

Analysis of Factors with Impact on Earnings and their Management in Commercial Companies

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Abstract: This paper aims to analyse in more detail the factors affecting earnings and management of companies. The presented paper consists of four parts. The first part is focused on the explanation and theoretical aspects of earnings. In the theoretical part definitions of earnings, functions of earnings and basic division of earnings and management commercial companies are introduced. The second part of the paper deals with analysis of factors affecting earnings and management of companies. The factors are divided into two groups. The first group are factors resulting from the State's earnings and second group of factors from side of companies. The basic methods used in presented paper are descriptive method, analysis, selected mathematical-statistical methods, graphical methods, comparison, and synthesis. The third part paper deals with results of analysis of the earnings of Slovak companies based on factors defined in previous part paper. The fourth part of paper is devoted to discussions on solved and researched issues. In the fifth part, the paper deals with the conclusions on factors affecting earnings and management of companies. The result of presented paper is a comprehensive view of factors that affect earnings management of commercial companies.

Keywords: earnings; loss; commercial companies; earnings impact factors; economic results; earnings management

JEL Classification: M20; G10; G30; O10

1. Introduction

Earnings are in the definition of business itself. Therefore, it is very important at the beginning to define what is a business and then earnings. Business is a systematic activity carried out separately, on its behalf and under its responsibility to make earnings. During the business period, the company manages and performs various operations on the market, thus generating costs on the one hand and revenues on the other. Consequently, if revenue exceeds the cost, earnings are generated. If the revenues do not exceed the costs, the company incurs a loss. The difference between the revenues and costs of indicates the economic result, which the companies have reported for its business periods. (Dhole and Gul 2019) It follows from the foregoing that, in order to make earnings, the revenues must exceed.

There exist 4 earnings functions:

- Criterion function - deciding on economic issues of the company
- Accumulation function - creation of financial resources for business development
- Splitting function - transfer of funds to owners, investors and the State
- Incentive function - earnings here is the main motivation for business and interested workers

The primary and individual purpose of earnings is to express the economic aspect of the company explicitly. If returns, in the long run, exceed costs, it is the evidence of prosperity for the company. (Campa 2019) Also evidence about in-house processes, responsible management or properly selected goals and strategies of the company. (Chapman 2018) At the same time, earnings can be seen from the perspective of business owners and investors. The feedback for them is that their capital is appropriately used and thus assured of a positive share of the economic result. It is also possible to perceive earnings from the perspective of employees. (Groshen and Hlzer 2019) This is important for

them for two reasons. The first is because it is a reward for their work. The second reason is because it gives them the security of their work in the future. Also, too much effort by management to maximize earnings increases the risk of its future existence. However, investors expect this and it is, therefore, appropriate for companies to set goals other than earnings maximization or high market share.

Earnings are also defined as residual income, which arises as to the difference between the total incomes and expenses of companies. Therefore, we differentiate earnings on accounting and economics. Accounting earnings correspond to the difference between accounting revenues and accounting costs. Economic earnings are reduced by implicit costs. This basis offers the best assessment of the effectiveness of business activity. The source of economic earnings is the reward for taking risk because every business is associated with risk. (Salaga et al. 2015) Also, a reward for innovation and entrepreneurship, where stimulation of the latest scientific knowledge is used.

Each alternative of resource utilization achieves so-called. nominal earnings. With higher use of alternative sources arises extraordinary profit. If companies in the conditions of imperfect competition achieve long-term excessive earnings it is a monopoly earnings.

2. Methodology

Factors influencing earnings and its management in commercial companies have been divided into two groups within the scope of this paper. The first group of factors are that it affects earnings from side of State. The second group of factors are that it affects earnings from side companies.

2.1. Factors are that affect earnings from State side

Earnings are influenced by several factors that are applicable either from State side or by the companies itself. The State regulates earnings for tax purposes and determines which factors adjust earnings and thereby influence the income tax base.

Factors affecting earnings from side the State include attributable and deductible items. These items affect the basis for calculating income tax and hence earnings. These items are either expense or income. The deductible items reduce the income tax base. Attributable, items on the contrary, reduce it.

