

## ANALYSIS OF THE RATIO INDICATORS IN LPS S. P.

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### Summary

Financial analysis is a significant area of financial management of an enterprise as it provides a link between the expected outcome of management decisions and reality. It only makes sense and meaning if the result is new information that is more valuable than primary data and has greater verbal ability to assess the financial situation. Analysis of the ratios can be created using a large set of methods. The set of relative financial ratios is chosen to allow us to analyse the crucial aspects of the company's financial situation. This paper is aimed at exploring and assessing the financial situation of LPS in terms of the ratio indicators.

**Keywords:** financial analysis, ratio indicators, state company, financial ratios

### 1. INTRODUCTION

Financial analysis of the company plays an important role in concretizing and clarifying the strategic objectives for the creation of a long-term and short-term financial plan. Its aim is to evaluate the financial situation of the financial health of the company and to identify the causes that have affected it. It seeks to express, as far as possible, the financial situation of an undertaking, to identify all the factors that have determined the financial health of the enterprise. The financial situation of an enterprise influences factors that can be divided into two groups. Several authors have dealt with the subject and, as an example, the issue can be mentioned **Evaluation Index System of Civil Air Traffic Management Service Satisfaction in China** where authors said that the quality of air traffic management is of essential in aviation safety and operational efficiency [1]. In **A cost-efficiency analysis of European air navigation service providers** authors have dealt with problem that Air Navigation Service Providers (ANSPs) as the third major component of the aviation industry have been less of a focus in research than their airline and airport counterparts [2]. In **Economic Efficiency of European Air Traffic Control Systems** authors said much analysis has been conducted on the efficiency of airlines, but less has been done on air traffic control, or strictly air navigation services [3]. In **The partially private UK system for air traffic control** authors reviewed the performance of the PPP up to the present time in terms of safety, delays due to air traffic control, efficiency and financial performance [4]. In **Explaining changes and trends in the airline industry: Economies of density, multiproduct scale, and spatial scope** authors researched shape and size of airline networks that have not been explained clearly from a cost perspective based on the finding of increasing returns to density for given route structures and constant returns to scale for variable network size [5]. In **Calculation of economies of spatial scope from transport cost functions with aggregate output with an application to the airline industry** author searched transport network expansions that have usually been analyzed calculating returns to scale with variable network size (RTS), which has been shown to suffer from a number of shortcomings because, in the end, it attempts to capture as a scale property something that in fact is related with scope, namely the addition of new products when a transport network expands.

## 2. Methodology

We used the following formulas to process data on the financial situation in LPS

- Liquidity – Formula: Current assets / current liabilities
- Profitability - ROA Formula: Net Profit / Total Assets
  - ROE Formula: Profit after Tax / Net worth
  - ROS Formula: Operating Profit / Net Sales
- Activity – Turnover time Inventory Formula: Inventory / (Sales / 360)
  - Turnover time Receivables Formula: Receivables / (Sales / 360)
  - Turnover time Liabilities Formula: Liabilities / (Costs / 360)
- Indebtedness – Formula: Total debt / Total assets
- Equity indebtedness – Formula: Debt / Equity

## 3. Analysis of the ratio indicators

In order to obtain a comprehensive view of the situation of the state company in the period under review, it is necessary to subject the values from the financial statements to the ratio analysis. Indicators of profitability, liquidity, activity and indebtedness that have been predominantly positive over the whole reporting period will be analysed.

### 3.1 Liquidity

These indicators express the ability of an enterprise to pay, solvency. They also express how quickly an enterprise is able to transform material values into a monetary form. Their course is shown on the chart.

