Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics



Diploma Thesis

Financial Analysis of the selected company

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

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Thesis title

Financial Analysis of the Selected Company

Objectives of thesis

The objectives of the thesis is a comprehensive evaluation of the financial situation of selected business entity STRV s.r.o. based on the methods of financial analysis in the period 2016 – 2019. Based on selected financial analysis tools, an overall financial situation and performance will be evaluated and recommendations will be provided to point out areas of improvement for the management.

Methodology

In order to fulfill the aim of the thesis, a compilation, citation, and excerption methods will be used to study academic literature and other information sources. Based on these methods theoretical background and methods of financial analysis will be characterized.

The practical part will include the application of selected methods of financial analysis based on the financial statements of STRV s.r.o.. Results will be supported with an in-depth interview with the CFO of STRV s.r.o. Finally, an overall summary of the results will be analyzed and the resulting recommendations will be made.

The proposed extent of the thesis

50 – 60 pages

Keywords

financial analysis, profit and loss statement, balance sheet, financial ratios, horizontal analysis, vertical analysis, ratio indicators

Recommended information sources

- GRÜNWALD, R. HOLEČKOVÁ, J. Finanční analýza a plánování podniku. Praha: Ekopress, 2007. ISBN 978-80-86929-26-2.
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Declaration

I declare that I have worked on my diploma thesis titled "Financial Analysis of selected company" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 29.3. 2021

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Financial analysis of selected company

Abstract

The objective of this diploma thesis is to evaluate the financial health of the selected company STRV s.r.o. applying the methods of financial analysis for the period 2015-2019. Based on the outputs of the analysis, a comparison will be made with the average industry values in the field of information technology. The purpose of this dissertation is to prove/disprove the main hypothesis question *"The financial situation of the company is generally evaluated as healthy in the monitored period."* which will be supported by other six sub-hypotheses.

The diploma thesis is divided into two parts, theoretical and practical part. The theoretical part explores the importance of financial analysis, their sources, users and describes the methods and procedures that can be used to assess the financial condition of the company. The practical part will test the particular sub-hypothesis using selected indicators. By using financial statements, a horizontal and vertical analysis, ratio analysis, and selected bankruptcy and solvency models will be formed.

The results of the financial analysis will be summarized and recommendations for improving the company's financial situation will be executed.

Keywords: financial analysis, horizontal analysis, vertical analysis, ratio analysis, Altman model, IN05 model, Kralicek's Quicktest

Finanční analýza vybrané společnosti

Abstrakt

Cílem této diplomové práce je zhodnocení finančního zdraví vybrané společnosti STRV s.r.o. s použitím metod finanční analýzy za období 2015–2019. Na základě výstupů z analýzy dojde ke komparaci s průměrnými odvětvovými hodnotami z oblasti informačních technologii a poté následují návrhy a doporučení, které by mohly přispět ke zlepšení dosavadní situace. Pro účely této práce je stanovena hlavní hypotéza *"Finanční situace podniku je ve sledovaném období hodnocena jako zdravá"*. Pro posouzená platnosti této hypotézy bude stanoveno dalších šest pracovních hypotéz.

Diplomová práce je rozdělena na dvě části, teoretickou a praktickou. Teoretická část se věnuje významu finanční analýzy, jejich zdrojů, uživatelů a popisuje metody a postupy, pomocí kterých lze hodnotit finanční stav společnosti. V praktické části se budou testovat konkrétní hypotézy, aby se mohla prokázat hlavní hypotéza. Na základě účetních výkazů je provedena horizontální a vertikální analýza, analýza poměrových ukazatelů a v poslední sekci jsou aplikovány zvolené bankrotní a bonitní modely.

Z výstupů finanční analýzy jsou shrnuty závěry a následně jsou navržena doporučení pro zlepšení jejich finanční situace.

Klíčová slova: finanční analýza, horizontální analýza, vertikální analýza, analýza poměrových ukazatelů, Altmanův model, indexy IN05, Kralickův rychlý test

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List of abbreviations

B – Balance sheet
EAT – Earnings after tax
EBIT – Earnings before interest and taxes
EBT – Earnings before tax
EBITDA – Earnings before interest, taxes, depreciation and amortization

LT – Long-term P&L – Profit and loss statement Thous. – thousands ROA – Return on assets ROE – Return on equity ROS – Return on sales ROCE – Return on capital employed ST – Short-term

1 Introduction

Nowadays, it is not easy to make yourself visible in a competitive business environment. In order for a company to function healthily, it must have perfect control not only over the business side but also over the financial side which is helped by financial analysis. An integral basis for its compilation is quality accounting data, without which it is not possible to perform a good financial analysis. These are mainly financial statements published annually, or other internal and external information. The tools and methods of financial analysis try to assess the financial health of the company, identify its strengths which serve as a basis for successful business management, eliminate weaknesses and focus on future business decisions. It informs about whether the company sufficiently values the invested capital, whether the company is profitable, liquid or indebted.

Financial analysis provides an evaluation of the past, present and based on its output, future developments can be predicted. It helps managers make better decisions, banks and investors decide whether to invest their excess capital in the company, helps competitors to create new strategies and other users who are interested in its results, how the company manages. This means that each interest group emphasizes slightly different information from the financial analysis.

On the following pages of this diploma thesis, the methods of financial analysis are first theoretically described and supported on the basis of the study of professional literature. Secondly, the theoretical knowledge is practically applied to the STRV s.r.o., design and engineering company that delivers mobile applications, websites and other software solutions. The period between 2015 and 2019 was chosen for the observed period. In the final part of this work, evaluated results are obtained by financial analysis, compared with average industry values and suggestions and recommendations are provided for possible improvement of the financial health of the company. For a better understanding of the financial reports, the CFO of STRV s.r.o. will provide information suitable for the final evaluation.

2 Objectives and Methodology

2.1 Objectives

The main objective of the diploma thesis is to perform a financial analysis of the technological company STRV s.r.o. for the period 2015–2019. Based on the selected tools of financial analysis, an evaluation of the overall financial situation and performance of the company will be performed. Furthermore, results will be compared with industry values to get better understanding and context of the company's financial results. Subsequently, proposals and recommendations will be set out for areas in which the selected company should be improved.

To fulfill the main goal, sub-goals are set, which include:

- Introduction of the monitored company
- Horizontal analysis of financial statements
- Vertical analysis of financial statements
- Ratio analysis
- Analysis of aggregate indicators using Bankruptcy models
- Analysis of aggregate indicators using Solvency models
- Proposal to the improvement of the financial situation

For the purposes of this dissertation, the main hypothesis is set as follows:

The financial situation of the company is generally evaluated as healthy in the monitored period.

To prove or disprove this hypothesis it is necessary to define indicators that support the evaluation of the financial health of the company. Based on individual indicators, sub-hypotheses will be formulated, thanks to which it will be able to assess the validity of the main hypothesis. In order for the main hypothesis to be considered valid, at least 4 out of the following 6 hypotheses must be confirmed.

1) The company's profitability shows a stable or increasing trend in the monitor period.

The hypothesis will be confirmed if the individual profitability indicators do not report decreasing values in 4 out of the 5 monitored years. That is, they will remain at the same level or grow.

2) The company is able to repay its liabilities well in the long run.

This hypothesis will be tested by liquidity ratios. The hypothesis can be confirmed if the current and cash ratios are higher than the recommended value determined by the literature, or higher than the average value for the industry, in 4 out of 5 monitored years.

3) The company reports a shorter payables period than the collection period.

The hypothesis will be confirmed if the values in the payables period will be lower than the collection period in the in 4 out of the 5 monitored years.

4) The company is claimed as a stable in the long run.

This hypothesis will be tested on one of the stability indicators. The hypothesis can be confirmed if the debt ratio is in the zone of recommended values determined by the literature, or lower than the industry average, in 4 out of 5 monitored years.

5) The company is not overall threatened with bankruptcy in the monitored period.

Altman's and IN05 models will be used to evaluate this hypothesis. In order for the hypothesis to be confirmed, the Z-score values must not fall below 1.2 and the IN05 values must not fall below 0.9 in 4 out of 5 monitored periods.

6) The company is overall creditworthy in the monitored period.

This hypothesis will be tested using Kralicek's Quicktest. The hypothesis can be confirmed if the company reaches an average evaluation of 2 in 4 out of the 5 monitored periods, which can be claimed as a good result.

2.2 Methodology

This diploma thesis is divided into two main parts, namely the theoretical part and the practical part. The theoretical part explains the basic theoretical background and methods of financial analysis. Definitions of financial analysis are characterized, as well as specifications of users for financial analysis and sources of financial analysis are defined. The remaining theoretical part describes specific indicators of financial analysis, namely horizontal and vertical analysis, ratio analysis (profitability, liquidity, activity, stability). At the end of the theoretical part, bankruptcy and solvency models are characterized, which represent - Altman Z-score model, Credibility index and Kralicek's Quicktest. The

theoretical part is performed on the basis of professional literature, which is listed at the end of the work in the Refences section. The practical part starts with a brief introduction of the selected company to which financial analysis will be applied. Publicly available reports from the website www.justice.cz, which are in an Appendix section in the diploma thesis, serve as a basis. Furthermore, this section includes calculations of the horizontal and vertical analysis of the financial statements, which mainly include the balance sheet and the income statement. Moreover, Ratio analysis and selected Bankruptcy and Solvency models, which were processed in the literature review, are elaborated. Calculations of indicators are processed in tables and in graphical representation. The financial reports are closely consulted with the CFO of STRV s.r.o. to get a better understanding of the information obtained. At the end of the work, the obtained results from the financial analysis are evaluated and proposals and recommendations to improve the financial health of the company are made.

The next section below includes formulas that support the individual calculations in the practical part. The abbreviation "B" indicates the data used from the balance sheet and the abbreviation "P&L" indicates the data from the profit and loss statement also known as the income statement. The line numbers used after these abbreviations represent the line numbers of the corresponding financial statements which are included in the Appendix.

As of 1st January, 2016¹, there was a change in the structure of the balance sheet and income statements. Therefore, the data for 2015 are transferred to the new structure and the lines in the balance sheet and the income statement differ from the original statements.