The second group of factors is the income tax rate. From the income tax base reduced for non-taxable and other items as is calculated based on the rate. This is then recorded as an expense in the accounting and deducted from the pre-tax earnings or loss. The tax rate is thus explicitly linked to earnings.

The third group of factors is the deduction of losses from previous years. This group can change the tax base and consequently the value of earnings. If a company achieves positive earnings in the current accounting period but a loss in the extraordinary period, it may be offset by deduction.

2.2. Factors that affect earnings by the company

Earnings can also have a large impact on the business itself. The first reason is the case, when the equation implies earnings, resp. loss. The second reason is the difference between revenue and cost. However, it is not possible to compare only costs and revenues as such. But also, as subsets that make them up. Therefore, to identify earnings it is necessary to know the variables that contribute to its changes. These are:

- production volume
- price
- costs

There are several approaches to calculate earnings. The following formula takes into account the price per unit of production, the variable, and fixed costs. If revenue exceeds the total cost, earnings were generated. However, the cost and revenue functions are not always linear. In this case, the equation has a different shape from the following case.

$$Z = V - N \tag{1}$$

$$Z = pq - a - bq \quad (2)$$

$$Z = (p - b) \times q - a \quad (3)$$

Where: Z = earnings
 V = revenues
 N = costs
 q = production volume
 a = fixed cost companies
 p = price per unit of production
 b = variable companies cost per unit of companies

There is an expression in the formula $(p - b)$ which means a cover contribution or a contribution to the office of fixed costs and earnings. The higher the value of the contribution is, the smaller the amount of production to make earnings is needed. This procedure is typical for manufacturing companies.

Production volume

Production is the process by which all business activities involve the combination of factors where performance is ultimately generated. On one hand, the production process incurs production costs and on the other hand, the output needs to cover not only these costs but also generate earnings. In summary, the manufacturing process quantifies the break-even point, which is derived from the earnings equation. The break-even point indicates the amount of production that will cover fixed and variable costs. The lower the break-even point, the easier it is to make a earnings. The form of break-even point in production volume is expressed by:

$$q = \frac{a}{p-b} \quad (4)$$

Where: q = production volume
 a = fixed cost companies
 p = price per unit of production
 b = variable companies cost per unit of companies

Unit costs

The term costs generally refers to the purposeful consumption of the factors of production. Costs can be in the form of a reduction in assets, incurrance of liabilities or a reduction in cash. In most businesses, costs are analysed as unit costs. Generally referred to as unit cost of production. To the addition up to all costs, it ultimately affects earnings and serves calculation. For the calculation formula to be relevant, it must include all costs actually incurred. The most common error that occurs with the calculation formula is the distinction between direct and indirect costs. Direct costs have an immediate relationship to product. For example, used raw materials, base material, semi-finished products, fuels and the like are included there. Other direct costs include technological fuel, energy, depreciation of tangible fixed assets, etc. Indirect costs are not directly quantified as they are spent on the operation of the whole companies. The most common indirect costs include operating overheads, production overheads, sales overheads and are sometimes referred to as overheads.

Unit price

Price is the monetary amount for which the customer buys the product. The price must cover not only all costs but also make earnings. At the same time, it may not be higher than the price of competition in terms of trade policy. The fixing of a minimum price is not merely for setting the lower limit of the selling price in order to undertake and to make earnings. It also serves to address the question of how much the price could be reduced or increased in relation to the change in production volume so that the company could make the required earnings. The relationship for this type of calculation is expressed as follows:

$$c_o = v_j * \frac{FN + Zp}{Qp} \quad (5)$$

Where: c_o = minimum selling price
 v_j = average variable cost
 FN = fixed cost companies
 Zp = required earnings
 Qp = expected production volume

On the basis of the above-analysed factors affecting the profit and management of trading companies, the financial results of Slovak trading companies were analysed. In the analysis of financial results, the present article dealt with the analysis of profit/loss of Slovak companies. The analysis of financial results was also carried out an analysis of Slovak trading companies that did not make any profit for the period under review. Also, on the basis of an analysis of factors affecting the profit and management of trading companies, the annual increase in personnel costs of Slovak trading companies was also found. The amount and development of income tax is also an important part of the overall economic result and analysis of financial results. Analysis of the financial results of Slovak trading companies was performed on a sample of 1,531,847 companies. Secondary data were used to analyse financial results. The results of the analysis of financial results are presented in the next chapter of this paper.