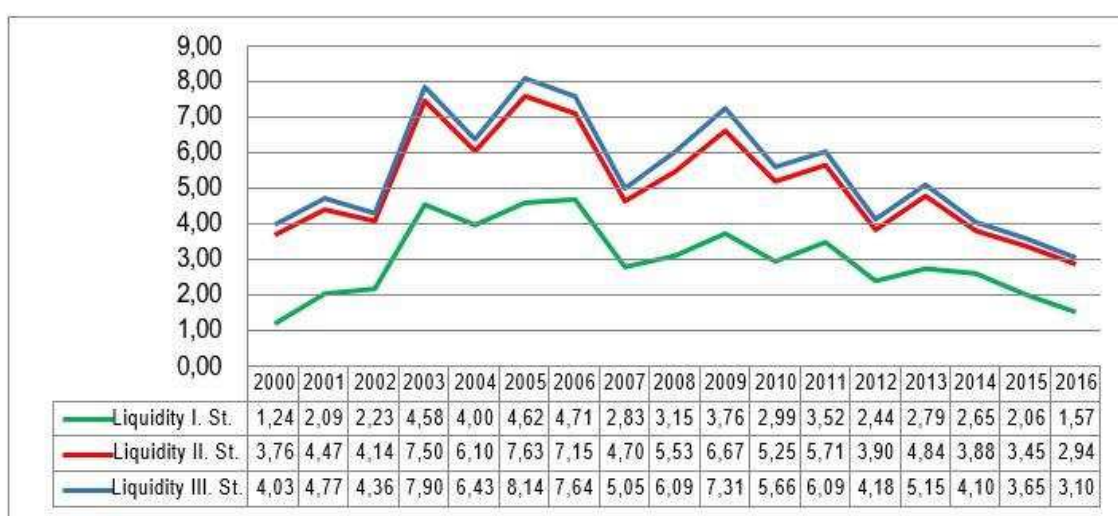


Figure 1 Development of the liquidity indicator

The Grade I liquidity ratio ranged from 1.24 to 4.71. Higher value is favourable from the point of view of creditors, but for business management, it is a signal of a low return on business (too much of a current asset is tied up in the form of prompt means that yield little or no interest). The highest value was in 2006, at 4.71. However, the indicator has a decreasing trend, which is acceptable to the extent that the recommended values represent a range of 0.2-0.6 at the required value of 0.20.

Liquidity indicator II. grade is expressed by the ratio of financial accounts and short-term receivables to short-term liabilities. The range of these values ranges from 2.94 to 7.50, the optimum

being in the range of 1.8 and 2.5, at the required value of 1.50. As the value achieved is sufficiently high, this means that the company has a low insolvency risk. The lowest value of 2.94 was recorded in 2016. The trend of this indicator also declines.

Liquidity indicator III. grade achieves the highest values. As stocks account for only about 7% of the total current assets, the total liquidity is almost identical to the current liquidity. The business is still above the recommended range of 2 to 2.5 at the required value of 2.0. The development trend of this indicator is again decreasing.

Initial growth was due to an increase in the financial accounts, with a small change in total short-term liabilities. The years 2004 and 2007 were marked by the relatively low level of financial accounts and short-term receivables, while increasing short-term liabilities. As we can see on the graph, and as noted in specific indicators, all three levels of liquidity have a declining nature, which may be explained by rising short-term liabilities. Since the amount for the invoiced unit has changed quite a lot, these curves do not have a linear pattern.

### 3.2 Profitability

Profitability allow you to express how much profit the company creates from its assets or liabilities. The values of all calculated pointers are in the graph.

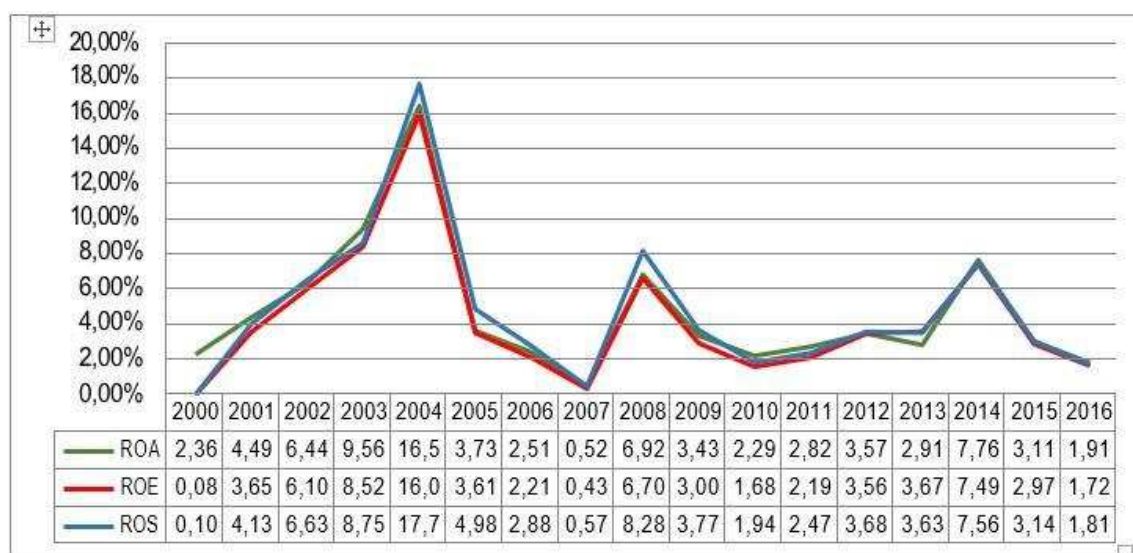


Figure 2 Development of the profitability indicator

Indicators have similar values in the reference period. The year 2000 represented a minimum for return on equity and returns. The reason was the high value of equity and the low net profit and the resulting lower sales. Profit in the coming year increased by 4856.90%, which in the total rating is € 1 459 038.