Indicator	Formula	Line in the Financial statements	Sources
Returns on equity	Net income Equity	P&L 55 B 83	Higgins, 2007
Returns on assets	EBIT Total assets	P&L 43 + P&L 49 B 01	Kislingerová, 2010
Returns on sales	EBIT Revenue from finished products + Revenue from goods	P&L 43 + P&L 49 P&L 01 + P&L 02	Kislingerová, 2010
Returns on capital employed	EBIT LT payables + Equity + Reserves	P&L 43 + P&L 49 B 83 + B 111 + B 105	Vochozka, 2011

Formula 1 - Profitability ratios

Sources: Own processing based on used literature

¹Version 2015 [online]. [25-11-2015] available from: www.mfcr.cz/cs/verejny-sektor/ucetnictvi-a-ucetnictvi-statu/ucetnictvi-podnikatelu-a-neziskoveho-sek/aktuality-a-metodicka-podpora/2015

Formula 2 - Liquidity ratios

Indicator	Formula	Line in the Financial statements	Sources
Current ratio	Current assets	<u>В 37</u>	Kislingerová.,
	ST payables	В 126	2010
Quick ratio	Current assets – Inventories	<u>В 37 — В 38</u>	Kislingerová,
	ST payables	<u>В 126</u>	2010
Cash ratio	Cash + Financial instruments	<u>В 75</u>	Kislingerová,
	ST payables	В 126	2010

Sources: Own processing based on used literature

Formula 3 - Activity ratios

Indicator	Formula	Line in the Financial statements	Sources
Assets turnover	Total sales Total assets	$\frac{P\&L 01 + P\&L 02}{B 01}$	Ross, 2005
Fixed assets turnover	Total sales Fixed assets	$\frac{P\&L 01 + P\&L 02}{B 03}$	Sedláček, 2009,
Inventory turnover	Total sales Inventories	P&L 01 + P&L 02 B 38	Růčková, 2015
Inventory period	Inventories Total sales x 360	$\frac{B 38}{P\&L 01 + P\&L 02} \ge 360$	Sedlaček, 2009
Collection period	$\frac{\text{Receivables}}{\text{Total sales}} \ge 360$	$\frac{B46}{P\&L01 + P\&L02} \ge 360$	Ross, 2005
Payables period	$\frac{\text{ST payables}}{\text{Total sales}} \ge 360$	B 126 P&L 01 + P&L 02 x 360	Kislingerová, 2010

Sources: Own processing based on used literature

Formula 4 - Stability ratios

Indicator	Formula	Line in the Financial statements	Sources
Debt ratio	Total liabilities Total assets	B 104 B 01	Sedláček, 2009
Debt equity	Total liabilities Equity	B 104 B 83	Vochozka, 2011
Interest coverage	EBIT Interest expenses	P&L 49 + P&L 43 P&L 43	Higgins, 2007

Sources: Own processing based on used literature

Formula 5 - Altman Z-score model

Indic.	Formula	Line in the Financial statements
X1	Current assets – ST payables Total assets	<u>(B 38 + B 57 + B 72 + B 75) - B 126</u> B 01
X2	Retained earnings Total assets	<u>B 99</u> B 01
Х3	EBIT Total assets	$\frac{P\&L 49 + P\&L 43}{B 01}$
X4	Equity Total liabilities	B 83 B 104
X5	Total sales Total assets	$\frac{P\&L 01 + P\&L 02}{B 01}$

Sources: Růčková, 2015 (Own processing)

Formula 6 - Credibility index IN05

Indic.	Formula	Line in the Financial statements
X1	EBIT Total assets	P&L 49 + P&L 43 B 01
X2	Revenues Total assets	P&L: 01,02,08,20,31,35,39,46 B 01
Х3	Total assets Total liabilities	B 01 B 104
X4	EBIT Interest expenses	P&L 49 + P&L 43 P&L 43
X5	Current assets ST payables + ST bank loans	<u>В 37</u> В 126

Sources: Neumaierová, Neumaier, 2002 (Own processing)

Formula 7 - Kralicek's Quicktest

Indic.	Formula	Line in the Financial statements
R1	Equity Total assets	B 83 B 01
R2	Liabilities — ST financial assets Operating cash flow	B 104 - B 72 - B 75 P&L 55 + P&L 14 + P&L 28
R3	EBIT Total assets	P&L 49 + P&L 43 B 01
R4	Operating cash flow Sales	P&L 55 + P&L 14 + P&L 28 P&L 01 + P&L 02

Sources: Růčková, 2015 (Own processing)

3 Literature Review

3.1 Financial analysis

There are many ways to characterize the concept of financial analysis. Růčková (2015, p. 9) defines financial analysis as "a systematic analysis of the obtained data, which are contained primarily in the financial statements. Financial analysis includes an evaluation of the company's past, present, and forecast of future financial conditions." It can therefore be said that with the help of a well-prepared financial analysis it is possible to identify and respond to weaknesses and strengths of a company which serves as a basis for future decision making of the company's management.

Financial analysis is important not only for the company's managers but also for external users, such as shareholders and creditors, because it serves as a tool for evaluating the company's financial performance. It acts as feedback on how the company has developed in each area and how the set goals have been met.

The goals of the financial analysis of a company are:

a) Assess the impact of the external and internal environment of the company

b) Providing information for future decisions

c) Comparison of results of the intercompany analysis

d) Interpretation of results, including proposals for financial planning of the company

e) Comparison of individual indicators in time and space

(Sedláček, 2009, p. 4)

3.2 Users of Financial analysis

A large number of users come into contact with the company on a daily basis. Information concerning the company's financial situation needs to be available not only for the management in the company but also for many other users. Users of financial analysis are divided into external and internal. External users include employees, managers, unions, and internal users include investors, creditors and banks, the state and its bodies, business partners, and competition.

3.2.1 External users

The state and its bodies

The state and its bodies are in charge of controlling taxes, providing financial subsidies, supervising of state companies, preparing statistical information about companies, and supervising of financial management of companies that are participants in public procurement. (Vochozka, 2011, p. 13)

Investors

Potential investors represent, one of the ways capital provided for a company. In order to make decision about future investment, investors are interested in information about the financial performance of the company. They need to pay special attention to amount of risk and return in connection with the invested capital. Furthermore, information about financial analysis is used to assessment of the capital management already invested in the company, which is a primary matter, especially for joint-stock companies. (Vochozka, 2011, p. 13)

Banks and other creditors

The information which are obtained from the financial analysis is used by creditors to be aware about the financial health of their debtors. At the initial stage, the creditor decides whether to provide a loan, in what amount, and under what conditions is the agreement valid. Part of the loan agreement is to periodically inform the creditor about the financial health of the debtor. (Vochozka, 2011, p. 13)

Business Partners

Business partners focus on the company's ability to meet its obligations from the business relationship point of view. Important indicators that business partners need to observe are data on indebtedness, solvency, and liquidity. Thanks to these indicators, they gain an overview of the debtor's solvency. In the short term, these data are viewed by suppliers and customers. In the long run, it represents the stability of business relations. (Vochozka, 2011 p. 13)

Competition

Competitors use information about the company's financial situation primarily to compare financial results but also monitor other data, such as the level of research and development, marketing, pricing policy, and investment activity of the company. (Grünwald, 1995, p. 6)

3.2.2 Internal users

Management

Managers are responsible for the operational and strategic management of the company. These tasks require an overview of the company's financial situation, which is currently provided by financial analysis and is used by managers on a daily basis to accomplish specific goals. (Vochozka, 2011, p. 13)

Employees

The primary interests of employees include prosperity and job security. Furthermore, it includes the requirements for wage and social stability. (Vochozka, 2011, p.13)

3.3 Sources of Financial analysis

The financial analysis quality and accomplishment depend on which input information is used. It is highly important to pay attention to all the necessary data that could distort the results on the financial health of the company. Basic data are most often drawn from financial statements that are divided into internal and external. Internal financial statements are not regulated by any legal norm and are based entirely on the internal needs of individual companies. The financial statements are regarded as external and are accessible to the public due to the fact that every company is obligated to publish them at least once a year. They form the basis for financial analysis and provide information mainly to external users. (Ružičková, 2015, p.21)

Financial statements include the balance sheet, income statement, cash flow statement, and notes to the financial statements.

3.3.1 Balance sheet

"The balance sheet records individual items of assets and equity and liabilities, captures the state of assets in the company and the sources of coverage at the selected time, usually on the last day of the accounting period, in monetary terms." (Grünwald, Holečková, 2009, p. 35)

Decree No. 500/2002 Coll. to the Accounting Act in Annex No. 1 defines the arrangement and designation of each item in the balance sheet. The balance sheet is broken into two main parts - assets and equity and liabilities. This specific financial statement states that the sum of total assets must always be equal to the sum of total equity and liabilities.

Assets are ranked in the balance sheet from the least liquid items, such as fixed assets, to the most liquid such as current assets. The financial structure of the company is recorded on the right side of the balance sheet - equity and liability. This part contains sources of financing company's assets. The detailed structure of asset, equity, and liabilities is presented in Table No 1. (Knápková, Pavelková, Šteker, 2018, p. 80)

Table 1 - Balance sheet

Assets	Liabilities and Equity
A) Receivables for subscribed equity	A) Equity
B) Fixed assets	I. Subscribed capital
I. Intangible fixed assets (software, research & development, goodwill)	II. Capital funds (share premium)
II. Tangible fixed assets (land, buildings, livestock)	III. Funds created from profit (legal reserve fund, statutory and other funds)
III. Long-term financial investment (shares, loans)	IV. Retained profit or loss of previous years
C) Current assets	V. Profit (loss) of current account period
I. Inventories (material, work-in-progress, goods)	B) Liabilities
II. Receivables	I. Reserves
Long-term receivables (trade receivables)	II. Long-term payables (trade payables)
Short-term receivables (trade receivables)	III. Short-term payables (trade payables, payables to emplyees, taxes payables)
III. Financial asset (cash, bank account)	IV. Bank loans and borrowings
D) Prepaid expenses and accruals	C) Accruals and deferred income

Sources: Knápková, Pavelková, Šteker, 2018, p. 81 (own processing)

3.3.2 Income statement

The income statement is compiled at a given moment, by recording resource flows over time. It informs about the financial performance of the company. The income statement shows an overview of which revenue and expenses items contribute to the profit generation for individual activities. It operates on an accrual principle, which signifies that revenues and expenses are not related to real cash flows, so the resulting net profit does not represent actual cash generated by the company's activities. (Higgins, 2007, p. 23)

The Czech Republic divides the income statement into operational, financial, and extraordinary areas.