3. Results

Based on the factors defined above, which affect earnings and its management in commercial companies, we present summarized process in the following figure. 1.

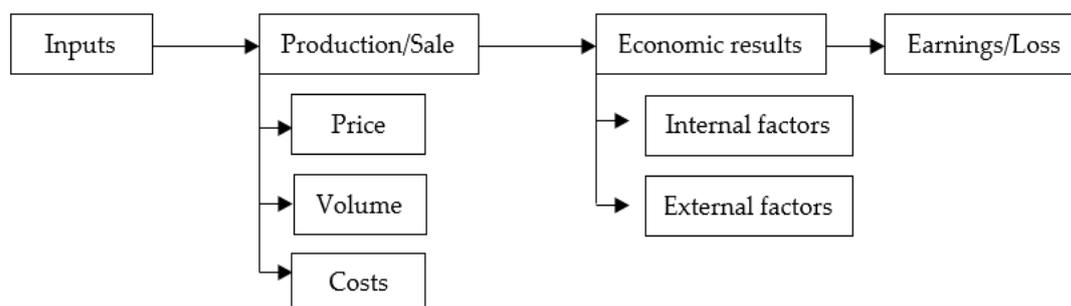


Figure 1. Factors affecting earnings and management commercial companies.

From Figure 1, it is clear that the initial input to the company will be converted by production or sale process to economic results. Production or sales are influenced by three factors. The first one is price, the second is cost, and the third is volume. After the sale of a product or service, an economic result arises.

It is determined by internal and external factors. After adding or subtracting the last operations, an earnings/loss arises, which the company can use in various ways. The ways of using earnings will be presented in the paper in a separate category of discussion.

3.1. Results of analysis of earnings of Slovak companies

From the above results, the financial results of Slovak companies were analysed based on secondary data. A statistical overview of the development of sales, profit/loss of companies of the Slovak Republic for the last 6 years was performed. Analysis of the overview development of earnings/loss for the last 6 years was examined sample of 1,531,847 Slovak companies. In 2013 and 2014, there were 249,907 and 223,987 companies in the sample. In 2015, there were 235,981 trading companies Subsequently in 2016, there were 298,997 trading companies. The 2017 contained 255,985 trading companies and in 2018 there were 266,990 trading companies. The figure 2 shows the sales overview of Slovak commercial companies for the period 2013 - 2018.

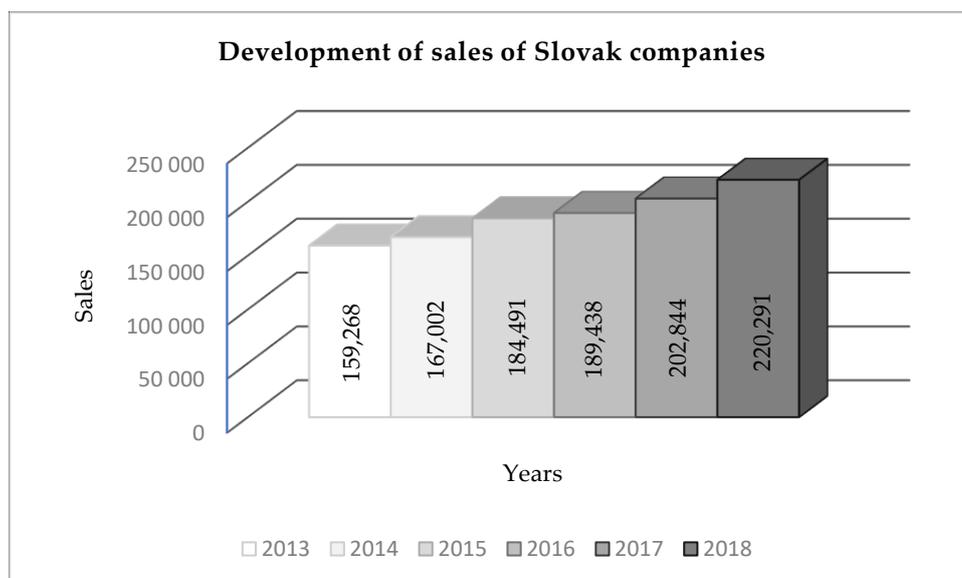


Figure 2. Development of sales of Slovak companies, units in millions of €.