By the year 2004, due to rising profits, profitability grew and ROS reached up to almost 18% when the company reached its maximum profit over the reviewed period. The value of the indicator says that LPS generated 18 cents of profit in a given year for 1 € revenue. It followed the fall and the lowest profit over the period under review, which was signed on the values of all the indicators as they all combine the economic result in the numerator. In 2007, the return on assets was low. The result was the strike in the company (closure of the Slovak airspace) and the reduction of the unit rate (decrease by 36.3%).

Subsequent two peaks in 2008 and 2014 were also caused by a significant increase in profit, which peaked in 2014 over the decades. In the last years of the LPS period under review, the decline in profitability has resulted in a reduction in profit. In 2015 by 60% and 2016 by almost 43% compared

to the previous year, which was the primary cause. The second factor behind this decline in the ROA indicator is the 2.93% increase in assets and the 0.07% increase in equity in ROE.

From the point of view of the effectiveness assessment, the profitability and the cost of the company are included in the evaluation. An average business per one euro of revenue generated around 4.8 cents of profit. In general, the lower the costs are needed to generate a 1 € profit. Cost is calculated as:  $1 - \text{profit returned on sales}$ . Increasing or decreasing profits, has affected not only cost reductions but also increased sales.

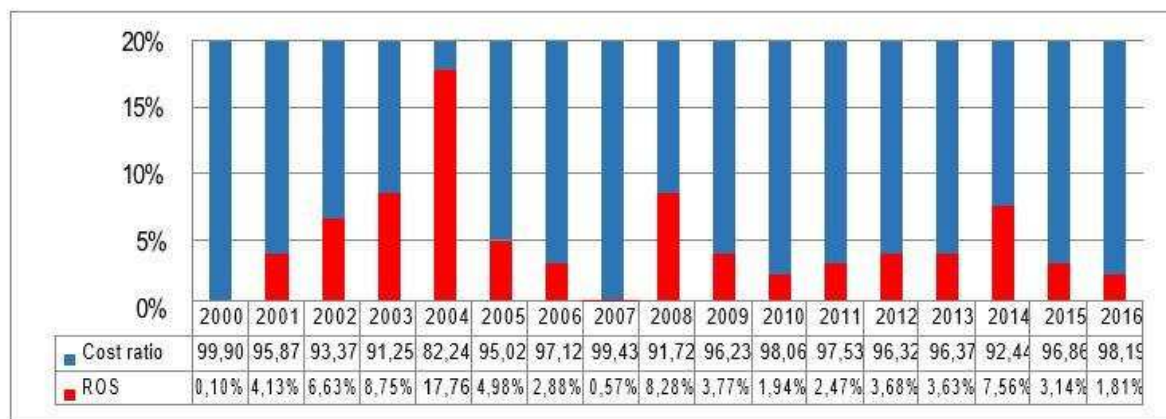


Figure 3 Development of cost ratio

### 3.3 Activity

Activity shows how effectively an enterprise uses its assets. The business department is a decisive factor in terms of inventory. Business size is important when deciding on the time of turnover of receivables and payables. The air traffic services of the Slovak Republic are a large enterprise, which has a monopoly position on the Slovak market.