The company's revenues are:

a) operating revenues (e.g., sales revenues)

- b) financial revenues (e.g., obtained from investments, securities, deposits)
- c) extraordinary revenues (e.g., obtained from the sale of depreciated machines)

The company's expenses are:

- a) operating expenses (e.g., material consumption, personnel costs)
- b) depreciation of fixed assets
- c) other operating expenses
- d) financial costs (e.g., interest)
- e) extraordinary costs (e.g., gifts, rewards)

(Synek, 2011, p. 74)

In financial analysis works with several forms of profit. The most important one is considered to be the one for which the financial analysis is prepared. The most used forms of profits are shown in the following table:

Table 2 - The forms of profit

Earnings after tax (EAT)		
+ income tax for extraordinary activities		
+ income tax for ordinary activities		
= Earnings before tax (EBT)		
+ interest expense		
= Earnings before interest and taxes (EBIT)		
+ depreciation		
= Earnings before interest, taxes, depreciation, and amortization (EBITDA)		

Sources: Kislingerová, 2010, p. 69 (own processing)

3.3.3 The cash flow statement

The cash flow statement is a part of the financial statements and informs about the changes in the balance of cash flow for the previous accounting period. By law, the cash flow statement must be submitted only by companies whose financial statements are subject to the auditor's control, but this statement is nevertheless considered to be very important. As with the income statements, cash flow is divided into three areas of the company's activities - operational, investment, and financial. (Grünwald, 1995, p. 16)

a) **Operational activity** - is considered to be the most important area, contains basic profitable activities of the company, if a company does not achieve positive results in this area for several years in a row, it represents significant problems

b) Investment activity - this area is related to the purchase or sale of assets, loans, and credits, if the result in this area is positive, it intends the sale, if negative, it is an investment
c) Financing activity - this area shows the inflow and outflow of funds from owners and creditors - changes in equity or long-term liabilities are reflected
(Knápková, Pavelková, Šteker, 2018, p. 195)

3.3.4 The notes to the financial statements

The note to the financial statements is a supplementary document to the balance sheet and income statement. It mainly informs external users about the statement of cash flows, information about owned securities, information about the accounting methods used, accounting principles, methods of valuing the company, and structure of bank loans. The note to the financial statement should meet certain criteria, such as the reliability, transparency, and comprehensibility of the accounting records kept. (Kislingerová, 2010, p. 76)

3.4 Analysis of absolute indicators

The analysis of absolute indicators belongs to one of the initial analysis when compiling a financial analysis. It draws data from financial statements to prepare an assessment of the company. The data in the balance sheet informs about the state/size of the property and the sources of its coverage at a given time, therefore they are called state variables. The data that comes from the income statement informs about the situation for a defined period of time and are referred to as flow variables. These variables make it possible to compile trend analysis, known as horizontal analysis and vertical analysis. (Kislingerová, 2010, p. 79)

3.4.1 Horizonal analysis

The horizontal analysis draws data directly from the balance sheet and income statement, or from annual reports. This analysis is called horizontal due to the fact that the individual items are tracked line by line horizontally. The results can be interpreted in two ways - absolute or percentage. With the use of a sufficiently long time series, it is possible to trace a certain trend into the future and thus influence the future development of the company. (Sedláček, 2009, p. 13)

By Kislingerová (2010, p.79), this analysis is looking for the answer to two questions:

a) By how many units has the relevant item changed over time?

b) By how many % has the relevant unit changed over time?

3.4.2 Vertical analysis

The vertical analysis studies the individual financial statements in columns - vertically. It examines how the share of individual balance sheet items in total assets or equity and liabilities changes. Due to the fact that the vertical analysis is not dependent on year-on-year inflation, it can be used to compare results from different years. Therefore, can be applied to compare growth trends in the company over time and to compare with different companies. (Sedláček, 2009, p. 17)

3.5 Ratio analysis

When analyzing the financial health of the company, the next important step is to calculate the ratio analysis. There occurs a ratio of two or more items shown in the balance sheet or income statement. The easy traceability of its indicators is not the only advantage but also the calculation itself, which also allows external financial analysts to evaluate the financial situation of the company. (Růčková, 2015, p. 53)

According to Sedlaček (2009, p. 55), ratio analysis is a popular and often used tool of financial analysis. Calculations provide an inexpensive and quick overview of the financial health of the company. Their popularity is also based on the following reasons:

- It provides a picture of the time evolution of the financial situation of the company.
- Suitability of use for cross-sectional analyses (comparison of several companies with each other).
- Possibility to use mathematical models as input data, which allow defining connections between phenomena, risks assessment, and to predict future development.

Kislingerová and Hnilica (2008, p.29), groups individual indicators in ratio analysis as following:

- Profitability ratios
- Liquidity ratios
- Activity ratios
- Stability ratios
- Capital market ratios

3.5.1 Profitability ratios

The profitability ratio is one of the most important indicators that measure the financial health and condition of a company. Profitability relates to the profit or loss from business activities to certain inputs. All profitability ratios can be explained in a similar way because they say how much CZK of profit falls on 1 CZK of a given denominator. There may be certain inputs in the denominator, as total assets, capital, or sales. Depending on what we substitute as input, we distinguish several variants of profitability. (Kubíčková, Jindřichovská, 2015, p. 120)

Returns on equity (ROE)

Higgins (2007, p. 53) explains that the ROE indicator is monitored mainly by business owners or shareholders, as they can see the final effect of their invested capital. It helps them find out how the capital invested by them is valued and whether it brings

sufficient return that corresponds to the risk of the investment. From a general point of view, the indicator says how much CZK of profit will create exactly 1 CZK of equity. This indicator is widely used for intercompany comparisons and capital markets. Higher values of the indicator usually mean greater demand by investors.

$$ROE = \frac{Net income}{Equity}$$

On the contrary, the indicator is also possible to express in the return on common equity, which is characterized by a relationship where the numerator is net profit deducted by dividends paid to shareholders and the denominator represents equity. (Gibson, 2009, p. 305)

Returns on assets (ROA)

According to Kislingerová (2010, p. 83), returns on assets measures profit with total assets invested in a company, regardless of whether the capital is from equity or liabilities. ROA finds out how the company uses its assets effectively. The size of the company, the organization of production, and the level of technology play an important role.

When the resulting value of this indicator is higher, shareholders and creditors who provide equity are satisfied because they obtain interest. In order for a company to be beneficial to take bank loans, the principle should be that the return on assets should be lower than the return on equity.

The numerator shows the profit at the level of EBIT or net profit. According to the profit that enters the formula, its result is interpreted.

$$ROA = \frac{EBIT}{Total assets}$$

Returns on sales (ROS)

If the analyst identified problems with this indicator, they would probably be issues in other areas as well, as the ROS is an indicator that forms the core of the company's efficiency. The resulting interpretation of ROS indicator measures how much profit will fall on 1 CZK of sales or in other words, what is the company's ability to generate profit at a given level of sales. (Kislingerová, 2010, p. 100)

The indicator can be calculated in two ways that differ in the numerator, either with EAT or with EBIT. According to Knápková, Pavelková and Šteker (2018, p. 430), it is better to give preference to EBIT when comparing two companies. Thereafter, the valuation is not affected by different capital structures and, different levels of taxation (in the case of companies from different countries).

$$ROS = \frac{EBIT}{Revenues from finished products + Revenues from goods}$$

 $ROS = \frac{EAT}{Revenues from finisehd products + Revenues from goods}$

Returns on capital employed (ROCE)

The indicator is based on the basic idea of the capital market principle, where companies take additional resources. It interprets how much operating profit a company has gained by investing 1 CZK in the capital. The resulting value is often less than 1, therefore it is multiplied by 100 and expressed as a percentage. (Kislingerová, 2008, p. 30)

 $ROCE = \frac{EBIT}{LT \text{ payables} + Equity}$

3.5.2 Liquidity ratios

The liquidity ratio informs about how the company is able to pay its liabilities. In order for a company to operate on the market in the long term, it is essential that the company is not only profitable but also that it is able to pay for its liabilities. It expresses the sum of all potential liquid assets to settle its debts, or the ability to convert assets into cash, whereas a liability is liquid if it is repaid as soon as possible. The fact that a company is able to pay its liabilities at the time of their maturity, in the right amount and in the right place is associated with the concept of solvency. A high level of liquidity can have a negative impact on owners, because assets are tied up in financial funds that are not valued, thus reducing the company's profitability. (Higgins, 2007, p. 65)

Current ratio

The current ratio informs about how many times the company's short-term payables are covered by current assets. The company may find itself in an unfavorable situation if it has poorly structured current assets, for instance by holding an excessive amount of inventories or a lack of cash.

The recommended value of this indicator varies in the literature, depending mainly on the chosen strategy. Aggressive strategy defines values between 1-1.6, the average strategy considers values 1.6 - 2.5, and conservative strategy range values from 2.5 and more. (Kislingerová., 2010, p. 104)

$$Current ratio = \frac{Current assets}{ST payables}$$

Quick ratio

This indicator is structured in such a way that the most liquid asset item - inventories, is deducted from current assets in the numerator and the denominator remains the same as for the current ratio. Once the indicator is set to 1, the company should be able to repay its debts without having to sell its inventories.