Figure 2 shows sales of Slovak commercial companies for the period 2013 - 2018. Revenue was divided into several subcategories. Revenues up to 100,000 € were the case for 697,356 out of the total number of companies. Revenues between 100,000 € and 500,000 of € were reached by 202,803 companies. From 500,000 € up to 2 mil. € in sales, there is naturally a reduced number of 87,786 companies. In the region of over 2 mil. € up to 10 mil. € in sales, there are 36,454 companies. The sales of over 10 mil. € were reached by 12,312 companies.

The development of earnings by Slovak commercial companies for the period 2013 - 2018 is shown in figure 3.

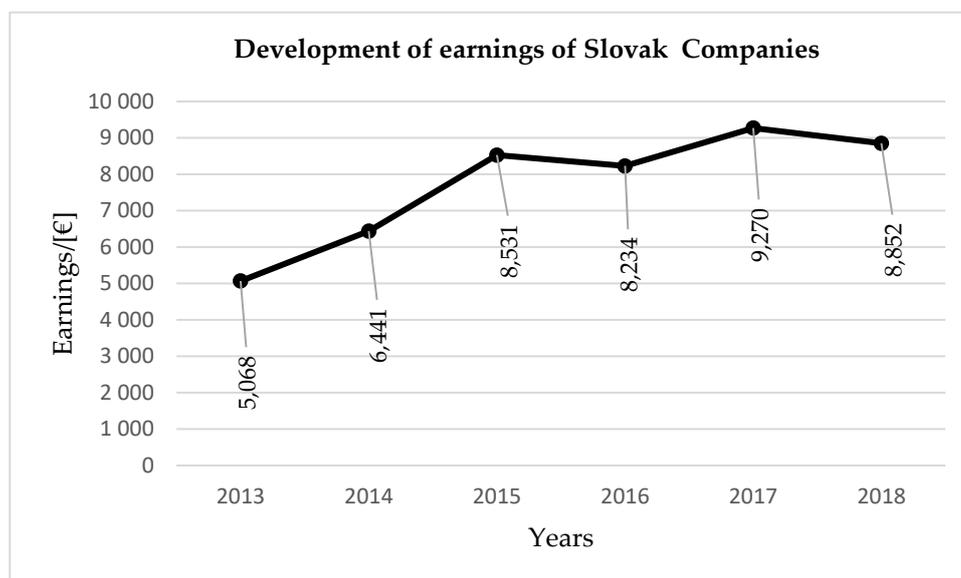


Figure 3. Development of earnings of Slovak companies, units in millions of €.

Figure 4 represents the development of earnings in trading companies. Earnings in 2018 decreased compared to 2017 by 4.51%. Sales increased by larger margin of 8.6%. Earnings in 2017 compared to 2016 increased by 13.64% in this kind of companies. The sales also increased by 7.39%. Earnings in 2016 decreased by 8.23% compared to 2015 and sales increased by 2.55%. The 2015 earnings increased by 11% compared to 2014.

Within the total amount of Slovak commercial companies, 395,139 of them were at loss. In 2013, 53,980 companies were in red numbers. In 2014, 59,920 companies were at a loss. Again in 2015, 61,574 companies did not reach profit. In 2016, 66,053 companies were at a loss. The 2017 was more negative with 75,568 companies at loss and the 2018 turned out to be the most negative one with 78,044 at loss.

The analysis of earnings/loss was also carried out on Slovak commercial companies, which achieved neither profit nor loss. They reached the so-called. zero value. The analysis results in percentages are shown in Figure 4.