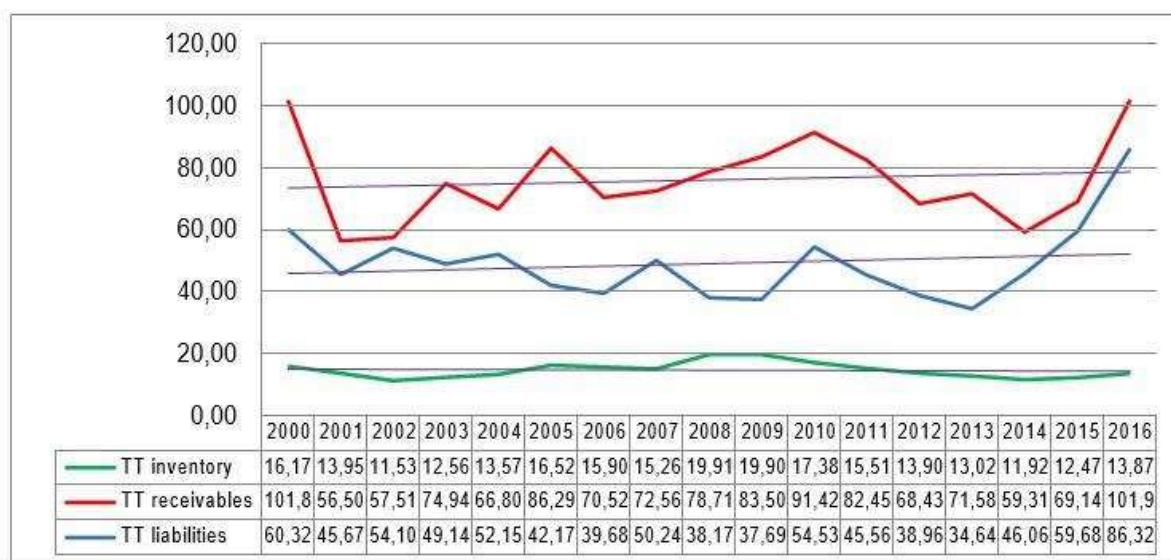


Figure 4 Development of the activity indicator

From the point of view of the development of the activity, it is clear that the company complies with the payment discipline better than its customers and the debt collection period is longer than the time of payment of the obligations. We can note that at the beginning and the end of the reference period, the turnover time of receivables was almost identical, of almost 102 days, which is the maximum of the period under review. In the second year it reached it's 56.5 days minimum. The average turn-over



time for receivables is 76 days, which is not a problem for a large enterprise, as the liquidity indicators show positive values. The trend denotes the gradually increasing turnover of both receivables and payables.

The longer the maturity of receivables, the higher the requirements for a business loan, and the higher the costs. The Trend denotes the gradually increasing turnover of both receivables and payables.

The asset turnover period recorded large fluctuations during the period under review. It averaged 441 days, and on 30 December 2016 it was 540.4 days. The inventory turnover time is kept on average for 15 days with small deviations, which corresponds to low stock levels throughout the whole period under review and shows that the company sells its stocks in 15 days.

### 3.4 Indebtedness

On the chart of indebtedness, it can be seen that Flight Operations Service SR, š.p. they are in favour of their own sources of funding, to a large extent. Total indebtedness is long-term below 30%, which is a very positive indicator and denotes the stability and independence of the business. However, if unexpected situations arise, it is possible to increase foreign credit resources.

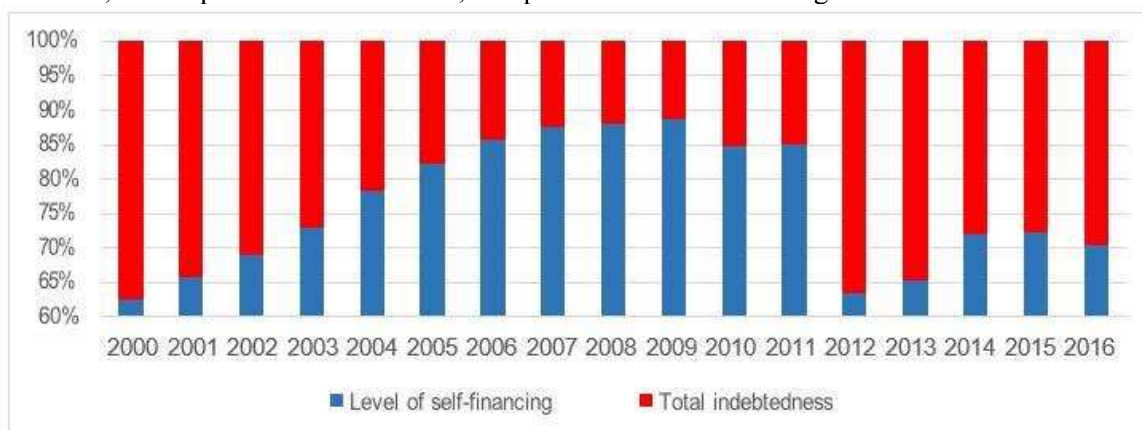


Figure 5 Financial structure

The following table shows the values of the "Interest Rate" indicator, which indicates how many times the profit is higher than interest. Thirty or more are considered safe values, which the company did not have until 2003. In 2008 - 2011, the trader did not have a loan, so this indicator is out of the question. Excellent values are considered to be 6 or more, which he has fulfilled highly during the next loan. This indicator again confirms stability.