In the final interpretation of the quick ratio, it is appropriate to check whether shortterm receivables do not contain a large number of difficult-to-collect receivables as these could cause distorted and increased results. (Vochozka, 2011, p. 27) The value gained depends on the chosen strategy. For an aggressive strategy, the value should range between 0.4 - 0.7, the average 0.7 - 1, and conservative strategy value is classified between 1.1 - 1.5. The higher the values, the more current assets are held by cash. (Kislingerová, 2010, p.105)

$$Quick ratio = \frac{Current assets - Inventories}{ST payables}$$

Cash ratio

This is the strictest indicator of liquidity which indicates whether a company can repay its short-term payables from short-term financial assets. The numerator includes all instruments of payment such as cash, money in a bank account, checks, short-term securities, and promissory note debts. These monetary instruments represent the most liquid part of current assets. The denominator is the same as for the two previous indicators. According to the literature, the recommended value of the cash position ratio is 0.2. (Kislingerová, 2010, p. 105)

Cash ratio = $\frac{Cash + Fiancial instruments}{ST payables}$

3.5.3 Activity ratios

By assessing activity indicators, it is used to provide information on how effectively the company's assets are managed. The indicators work with assets as a whole or with individual components, consisting of inventories, receivables, fixed assets, and current assets. If a company has excessive assets, its expenditures increase and thus profits are reduced. On the other hand, a company that does not have enough estate may lose potential investment opportunities and earnings from them.

Indicators come in two forms – turnover or the period. Turnover shows the number of days and the period expresses how many turnovers will take place in one year. (Sedláček, 2009, p. 60)

Assets turnover

Assets turnover captures how many times total assets are turned over a year, or how efficiently the assets are used in the company. Effective use of assets occurs when the value of the indicator is high. Otherwise, when the value is low, it indicates a disproportionate asset of the company, and the company should increase its sales or get rid of unnecessary assets. The minimum value of the indicator should not fall below the limit of 1. (Ross, 2005, p. 35)

Assets turnover =
$$\frac{\text{Total sales}}{\text{Total assets}}$$

Fixed assets turnover

This indicator plays an important role in deciding on future investments, as it measures how effectively a company uses buildings, machinery, and other fixed assets. This indicator is influenced by the depreciation of the company's assets. If more assets are depreciated, this indicator acquires better values with the same number of sales. (Sedláček, 2009, p. 61)

Fixed assets turnover =
$$\frac{\text{Total sales}}{\text{Fixed assets}}$$

Inventory turnover

Inventory turnover indicates how many times an individual inventory item is sold and re-stocked during the year. There is no optimal value in this case, but in some industries, it is affirmed that the lower the results the company shows, the more efficiently it can use its inventories. Some companies even prefer the "Just in time method", where production is based on the demand of a particular customer over time. On the other hand, it should be mentioned that there are some sectors that need a certain level of inventory, such as the furniture industry. (Růčková, 2015, p. 67) Inventory turnover = $\frac{\text{Total sales}}{\text{Inventories}}$

Inventory period

The inventory period is characterized as the number of days that inventories are held in the company before they are consumed or sold. The company strives to keep the value of this indicator as small as possible, but it depends on the company's sector and the way of business management. (Sedlaček, 2009, p.61)

Inventory period = $\frac{\text{Inventories}}{\text{Total sales}} \times 360 \text{ days}$

Collection period

This indicator informs about how customers are able to pay for ordered goods or services or in other words how many days it takes for receivables to be converted into money. (Ross, 2005, p. 36)

Collection period =
$$\frac{\text{Receivables}}{\text{Total sales}} \times 360 \text{ days}$$

Payables period

The payables period shows how quickly the company's liabilities are repaid. It can be used to calculate how many days of the company's short-term payables remain unpaid and for how many days the company uses a free bank loan. (Kislingerová, 2010, p. 109)

Payables period = $\frac{\text{ST payables}}{\text{Total sales}} \times 360 \text{ day}$

3.5.4 Stability ratios

One of the biggest problems of financial management is to find the optimal balance between the amount of capital required and the choice of the right composition of available resources for financing this capital. The more the company is in debt, the higher the risk of solvency. On the other hand, a certain indebtedness can also have a positive effect, because liabilities are not as expensive as equity, thanks to interest rates that reduce the tax burden. Indebtedness can be derived in the balance sheet, where it shows from what sources the company finances the acquired assets, or in the income statement, where it calculates the extent to which the expenses of liabilities is covered by the profit generated by the company. (Knápková, Pavelková, Šteker, 2018, p. 84)

Debt ratio

Sedláček (2009, p. 64) explains that the indicator of total debt ratio is expressed by the share of liabilities and total assets and is often known as the creditor risk indicator. The share of liabilities in total assets should be 50%. If the share is larger, the company is more indebted, if the share is smaller, then the indebtedness is also lower. Creditors strive to keep the value of the indicator as low as possible. Knápková, Pavelková and Šteker state the recommended value should be between 30 - 60%.

$$Debt ratio = \frac{Total \ liabilities}{Total \ assets}$$

Debt equity

Gallo (2015) states that debt to equity ratio says how much the claims of creditors are at risk. Therefore, this indicator is important for banks when examining whether it is appropriate to provide a loan to a company or whether it is too risky. If the indicator is too high, it indicates financial difficulties or inability to pay its creditors, if it is too low, it means that the company relies too much on equity, which can be costly and inefficient.

Vochozka (2011, p.25) recommends a ratio of total liabilities and equity of 50% and adds that around 40% is generally considered a safe level of indebtedness.

Debt equity =
$$\frac{\text{Total liabilities}}{\text{Equity}}$$

Interest coverage

It expresses how many times the total profit of the company covers interest payments. Interest expense is an obstacle for a company to overcome in order not to fail. The recommended value is 5 or more, which means that EBIT should cover interest expenses at least five times. If the resulting value is equal to one, then all profits go to the payment of interest. (Higgins, 2007, p.211)

Interest coverage = $\frac{\text{EBIT}}{\text{Interest expenses}}$

3.6 Analysis of aggregate indicators

Aggregate indicators use a single value to describe the complex financial and economic situation and performance of the company. It serves for a quick and global comparison of several companies or they can be used as a basis for further evaluation. Therefore, their disadvantage is lower explanatory power. (Růčková, 2015, p. 75)

According to Růčková, the aggregate indicators are divided into two groups:

1) Hierarchically arranged indicators

These indicators include Pyramid systems. This system works by analyzing in detail each indicator from the top of the pyramid. For clarity, it is recommended to show this indicator in the graphic representation, thanks to which it is possible to clearly capture how the change of a single indicator will affect the rest of the indicators.

2) Purposefully selected groups of indicators

It expresses the financial situation of the company in one specific number and indicates what its future development will be like. This subcategory can be further divided into Bankruptcy models (e.g. Altman Z-score, Taffler model, IN05 model) and Solvency models (e.g. Kralicek's Quick-test) which will be described in the next section. (Růčková, 2015, p. 76)

3.6.1 Bankruptcy model

The purpose of these models is to estimate the future development of the company based on the current values of indicators. They can also be called "crisis prediction" models. These models can be used to predict whether a company is in danger of bankruptcy in the near future. (Sedláček, 2009, p. 105)

3.6.1.1 Altman Z-score model

Altman Z-score model is among the most widely used crisis prediction models. It is calculated as the sum of the values of five ratio analysis indicators, which have different weights. The result is a Z-score, which is included in the interval that expresses the stability and financial situation of the company.

Altman defined different models for companies trading on the stock exchange and for other companies. In this work will be used a model that is adapted for private companies and for companies not traded on the stock exchange. It differs only partially from the previous index in the weights of the given indicators in the model. (Růčková, 2015, p.78)

The calculation equation is presented as:

$$Z = 0.717 X_1 + 0.84 X_2 + 3.107 X_3 + 0.42 X_4 + 0.998 X_5$$

Z = Z-score

$$X_1 = \frac{\text{Current assets} - \text{ST payables}}{\text{Total assets}}$$

 $X_2 = \frac{\text{Retained earnings}}{\text{Total assets}}$

 $X_3 = \frac{Profit before interest and tax (EBIT)}{Total assets}$

$$X_4 = \frac{Equity}{Total liabilities}$$

$$X_5 = \frac{\text{Total sales}}{\text{Total assets}}$$

The interpretation of results is performed by including the resulting Z-score value in one of three intervals:

Table 3 - Interpretation	of result for Altman	Z-score model
---------------------------------	----------------------	---------------

Value	Financial situation of the company
Z > 2.9	Prediction of a satisfactory financial situation
$1.2 < Z \le 2.9$	Gray zone (it is not possible to determine whether the company is successful or not)
Z≤1.2	Bankruptcy (a company threatened by serious financial problems)
Sources · Sedláček	2009. p. 110 (own processing)

urces: Sedlacek, 2009, p. 110 (own processing)

3.6.1.2 Credibility index - IN05 model

The IN05 model is one of four bankruptcy models introduced by Inka and Ivan Neumaier. The credibility index IN05 model chosen for this thesis, is a modified version of the IN01 model and helps to evaluate the financial credibility and performance of the company. The name IN05 is associated with the year 2005 when was introduced the latest version of the model. Its advantage is that it combines both the creditor's view and the owner's view. As with the Altman model, this Credibility index consists of several coefficients that have different weights. The model is very popular in the Czech Republic, because the couple used data from Czech companies to create models. Coefficient X1 and X2 are characterized as the company's ability to generate EBIT. Coefficient X3 and X4 identifies the way of dividing the generated EBIT and coefficient X5 monitors company's liquidity. (Neumaierová, Neumaier, 2002, p. 145)

The calculation equation is presented as:

 $IN05 = 3.97 X_1 + 0.21 X_2 + 0.13 X_3 + 0.04 X_4 + 0.09 X_5$

$$X_1 = \frac{EBIT}{Total assets}$$

$$X_2 = \frac{\text{Revenues}}{\text{Total assets}}$$

$$X_3 = \frac{\text{Total assets}}{\text{Total liabilities}}$$

$$X_4 = \frac{\text{EBIT}}{\text{Interest expense}}$$

$$X_5 = \frac{\text{Current asset}}{\text{ST payables } + \text{ ST bank loans}}$$

The results can be classified according to the following values in the table:

Table 4 - Interpretation of result for Credibility index IN05 model

Value	Financial situation of the company
IN > 1.6	Prediction of a satisfactory financial situation
$0.9 < IN \le 1.6$	Gray zone (it is not possible to determine whether the company is successful or not)
$IN \leq 0.9$	Bankruptcy (a company threatened by serious financial problems)

Sources: Sedláček, 2009, p. 111 (own processing)

3.6.2 Solvency model

Its goal is to determine whether the financial health of the company is in good condition or in poor condition. The results of these models are crucial for banks and other creditors, who can use them to check whether the company is able to repay its liabilities. (Růčková, 2015, p. 77)