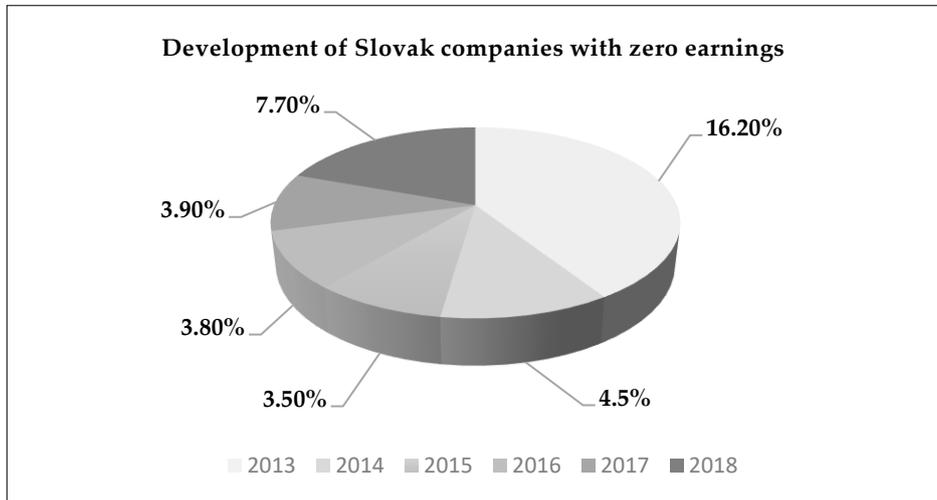


Figure 4. Development of Slovak companies with zero earnings.

Figure 4 represents Slovak commercial companies, which in the reporting period 2013 to 2018 reached the so-called. zero value. In 2013, the largest number of companies ended the year is zero. This represents an increase of 16.20% compared to previous year. In 2014, 2015, 2016 and 2017 the number of companies with zero value was around 4%. In the last analysed year, the number of commercial companies without profit nor loss, rose again up to 7.70%.

While analysing Slovak commercial companies, it was also interesting to find out the results within the personnel costs of companies. In figure 5, the results of the personal costs of companies during reference period between 2013 and 2018, are therefore presented.

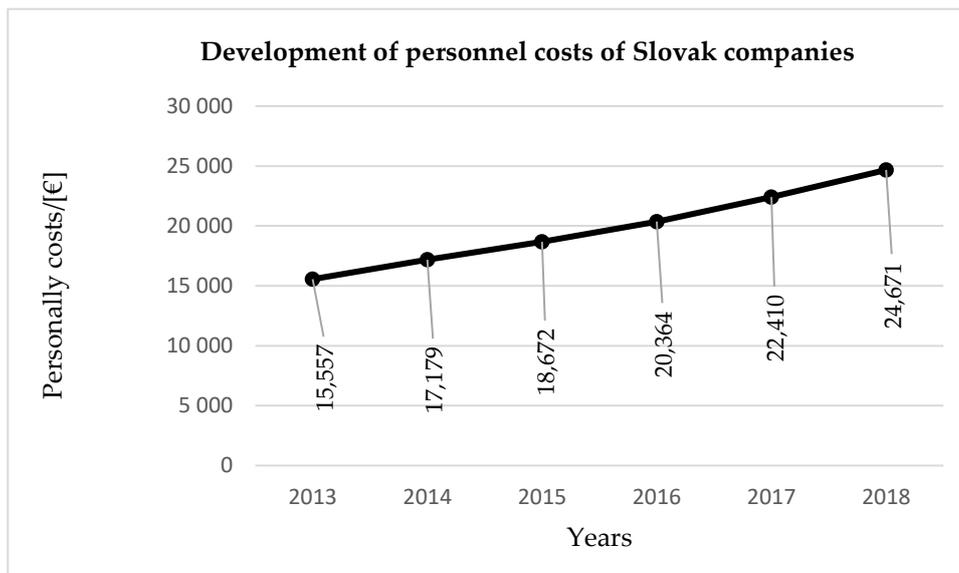


Figure 5. Development of personnel costs of Slovak companies, units in millions of €.

The number of personnel costs of Slovak companies, as shown in Figure 5 compared to other items in the financial statements has been growing significantly since 2013. The change in percentage of year-on-year values between individual years is shown in Table 1.

Table 1. The change in percentage of year-on-year values between individual years.

Years	Years over year values [%]
2014	10.42
2015	8.69
2016	9.06
2017	10.04
2017	10.09

In 2014, the volume of personal deposits increased by 10.42% compared to 2013. Subsequently, in the next two years, the number of personal deposits was around 9%. However, in 2017 and 2018 the number of personal deposits was around 10% compared to previous years.