Table 1 Interest coverage

Year	2000	2001	2002	2003	2004	2005	2006	2007	2012	2013	2014	2015	2016
Interest coverage	1,33	2,84	4,83	6,55	24,10	7,58	8,90	6,76	20,47	6,07	19,05	15,34	12,97

The equity ratio meter indicates the amount of foreign equity per unit of equity. This indicator is evaluated by banks when company requires the business loan. In the indicator, the firm has a significant margin, which means that it can draw further loans if necessary. 1/3 of own resources and 2/3 of foreign resources are considered acceptable.

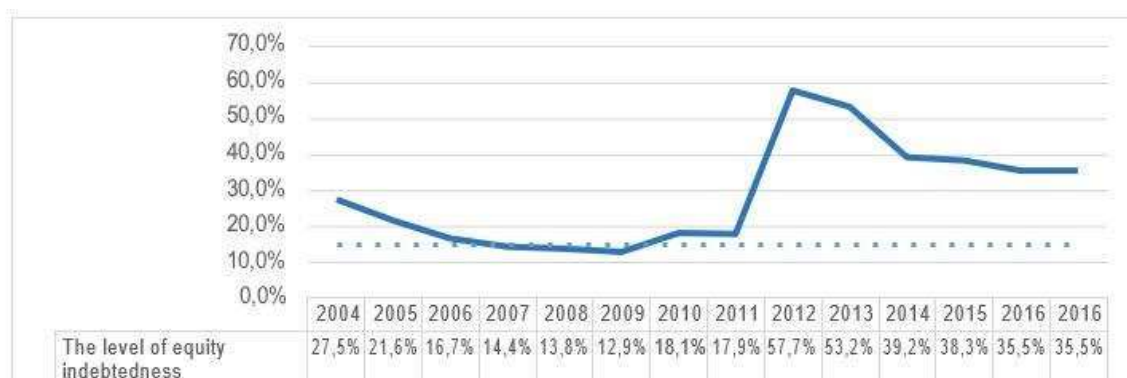


Figure 6 The level of equity indebtedness

### 3.5 Estimate of the future financial situation

For business in crisis, there is a typical declining trend in liquidity, profitability and activity. The ability to repay the loan declines and debt is rising. As can be seen from the previous chapters, the trend of profitability and liquidity has a slightly declining character, caused by extreme gains in 2004. These indicators nevertheless indicate a more stable situation and do not indicate the imminent dangers, the crisis, bankruptcy. A quick test and Altman Z-score will be used to predict the state of the business.

### 3.6 Quick test

Quick test is used to predict predicted developments, it does not make much sense to focus on values from past years, which may be helpful in evaluating this indicator. As shown in the chart of the rapid test development the company's financial situation is assessed as very good and the firm is creditworthy. From 2005 to 2007, the company was included in the yellow zone, but the financial situation was still good.

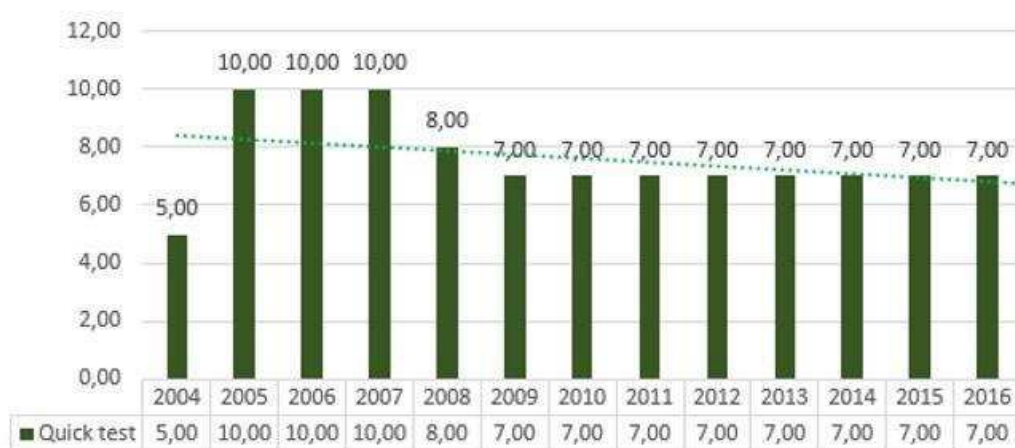


Figure 7 Quick test

Table 2 Evaluation of the Quick test

Rating	
The sum of the points is less than 8	Very good financial situation
The sum of the points is in the range 8 to 12	Good financial situation
The sum of the points is in the range 12 to 15	Bad financial situation
The sum of the points is in the range 16 to 19	Poor financial situation
The sum of the points is more than 19	Extremely bad financial situation