3.6.2.1 Kralicek's Quicktest

Kralicek's Quicktest, which was introduced in 1990, was chosen as a representative of Solvency model. This model combines four types of different ratio analysis indicators, which are transformed into a point evaluation of the company's financial health. The calculation is performed by assigning points to individual representatives of indebtedness, solvency, profitability and liquidity indicators based on their results. The number of points depends on the predetermined interval into which the resulting values of the ratio analysis indicators fit. The last step to the possibility of assessing the creditworthiness of the company is a simple arithmetic average of the given points. (Růčková, 2015, p. 86)

Indicator	Indicator calculation	Evaluation	Points
		> 0.3	4
	Equity	0.2 - 0.3	3
R1	Assets	0.1 - 0.2	2
	Assets	0 - 0.1	1
		< 0	0
		< 3	4
	Liabilities – ST financial asset	3 – 5	3
R2		5 – 12	2
	Operating cash flow	12 - 30	1
		> 30	0
		> 0.15	4
	EBIT	0.2 - 0.15	3
R3		0.08 - 0.12	2
	Assets	0 - 0.08	1
		< 0	0
		> 0.1	4
	Operating each flow	0.08 - 0.1	3
R4	Operating cash flow	0.05 - 0.08	2
	Sales	0-0.05	1
		< 0	0

Sources: Růčková, 2015, p. 86 (own processing)

The company is evaluated in three steps:

- 1. step evaluation of financial stability (average of sums of indicators R1 and R2)
- 2. step evaluation of revenue situation (average of sums of indicators R3 and R4)
- 3. step evaluation of the overall situation (average of the sum of the point value of the financial stability of the revenue situation) (Kislingerová, 2008, p. 76)

Table 6 - Interpretation of results for Kralicek's Quicktest

Value	Financial situation of the company
≥ 3	Prediction of a satisfactory financial situation
1 – 3	Gray zone (it is not possible to determine whether the company is successful or not)
≤ 1	Bankruptcy (a company threatened by serious financial problems)

Sources: Kislingerová, 2008, p. 76 (own processing)

4 Practical Part

4.1 Characteristics of the selected company

Company Name:	STRV s.r.o.
Registered office:	Rohanské nábřeží 678/23, Karlín, 186 00, P8
Legal form:	Limited liability company
Date of registration:	4 May 2009
Identification number:	2888286
Subscribed capital:	CZK 200,000
Subject of business:	software development, especially mobile and web applications ²

The company is primarily engaged in two activities. The first is the creation of digital products and applications for clients from startups and corporations in various parts of the world, especially in the United States. The second area of the interest is building own products using the latest technologies within STRV Labs.

The company was founded in 2009 by David Semerád and Martin Štáva (later Lubo Smid and Pavel Zeifart also joined) and worked on projects focused on mobile applications for Czech customers. At that time, they were called uLikeit and 10 years later they were renamed STRV because the original brand name was not respectable enough. Although the demand for mobile applications used to be very low, the company still decided on mobile development and in 2011 expanded to the USA.

STRV operates several of its own startups like Dot to Dot, Surge app, Zoe app, Futupilot, or Kindest. To control the business in the USA, a sales agent has been created within the company. This sales agent is called STRV Inc., which exclusively represents the company in the USA and generates a large part of its income. To unite all the entities of the company, STRV Group SE was created which includes all the company's startups, its Czech entity STRV s.r.o., and American entity STRV Inc. as can be seen in Figure No 1.

² Justice, [online]. [16-12-2020] available from: or.justice.cz/ias/ui/rejstrik-firma.vysledky?subjektId=319412&typ=PLATNY

Figure 1 - Structure of STRV Group SE



Sources: Výroční zpráva STRV s.r.o. 2019

Nowadays STRV Group SE employs about 180 employees of which STRV s.r.o. employs around 35. The company has received several awards such as Deloitte Technology Fast50 CE, 1st place in Office of the Year, or 1st place in StevieAwards - Startup of the Year for business services industries. The company had an audit performed by the audit company PWC for the year 2019.

STRV s.r.o. in 2015, committed to the long-term lease of more than 5,000 m2 of office space at its headquarters in Prague.

For better orientation in the financial statements, the practical part will be calculated for the company's Czech entity STRV s.r.o.

4.2 Analysis of absolute indicators

The analysis of absolute indicators includes horizontal and vertical analysis of financial statements. The following section covers the horizontal and vertical analysis of assets, liabilities and equity and the company's income statement.

4.2.1 Horizontal analysis of the balance sheet

The following subchapter presents and comments on the development of individual items of the balance sheet of STRV s.r.o. in the period from 2015 to 2019. These are assets and liabilities and equity and their absolute changes between individual years of the period (in thousands of CZK) and relative year-on-year changes (in percent).

Table 7 - Horizontal analysis of assets of STRV s.r.o.

Ident.	Item / Year	2015-2016		2016-2017		2017-2018		2018-2019	
iuent.	item / i ear	thous. CZK	%	thou. CZK	%	thou. CZK	%	thou. CZK	%
	Total assets	144,807.0	603.5	-100,431.0	-59.5	-1,195.0	-1.7	-9,136.0	-13.6
А	Receivabels for subscribe capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
В	Fixed assets	11,037.0	4,862.1	-5,710.0	-50.7	3,015.0	54.3	-1,332.0	-15.5
B I.	Intangible assets	0.0	0.0	0.0	0.0	574.0	0.0	-219.0	-38.2
B II.	Tangible fixed assets	830.0	410.9	4,522.0	438.2	2,441.0	44.0	-1,113.0	-13.9
B III.	Financial assets	10,207.0	40,828.0	-10,232.0	-100.0	0.0	0.0	0.0	0.0
С	Current assets	6,491.0	27.3	29,770.0	98.4	-5,535.0	-9.2	-8,046.0	-14.8
C I.	Inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C II. 1	Long-term receivabels	387.0	0.0	-387.0	-100.0	2,523.0	0.0	105.0	4.2
C II. 2	Short-term receivabels	-15,003.0	-76.3	36,863.0	790.2	-8,967.0	-21.6	-4,638.0	-14.2
C III.	Cash and bank accounts	21,107.0	516.7	-6,706.0	-26.6	907.0	4.9	-3,513.0	-18.1
D	Prepayments and accrued income	127,279.0	909,135.7	-124,491.0	-97.8	1,325.0	47.3	242.0	5.9

Sources: Own processing according to publicly available financial statements

Table No. 7 shows a horizontal analysis of selected asset items of STRV s.r.o. The main asset items are fixed assets, current assets, and prepayments, and accrued income. The table shows that total assets have a declining trend in the monitored periods.

Between 2015 and 2016, assets gained significant growth of up to 603.5%. The cause was due to increase in fixed assets by CZK 11,037 thous. (4,862.1%) which is mainly due to an increase in financial assets by CZK 10,207 thous. (40,828%). From financial assets can be observed that item loans and borrowings to subsidiaries were increased due to the fact that STRV s.r.o. borrowed a loan to its other entity – STRV Inc. The main increase in total assets was mostly due to prepayments and accrued income by CZK 127,279 thous. (909,135.7%) due to prepaid expenses concerning the lease of offices until 2022.

The most significant decrease in total assets occurred in the following years 2016 and 2017 by -59.5%. Since 2017, the item total assets have been declining every year. Long-term financial assets are no longer reported, but the company started reporting tangible fixed assets (notebooks for developers, office furniture). On the other hand, the item current assets had a large increase by CZK 29,770 thous. (98.4%), mainly due to short-term receivables, more precisely trade receivables (receivable from a sister entity). Compared to 2016, the company has not reported such significant value in the item prepaid expenses since 2017 (change in accounting).

The decrease in current assets occurred between 2017 and 2018 by -9.2%. The item building and structures are newly reported, which were associated with technical improvement of leased offices. Short-term receivables particularly the item other receivables from 2017 in the amount of CZK 2,567 thous. were reclassified to long-term receivables

(loan to a co-founder with a maturity of more than one year). Short-term trade receivables decreased.

Between 2018 and 2019, total assets decreased by a total of -13.6%, mainly related to current assets, specifically short-term trade receivables and cash and bank accounts.

Ident.	Item / Year	2015-2016		2016-2017		2017-2018		2018-2019	
ruent.	item / i ear	thous. CZK	%	thou. CZK	%	thou. CZK	%	thou. CZK	%
	Total liabilities and equity	144,807	603.5	-100,431	-59.5	-1,195	-1.7	-9,136	-13.6
А	Equity	-5,584	-32.5	8,138	70.2	4,278	21.7	-236	-1.0
AI.	Subscribed capital	0	0.0	0	0.0	0	0.0	0	0.0
A II.	Share premium and capital reserves	0	0.0	6,632	0.0	-3,110	-46.9	-2,730	-77.5
A III.	Revenue reserves	0	0.0	0	0.0	0	0.0	0	0.0
A IV.	Retained earnings	13,469	5,101.9	-2,356	-17.8	1,619	14.9	5,823	46.7
AV.	P/L of current accounting period	-19,053	-110.5	3,862	213.6	5,769	280.9	-3,329	-42.6
B. + C.	Liabilities	149,814	2,200.2	-126,323	-80.7	-1,785	-5.9	-4,946	-17.3
В	Provisions	0	0.0	447	0.0	1,577	352.8	-1,586	-78.4
C I.	Long-term liabilities	144,633	8,012.9	-146,438	-100.0	0	0.0	258	0.0
C II.	Short-term liabilities	5,181	103.5	19,668	193.1	-3,362	-11.3	-3,618	-13.7
D	Accruals and deferred income	577	14,425.0	17,754	3,055.8	-3,688	-20.1	-3,954	-27.0

Table 8 - Horizontal analysis of liabilities and equity of STRV s.r.o.

Sources: Own processing according to publicly available financial statements

As with the horizontal analysis of assets, liabilities and equity have a declining trend. This trend is based on the basic balance rule, where assets must equal to the equity and liabilities. The most important individual items are equity, liabilities and accruals and deferred income.