The process of creation and the total amount of profit or loss are significantly influenced by income tax, which is part of the entity's costs. Income tax is a part of expenses and is an expense that is not recognized as an expense for achieving, securing and maintaining an income. Income tax affects the economic result after taxation, earnings/or loss, which is also intended for distribution among owners. Slovak companies paid tax licenses from 2014 to 2017. After 2018, when they were abolished, significant changes are visible. The share of companies with financial statements for the year 2018 paying negative to zero tax increases from 10.3% to 42.8%. The number of companies paying tax more than 2,880 € is about the same level as in previous years. The development of the number of Slovak companies by tax category was divided into three categories. The first category is Slovak companies that pay tax up to 480 €. The results are shown in Figure 6.

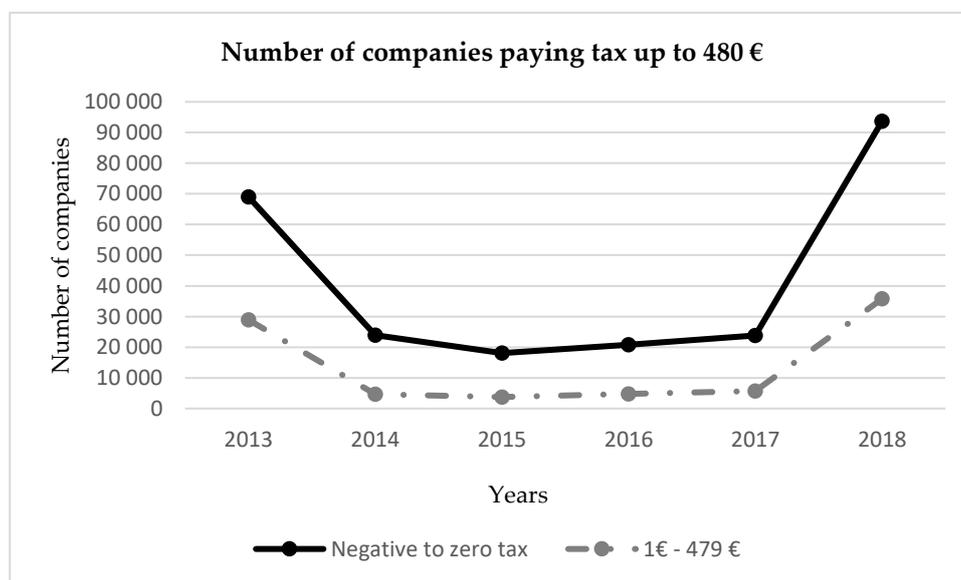


Figure 6. Number of Slovak companies paying tax up to 480 €, units thousands of €.

In the monitored period from the above picture no. 6 shows that the largest number of Slovak trading companies is in 2018, which reaches negative to zero tax. It represents 93,670 companies. In previous years, the number of companies that had a negative to zero tax ranged from 18,000 to 24,000. Also, in 2018 there were 35,768 companies that paid tax to 479 €. In previous years, the number of companies that paid tax of up to 480 € ranged from 3,000 to 6,000.

The second category is Slovak companies, which pay tax from 480 € to 960 €. The results are shown in Figure 7. In the second category, Slovak companies are divided into three subcategories. The first is the number of companies that pay 480 € tax. The second subcategory is the number of companies that pay 481 € to 959 € tax. The third subcategory is the number of companies that pay 960 € tax.

