређен је развој индикатора компаније са показатељима за целу словачку електро-инжињеринг индустрију. Подаци компаније су добијени из Регистра финансијских извештаја Словачке Републике; подаци целе индустрије добијени су из базе података „CRIBIS“. Поред научног доприноса, ова студија случаја пружа корисне информације и за финансијски менаџмент анализирани компаније.

*Кључне речи:* финансијска анализа, финансијски показатељи, индустрија, компанија, Словачка.

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