In 2016, the equity decreased by CZK -5,584 thous. (-32.5%) due to the fact that the amount of only CZK 13,469 thous. was charged to the item retained earnings instead of CZK 17,245 thous. reported as the result of the profit/loss of current accounting period in 2015 - this value was without tax. Furthermore, the company reported a loss in 2016, therefore the profit/loss of current accounting period is reduced by -110.5% compared to the year 2015, where the company was in profit. In 2016, liabilities increased by CZK 149,814 thous. (2 200%), which was largely influenced by the increase in long-term liabilities, specifically trade payables (the office lease payables) and the newly reported payables to the banks of CZK 11,304 thous.

The company's equity recorded the largest change in 2016 and 2017, when it increased by CZK 8,138 thous. (70.2%), mainly due to the fact that from 2017 the company began to report capital reserves. Even though equity were increased, the liabilities were reduced by CZK -126,323 thous. (-80.7%) because the company did not report long-term trade payables (office lease payables) in 2017. The company newly reported an item of short-term borrowings CZK 2,731 thous. which is a loan to one of the co-founders.

Between 2017 and 2018 equity were positive and increased by CZK 4,278 thous. (21.7%), mainly due to the increase in retained earnings and profit of current accounting period. Short-term liabilities decreased by CZK -3,362 thous. (-11.3%) for the first time in the monitored period which was most affected by the decline in payables to banks. Other liabilities increased but not so significantly.

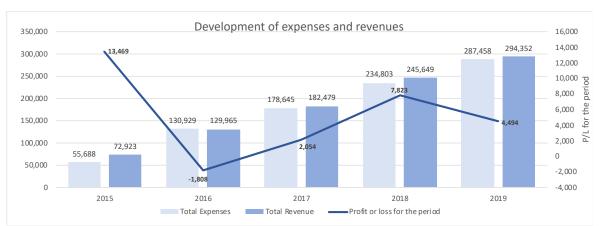
The following two year-on-year changes record a slight decline in total liabilities and equity. Between 2018 and 2019, there was again a sharp decline in share premium and capital reserves by CZK -2,730 thous. (-77.5%). In the year 2018, CZK 2,000 thous. of dividends was paid out of the profit and the rest was transferred to the retained earnings. Furthermore, item the profit/loss of current accounting period noted decease by CZK -3,329 thous. (-42.6%). A further decline was recorded in accruals and deferred income, which decreased by CZK -3,954 thous. (-27.0%) - discount on office space rental.

4.2.2 Horizontal analysis of the income statement

Table No. 9 below shows the year-on-year changes in the next financial statement, namely the income statement, which is an integral part of the financial analysis. The horizontal analysis is performed in absolute terms (in thousands of CZK) as well as in relative terms (percentage) and the years 2015–2019 are selected for the monitored period.

Sales of goods and services are the most significant item that generates the company's profit. Company's sales are mainly generated by the creation of digital products for clients. As the company does not sell any goods, item sales of goods was not reported.

Graph No.1 shows how total expenses and total revenues continue to increase over time. Profit or loss for the period show a rather fluctuating trend where the highest achieved profit was in 2015, namely CZK 13,469 thous., and on the contrary, the company suffered a loss in 2016 CZK -1,808 thous.



Graph 1 - Development of expenses and revenues for 2015–2019 in thous. of CZK

Sources: Own processing according to publicly available financial statements

Ident.	Item / Year	2015-2016		2016-2017		2017-2018		2018-2019	
Tuent.	item / i ear	thous. CZK	%	thou. CZK	%	thou. CZK	%	thou. CZK	%
I.	Sales of goods and services	44,086	60.7	54,536	46.7	64,726	37.8	43,087	18.3
*	Profit/loss from operating activities	-17,971	-102.9	-1,230	-247.0	27,052	1,565.5	-11,209	-44.3
*	Profit/loss from financial activities	-228	-95.8	6,028	1,293.6	-20,040	-360.3	7,257	50.1
**	Profit/loss before tax	-18,199	-105.6	4,798	497.7	7,012	182.9	-3,952	-36.4
**	Profit/loss after tax	-15,277	-113.4	3,862	213.6	5,769	280.9	-3,329	-42.6

Table 9 - Horizontal analysis of income statement of STRV s.r.o.	Table 9 - Horizontal	analysis of incom	e statement of STRV s.r.o.
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Sources: Own processing according to publicly available financial statements

Sales of goods and services in the monitored period show an increasing trend in all years. The largest recorded increase in change in terms of percentage was at the beginning of the monitored period, by 60.7%. In the following years 2016 and 2017, the second-largest change in growth was recorded 46.7%. In the next two years, the increase was gradually lower by 37.8% and subsequently by 18.3%. If we compare it in absolute values, the highest year-on-year increase in sales was between 2017 and 2018, namely CZK 64,726 thous. (due to the increase in clients in the USA). However, the increase in sales is also related to the increase in cost items, when, for example, in 2016, consumption from production ratio of sales reached almost 93%.

Between 2017 and 2018, there was a significant increase in the profit/loss from operating activities, however, the company generated a notable loss from the financial activities, yet profit/loss after tax increased significantly.

Income statement items	2015	2016	2017	2018	2019
Other financial revenues	228	1,104	9,393	8,963	12,873
Exchange rate gains	228	1,104	9,393	8,963	4,143
Interest income and similar income	432	1,565	3,592	23,128	19,594
Other financial expenses	432	1,565	3,592	12,299	16,035
Exchange rate loss	34	123	365	349	409
Interest expenses and similar expenses	0	128	126	36	109
Profit/loss from financial activities	-238	-466	5,562	-14,478	-7,221

Table 10 - Items affecting the profit/loss from financial activities in 2015-2019 in thous.

Sources: Own processing according to publicly available financial statements

As the company works with foreign currency, it shows the risk of exchange rate differences. Thanks to this, the company has secured a sufficient amount of CZK and EUR for 12 months with the use of currency derivatives to ensure that in larger exchange rate fluctuations, it causes only minimal effects. Therefore, Table No. 10 shows the detailed items affecting the profit/loss from financial activities.

Other financial revenues and expenses are increasing year-on-year, which is caused by the growth of sales from the company's sales agent STRV Inc. Exchange rate losses for all monitored periods exceed exchange rate gains except the year 2017. In 2018 are in other financial expenses included not only exchange rate losses but also costs from derivative operations (forwards) and bank fees (CZK 10,829 thous.). The company uses derivative transactions to hedge financial risks. In 2019, positive values were achieved from derivative transactions (CZK 8,730 thous.), however, exchange rate losses increased year-on-year therefore the total profit/loss from financial activities is also negative. Interest expenses and similar expenses relate to bank loan products, however, their amount is not so significant.

4.2.3 Vertical analysis of the balance sheet

As with the horizontal analysis, the vertical analysis is performed from selected balance sheet items in the years 2015 to 2019, which are mainly total assets and total equity and liabilities. The resulting values are expressed in a percentage value and can be define as the ratio to the total assets or total equity and liabilities on the specific item from the balance sheet.

Ident.	Item / Year	2015	2016	2017	2018	2019
	Total assets	100.0%	100.0%	100.0%	100.0%	100.0%
А	Receivabels for subscribe capital	0.0%	0.0%	0.0%	0.0%	0.0%
В	Fixed assets	0.9%	6.7%	8.1%	12.8%	12.5%
BI.	Intangible assets	0.0%	0.0%	0.0%	0.9%	0.6%
B II.	Tangible fixed assets	0.8%	0.6%	8.1%	11.9%	11.9%
B III.	Financial assets	0.1%	6.1%	0.0%	0.0%	0.0%
С	Current assets	99.0%	17.9%	87.8%	81.1%	80.0%
C I.	Inventories	0.0%	0.0%	0.0%	0.0%	0.0%
C II. 1	Long-term receivabels	0.0%	0.2%	0.0%	3.8%	4.5%
C II. 2	Short-term receivabels	82.0%	2.8%	60.7%	48.5%	48.1%
C III.	Cash and bank accounts	17.0%	14.9%	27.0%	28.9%	27.4%
D	Prepayments and accrued income	0.1%	75.4%	4.1%	6.1%	7.5%

Table 11 - Vertical analysis of assets of STRV s.r.o. in %

Sources: Own processing according to publicly available financial statements

In 2015, the company accounted 99% of the current assets from total assets. This is due to the fact that the company reports almost no fixed assets. In the following years, fixed assets gradually increased, thanks to the acquisition of office space and equipment. A significant value in 2016 is 75.4% for prepayments and accrued income – it refers to the lease of office space until 2022. In the last three monitored years, the value of current assets has stabilized at around 80%, which is adequate for this type of business because the company does not need any production facilities, machinery, and equipment that are reported in fixed assets.

Ident.	Item / Year	2015	2016	2017	2018	2019
	Total liabilities and equity	100.0%	100.0%	100.0%	100.0%	100.0%
А	Equity	71.6%	6.9%	28.9%	35.7%	41.0%
AI.	Subscribed capital	0.8%	0.1%	0.3%	0.3%	0.3%
A II.	Share premium and capital reserves	0.0%	0.0%	9.7%	5.2%	1.4%
A III.	Revenue reserves	0.0%	0.0%	0.0%	0.0%	0.0%
A IV.	Retained earnings	-1.1%	7.8%	15.9%	18.6%	31.5%
AV.	P/L of current accounting period	71.9%	-1.1%	3.0%	11.6%	7.7%
B. + C.	Liabilities	28.4%	92.8%	44.3%	42.4%	40.6%
В	Provisions	0.0%	0.0%	0.7%	3.0%	0.8%
C I.	Long-term liabilities	7.5%	86.8%	0.0%	0.0%	0.4%
C II.	Short-term liabilities	20.9%	6.0%	43.7%	39.4%	39.4%
D	Accruals and deferred income	0.0%	0.3%	26.8%	21.8%	18.4%

Table 12 - Vertical analysis of liabilities and equity of STRV s.r.o. in %

Sources: Own processing according to publicly available financial statements

There are significant fluctuations in the equity where the lowest value of 6.9% is recorded in 2016, which is related to the high value of liabilities therefore the equity value was low to cover the total balance sum. Since 2017, equity has been growing year-on-year, which is positive for the company. The year 2016 shows a 92.8% share of liabilities which is affected by long-term trade payables (liability related to the lease of offices). Since 2017, the share of liabilities has been around 40% and is slightly declining year-on-year. The declining trend of accruals and deferred income since 2017 is caused by the gradual deduction of the discount on the lease of office space. The retained earnings are gradually increasing as the generated profits are mostly left in the company (the largest payout from the profit was in 2019 CZK 2,000 thous.)