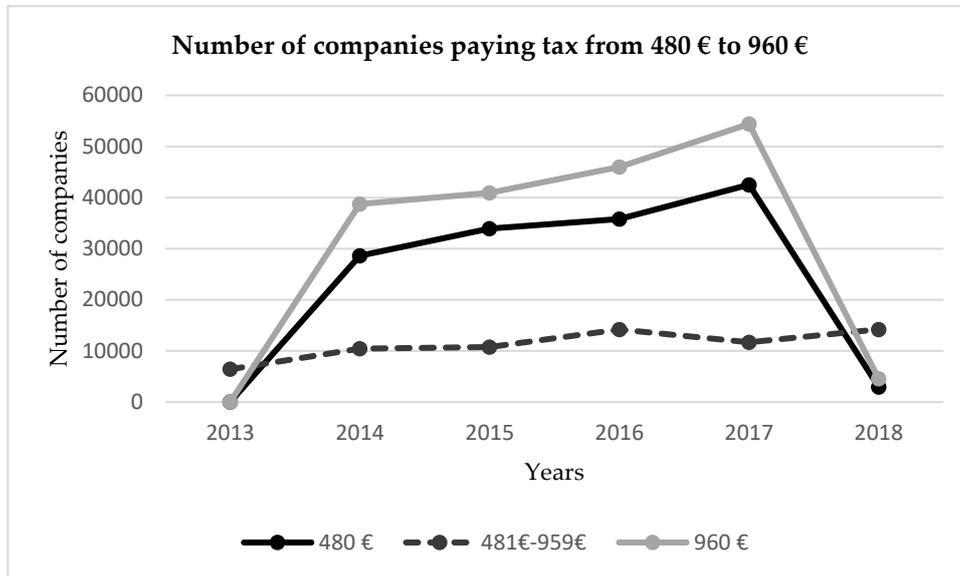


Figure 7. Number of Slovak companies paying tax up from 480 € to 960 €, units thousands of €.

From the above Figure 7. shows that the largest number of companies in the first subcategory is in 2017. Thus, 42,523 companies pay 480 € tax. In 2018 there were only 2,954 companies paying 480 € tax. In the second subcategory, the largest number of companies paying taxes ranging from 481 € to 959 € in 2018 is represented by 14,219 companies. In the third subcategory, the largest number of companies paid a tax of € 960 in 2017. That was 54,402 companies.

The third category is Slovak companies, which pay tax over 960 €. The results are shown in Figure 8. In the third category, Slovak companies are divided into three subcategories. The first is the number of companies that pay from 961€ to 2,879 € tax. The second subcategory is the number of companies that pay 2,880 € tax. The third under the category is the number of companies paying over 2,880 € tax.

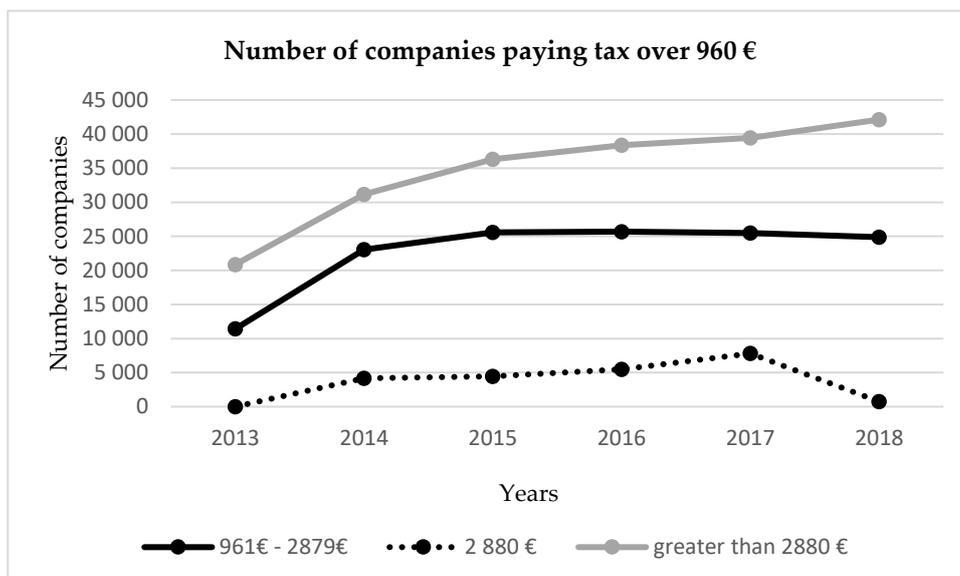


Figure 8. Number of Slovak companies paying tax over 960 €, units thousands of €.

From the above Figure 8. it is clear that the largest number of companies in the first subcategory is in 2016. Thus, 25,691 companies pay taxes ranging from 961 € to 2,879 €. In recent years, the number of companies has been almost at the same level. In the second subcategory, the largest number of companies paying a tax of 2,880 € in 2016. In the third subcategory, the largest number of companies paid a tax of over 2,880 € in 2018. This represented 42,123 companies.