### 3.7 Altman's analysis

The task of Altman's analysis is to predict a potential business crisis. Based on the specific five selected indicators, it makes it possible to define with some probability the status and direction of the organization, and so it can predict its future.

Different values are visible from the development graph. While in 2004 to 2006 the company showed a good situation, in 2007 and 2008, the Z values were at the level of the company facing bankruptcy. It was a fault b, and the prosperous business seemed unpredictable.

The trend of the past few years shows that the value of this indicator is gradually rising. In 2016, the score was 2.63. This value belongs to the inequality of  $1.2 \leq Z' \leq 2.9$ , which puts the company into the gray zone of the unmatched results. However, according to the trend, the company may reach  $Z > 2.99$  next year, which will mean a stable financial situation and unexpected financial difficulties.

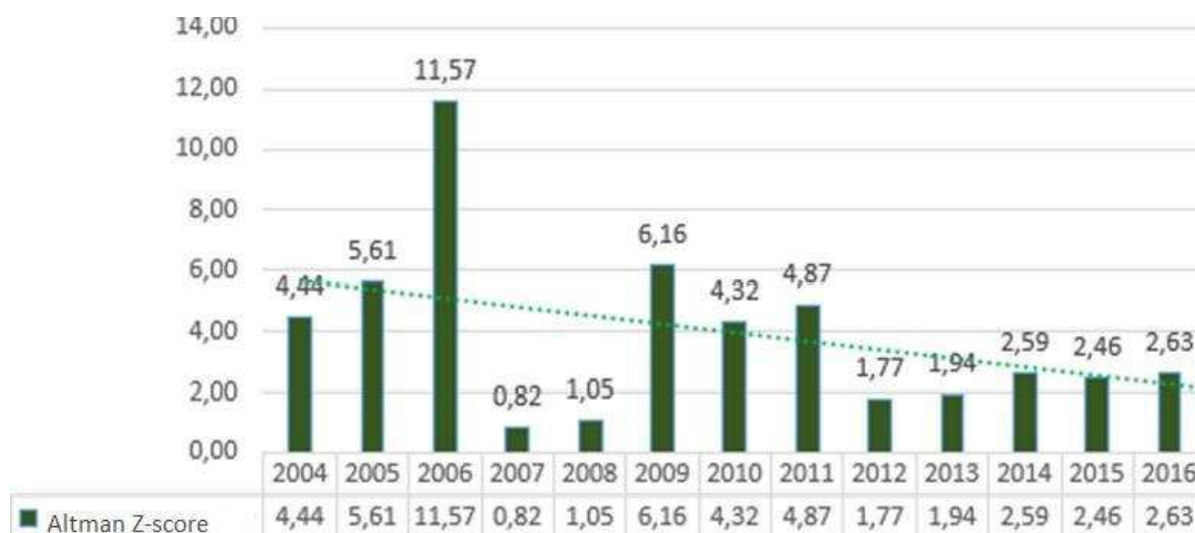


Figure 8 Altman's analysis

## 4. Conclusion

Customers of LPS SR s. p. are airlines on both regular and irregular lines. The main purpose of LPS SR s. p. is to ensure a safe, organized and efficient air traffic flow in the airspace of Slovak republic. Despite the slightly downward trend in ratios of liquidity profitability LPS maintains these values

above required values, which on the one hand poses positive information but, on the other hand, reduces the effectiveness of the company when potential gains are forthcoming. Debt indicators throughout the reporting period with the exception of the year 2012, when the acquisition of a new administrative and technical building has been decreasing, so the assets of LPS are usually covered by own resources. The future of LPS SR s. p. is very important, and according to the methods used for forecasting the financial health of the company, the financial situation is very good and the change to the worse is not expected. LPS SR s. p. are a compact subject at a high professional level, and despite the occasional difficulties and austerity measures, they have managed to end difficult times with a positive result.

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