4.3 Ratio analysis

This chapter presents the calculation of selected ratios, specifically profitability, liquidity, activity, and stability, which are calculated on the basis of the financial statements of STRV s.r.o. In order to put the ratios of the selected company into context and to obtain a better informative value of the partial indicators, the ratios were calculated for the total industry overview - Information and communication activities CZ NACE J (62 - Information technology activities) and compared with the values of the selected company. The values used for the calculations of the industry indicators are given in the Appendix to Table No. 28.

4.3.1 Profitability ratios

Profitability ratios provide an overview of the company's profitability according to individual items of financial statements, which are inserted into the denominator and then compared with different degrees of profit. Table No. 13 shows the results of individual types of profitability and their items of financial statements in the monitored period from 2015 to 2019. Calculations for the average industry value are mentioned in Table No. 14 below.

Profitability ratios / year	2015	2016	2017	2018	2019
Profit/loss for the period	13,469	-1,808	2,054	7,823	4,494
Equity	17,181	11,597	19,735	24,013	23,777
EBIT	17,269	-831	4,199	11,195	7,503
Total assets	23,994	168,801	68,370	67,175	58,039
Sales of goods and services	72,633	116,719	171,255	235,981	279,068
Long-term liabilities	1,805	146,438	0	0	258
Provisions	0	0	447	2,024	438
ROE	78.39%	-15.59%	10.41%	32.58%	18.90%
ROA	71.97%	-0.49%	6.14%	16.67%	12.93%
ROS	23.78%	-0.71%	2.45%	4.74%	2.69%
ROCE	90.96%	-0.53%	20.81%	43.00%	30.66%

Table 13 - Profitability ratios of STRV s.r.o. in thous. of CZK and %

Sources: Own processing according to publicly available financial statements

Table 14 - Profitability ratios of industry overview in %

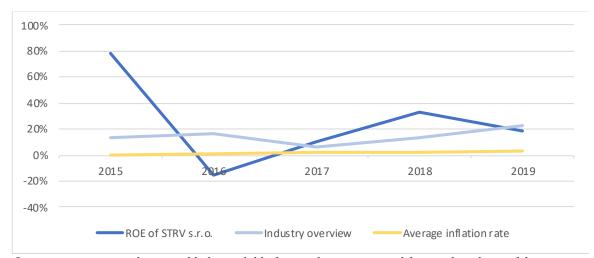
Profitability ratios / year	2015	2016	2017	2018	2019
ROE	13.23%	16.90%	6.61%	13.54%	22.60%
ROA	7.10%	9.48%	6.39%	7.73%	13.40%
ROS	4.28%	6.33%	3.96%	5.55%	10.05%
ROCE	13.35%	16.97%	11.02%	12.60%	21.80%

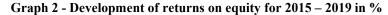
Sources: Own processing according to financial analyses of the corporate sphere - MPO ČR

Returns on equity

It can be deduced from Graph No. 2 that the returns on equity indicator have a fluctuating character. The highest return on equity was recorded in 2015 (78.39%) due to the highest positive value of profit/loss for the period (CZK 13,469 thous.). In 2016, the calculated indicator achieved the largest decrease in the entire monitored period, when the

value of the indicator decreased to -15.59%. This was caused by a sharp decline in the profit/loss for the period, which fell to the value of CZK -1,808 thous. After the loss-making year of 2016, profitability gradually increased in the next two monitored periods. Value in the last year decreased again to 18.9%, which fell below the industry value for 2019. For comparison with the industry, Graph No. 2 also shows the average returns on equity indicator for the Information technology activities sector in the industry overview. Despite the decline in 2016 and 2019, the values of the company's indicators still remain above the border of the industry average.

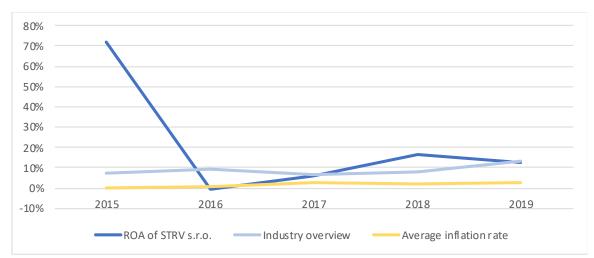




Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Returns on asset

The returns on assets were based on both positive and negative values in the monitored period. The highest profitability is achieved in 2015 when CZK 1 invested falls to CZK 0.72 of profit, which was caused by an increase in the company's profit/loss before interest and taxes. It also reached negative values (-0.49%) due to a high increase in assets and a negative profit before interest and taxes (CZK -831 thous.), which the company reported in 2016, and therefore the assets did not generate any profit. Industry values in the selected period range from 6% to 13%. When compared to the returns on assets of STRV s.r.o. Graph No. 3 records that the growth of the indicator does not show uniformity and stability, but rather there are jump fluctuations caused by the company's financial results. Only in 2015 and 2018 did the profitability of STRV s.r.o. ranges above industry values.

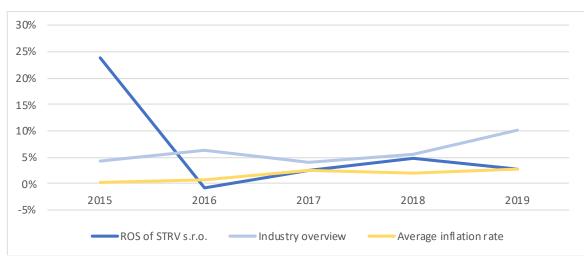


Graph 3 - Development of returns on asset for 2015 - 2019 in %

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Returns on sales

Another indicator in the area of profitability is the returns on sales, the indicator of which measures profit before tax and interest with the value of sales. As the company does not create any goods, the calculation is performed only with the item of sales of goods and services from the income statement. Although the company's sales have increased significantly over time, EBIT showed relatively low values, therefore the company's ROS indicator has low performance. As well as with the ROE and the ROA, the ROS is significantly affected by whether the company generated a loss or profit. Therefore, the year 2016 again reached negative values of -0.71%. According to Graph No. 4, only the value in 2015 is above the limit of industry values, specifically with a value of 23.78%. All other years are below industry averages.

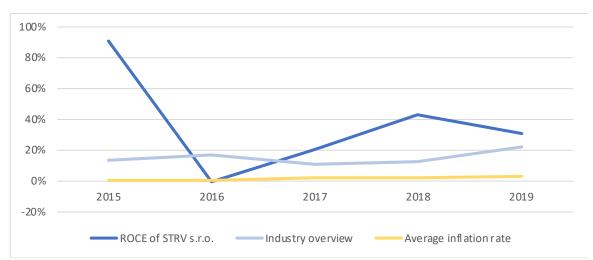


Graph 4 - Development of returns on sales for 2015 - 2019 in %

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Returns on capital employed

As with other indicators, the indicator ROCE has the highest value in 2015, namely 90.96%, which can be interpreted as CZK 0.90 of operating profit was gained by investing CZK 1 in the capital. The following year 2016 is again a crisis year and falls to negative values of -0.53%. In 2017 and 2018, the company did not report any long-term liabilities and the ROCE indicator is growing positively. The year 2019 has lower values (30.66%) compared to the previous year (43%) but is still in positive numbers. Return on capital employed in STRV s.r.o. is mainly positive compared to the industry values, except negative development in the second year.



Graph 5 - Development of returns on capital employed for 2015 - 2019 in %

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Due to the declining and unstable values of all profitability indicators of the company, hypothesis No. 1 "*The company's profitability shows a stable or increasing trend in the monitor period*." is disproven.

4.3.2 Liquidity ratios

This indicator represents the company's ability to convert its assets into cash to settle its liabilities. Liquidity indicators are distinguished according to three levels - current ratio, quick ratio, cash ratio. As the subject of the business of STRV s.r.o. are technological services, the company does not generate any goods and therefore the quick ratio indicator is not calculated. Table No. 15 lists the individual types of liquidity for the monitored period 2015 - 2019 in absolute terms, and Table No. 16 shows the average values of the industry overview.

Table 15 - Liquidity ratios of STRV s.r.o. in thous. of CZK and absolute values

Liquidity ratios / year	2015	2016	2017	2018	2019
Current assets	23,753	30,244	60,014	54,479	46,433
Short-term liabilities	5,004	10,185	29,853	26,491	22,873
Cash and bank accounts	4,085	25,192	18,486	19,393	15,880
Current ratio	4.75	2.93	2.01	1.96	1.92
Cash ratio	0.82	2.47	0.62	0.73	0.69

Sources: Own processing according to publicly available financial statements

Table 16 - Liquidity ratios of industry overview in absolute values

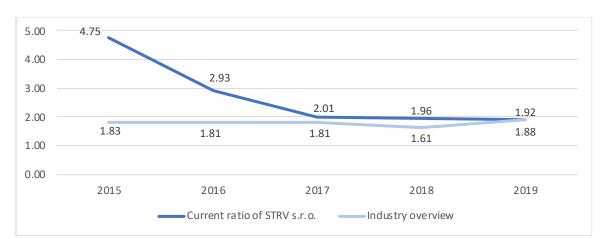
Liquidity ratios / year	2015	2016	2017	2018	2019
Current ratio	1.83	1.81	1.81	1.61	1.88
Cash ratio	0.40	0.52	0.45	0.31	0.42

Sources: Own processing according to financial analyses of the corporate sphere - MPO ČR

Current ratio

This indicator signifies the extent to which current assets (deducted from long-term receivables) are covered by all short-term liabilities which are due within one year. The values from 2017, 2018 and 2019 fall into the average strategy, which ranges from 1.6 - 2.5. The resulting values from 2015 and 2016 fall into the so-called conservative strategy, which is characterized by values of current ratio exceeding 2.5. The year's 2015 value of 4.75 significantly exceeds the recommended value and industry value. This increase in current

ratio was not affected by inventories, but by a significantly low value of short-term liabilities. All industry values in the monitored period are below the company's values.