4. Discussion

If revenue for a given period exceeds costs and generates earnings, it is necessary to work with it and use it further. In the presented paper, factors determining the amount of earnings were characterized and categorized. It is also necessary to analyse the possibilities of its use and division.

In the case of a public companies, it is not required by law to create mandatory funds and items. Earnings, respectively. the loss is divided equally among all shareholders. Unless otherwise provided in the memorandum of association, interest on the value of the paid contribution at the agreed amount shall first be paid to the shareholders. Subsequently, the residue is divided equally.

In the case of companies with limited liability, there are several options for distributing earnings. The first option is a share in earnings. This is the portion of the earnings to which members of the Board of Directors and the Supervisory Board are entitled if approved by the General Meeting. (Balcerzak et al. 2017) The second option is a mandatory share in the statutory reserve fund. This option is created because of business risks and is used to cover possible losses. The Commercial Code does not impose an obligation to create a reserve fund for limited liability companies. The third option is to pay a share of the earnings to the silent partner if the company has made earnings. If the company did not make earnings in the previous period, the silent partnership contribution is initially a supplement to the original amount. Unless otherwise specified in the contract, the tacit partner is obliged to share in the loss incurred up to the amount of its deposit. The resulting surplus profit share is paid to the silent companion. The share in the earnings of the silent partner is contingent and determined in the silent partnership agreement. Another possibility is to increase the registered capital by earnings. This is possible if the General Meeting decides to do so and then approve. Last but not least, statutory funds are also included in the distribution of earnings. (Al-Haddad and Whittington 2019) Statutory funds include, for example, social funds or bonus funds. These are called mandatory. Voluntary funds are created based on the decision of the General Meeting and the needs of the company. The allocation to the statutory funds is determined by the company and the company also determines how and where the money will be used. (Anderson and Esenaliev 2019) Another option is to cover losses from previous years. This option can only be used if the company has posted earnings in the current period and a previous loss. Earnings is thus possible under conditions approval by the General Assembly as loss compensation. However, the loss may also be covered in another way. This can be done, for example, through a reduction in equity or a reserve or other fund. The last option includes retained earnings from previous years. It is one of the types of self-financing and serves to develop the needs of the companies. This is the so-called. retained earnings and in the future, it can be used for business development or loss settlement. (Valaskova et al. 2018) However, the distribution of earnings at the end of the match is within the competence of the shareholders. Large number of aspects have to be taken into account in its distribution. Among them, there are visions, business goals, business stability, business environment, etc. It is, therefore, necessary that earnings help to optimize business development. (Kovacova et al. 2017) At the same time, however, stability has to be maintained. Stakeholder satisfaction with usage and profit distribution will always vary. It is, therefore, necessary for companies to set an optimal balance that will meet their needs and invest in the future of the companies themselves. (Sajnog 2017)

5. Conclusions

If businesses make long-term earnings, it does not just mean that their products or services have a higher selling price than the purchase one, respectively production price. It also means that the company disposes of its assets economically, sensibly invests. It has chosen the right marketing strategy, monitors competition or its activities and constantly makes internal processes more effective.

As part of the analysis of factors affecting earnings in the management of commercial companies, Slovak companies have a fluctuating character of earnings development. However, based on this analysis, Slovak commercial companies also have positive earnings development.

The factors of limitation in the payment of earnings in Slovak commercial companies are also in Act 431/2002 Coll. on Accounting, as amended. If development costs have not been activated, or one of the components of the assets that a company may have is entirely depreciated, a trading company can distribute earnings. This is also possible when the aggregate amount of reserves and other equity is greater than the total amount of unwritten capitalized development costs. According to the Slovak Commercial Code companies with limited liability and joint-stock companies cannot even pay out earnings, if it would cause them to fail – it means to achieve negative equity or insolvency.

When distributing earnings or settling losses, commercial companies should also be careful not to threaten their bankruptcy. Thus, the ratio of equity to liabilities must be below the threshold. If a company is in bankruptcy or threatens to fail, it goes into crisis and is the subject of certain restrictions. Therefore, further research of the presented paper in the future may be a more detailed examination of these constraints and their impact on earnings and management of commercial companies.

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