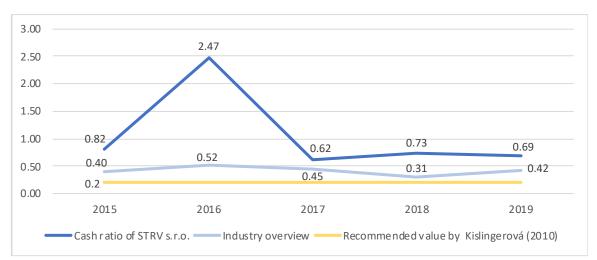


Graph 6 - Development of current ratios for 2015 – 2019 in absolute values

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Cash ratio

Cash ratio determines how many times a company would be able to settle short-term liabilities only with the help of short-term financial assets (cash and bank accounts). According to the literature, the recommended value of the cash ratio is 0.2. (Kislingerová, 2010, p. 105). In this case, the results of STRV s.r.o. exceed the recommended value of 0.2 in all monitored years. The most significant decrease was recorded in 2017 at 0.62, when the value was closest to the recommended optimum. Despite the fact that the value of financial assets reached CZK 18,486 thous., short-term liabilities specifically payables to banks (which were accounted as long-term liabilities in 2016), increased significantly. On the other hand, a notable increase with value of 2.47 was recorded in 2016 due to high value of short-term financial assets CZK 25,192 thous. and low value of short-term liabilities. This year can be considered inefficient in terms of the use of funds. All years are above the industry threshold.



Graph 7 - Development of cash ratios for 2015 - 2019 in absolute values

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

With these indicators, it has been tested hypothesis No. 2 "*The company is able to repay its liabilities well in the long run*". Given that both indicators - current and cash ratios reported favorable results and in all years the values fell above the recommended values and above the average values of the industry, this hypothesis is proven.

4.3.3 Activity ratios

Activity indicators monitor how many times or for how long during the year a certain item of asset goes to consumption or for sale. Calculations of individual indicators of STRV s.r.o. are listed in Table No. 17 below. Although the inventory turnover, inventory period and fixed assets turnover are included in the activity ratios, they are not listed in the practical part as the company does not report any inventories. To compare the results with the industry values, Table No. 18 is elaborated.

Activity ratios / year	2015	2016	2017	2018	2019
Sales of goods and services	72,633	116,719	171,255	235,981	279,068
Total assets	23,994	168,801	68,370	67,175	58,039
Receivables	19,668	5,052	41,528	35,084	30,551
Short-term liabilities	5,004	10,185	29,853	26,491	22,873
Assets turnover	3.03	0.69	2.50	3.51	4.81
Collection period (days)	97	16	87	54	39
Payables period (days)	25	31	63	40	30

Table 17 - Activity ratios of STRV s.r.o. in thous. of CZK and absolute values

Sources: Own processing according to publicly available financial statements

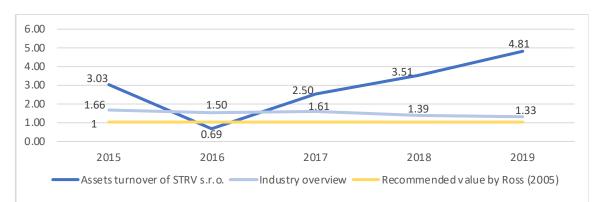
Table 18 - Activity ratios of industry overview in absolute values

Activity ratios / year	2015	2016	2017	2018	2019
Assets turnover	1.66	1.50	1.61	1.39	1.33
Collection period (days)	107	88	83	85	92
Payables period (days)	80	87	79	84	77

Sources: Own processing according to financial analyses of the corporate sphere - MPO ČR

Assets turnover

Assets turnover indicates how many times in a year sales cover total assets. According to Ross (2005) the recommended value of this indicator is 1, thus sales should cover total assets at least once. The higher the value the better activity ratio is. It can be seen from Graph No. 8 that the indicator obtains values lower than 1 only once, in 2016, when it reaches the value of 0.69 thanks to the significant value of prepayments and accrued income CZK 127,293 thous. Since 2017, the value has been gradually increasing and in 2019 the highest value of this indicator was recorded, namely 4.81. Therefore, the company managed its assets most efficiently in the last year. According to Graph No. 8, the average assets turnover in the industry ranges between 1.33 - 1.66 in the observed period, which is situated just above the recommended values. In comparison with industry values, STRV s.r.o. acquires several times higher values except in already mentioned year 2016. The higher assets turnover indicates the better use of the company's assets compared to the industry overview.

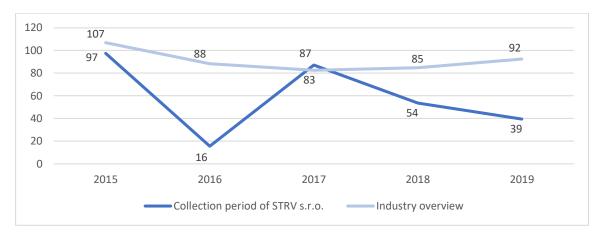


Graph 8 - Development of assets turnover for 2015 – 2019 in absolute values

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Collection period

The number of days that pass between the issuance of invoices and their payment can be monitored using the indicator of the collection period. The longest payment period was in 2015 (97 days). On the contrary, the minimum delay is reached in 2016, namely 16 days. An interesting development can be observed from 2017 to 2019, during which the turnover time gradually decreases (a decrease by 48 days from 2017 to 2019). The reason is the annually declining receivables (a decrease by CZK 10,977 thous. since 2017 to 2019), and in contrast the annual increase in sales. The average collection period in the total monitored period was 59 days. The industry average value of collection period was 91 days. When comparing each other, Graph No. 9 shows a marked difference between the values of the industry and the company STRV s.r.o., which are characterized by very low values therefore may point to better payment discipline of customers of STRV s.r.o. From the overall evaluation it follows that the company STRV s.r.o. causes minimal difficulties in converting their receivables into cash.



Graph 9 - Development of collection period for 2015 - 2019 in days

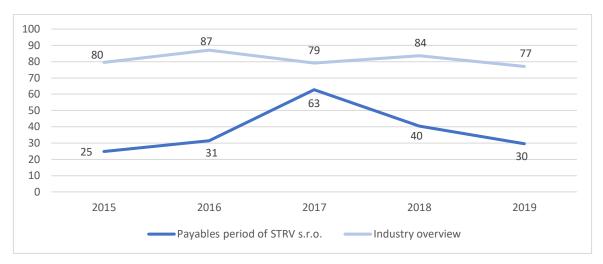
Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Payables period

On the contrary, payables period expresses how long it takes a company to pay its liabilities to its suppliers and thus reflects the payment morale of the company. A significant increase was recorded in 2017, during which the payables period was increased by 31 days with its value of 63 days thus reached its maximum for the monitored period. This value was significantly affected by increase of short-term liabilities, accurately payables to bank (CZK 16 276 thous.). The shortest payables period (25 days) falls in 2015 as this year has the lowest short-term liabilities to the ratio of sales. The average payables period in the monitored period was 38 days which is significantly lower compare to collection period. This situation is advantageous for the company, as it proves the ability to pay its liabilities on time as opposed to its customers. In terms of the industry overview comparison shown in Graph No. 10 the company manages to keep its values compared to the industry at a very extremely low level.

Overall, the company pays its liabilities in a shorter period of time than it receives the payment of receivables. Therefore, it can be said, that STRV s.r.o. has sufficient operating cash flow to cover its liabilities. Consequently, hypothesis No 3 *"The company reports a shorter payables period than the collection period."* can be considered proven.

Graph 10 - Development of payables period for 2015 – 2019 in days



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4.3.4 Stability ratios

Calculations of stability ratio indicators of STRV s.r.o. are listed in Table No. 19 below. For comparison, the indicators were calculated for the industry overview in Table No. 20.

Table 19 - Stability ratios of STRV s.r.o. in thous. of CZK and %

Stability ratios / year	2015	2016	2017	2018	2019
Liabilities	6,809	156,623	30,300	28,515	23,569
Total assets	23,994	168,801	68,370	67,175	58,039
Equity	17,181	11,597	19,735	24,013	23,777
EBIT	17,269	-831	4,199	11,195	7,503
Interest expense and similar expenses	34	133	365	349	609
Debt ratio	28.38%	92.79%	44.32%	42.45%	40.61%
Debt equity	39.63%	1350.55%	153.53%	118.75%	99.13%
Interest coverage	507.91	-6.25	11.50	32.08	12.32

Sources: Own processing according to publicly available financial statements

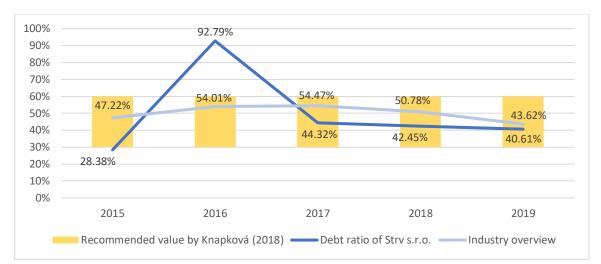
Table 20 - Stability ratios of industry overview in %

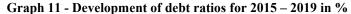
Stability ratios / year	2015	2016	2017	2018	2019
Debt ratio	47.22%	54.01%	54.47%	50.78%	43.62%
Debt equity	110.75%	141.94%	140.18%	118.24%	94.10%

Sources: Own processing according to financial analyses of the corporate sphere - MPO ČR

Debt ratio

The first of the indicators is the debt ratio, the recommended value of which should be in the range of 30–60% according to Knápková, Pavelková, Štekra (2018). Graph No. 11 shows that in the first year 2015 the company is at a very low level (28.38%), which confirms that the company uses its own resources, rather than liabilities, to finance its activities. The next year 2016 is a crisis for the company, as it faced significant indebtedness and its debt ratio was 92.79%. This over-indebtedness was caused by high value of liabilities. In 2017, 2018 and 2019, thanks to the positive profit/loss for the period, the debt ratio was stabilized, and the recommended values were reached. From the overall point of view, the company managed its over-indebtedness very well caused in the second year by systematically reducing its debt and was able to bring it to the range of recommended values and below the values achieved in industry.





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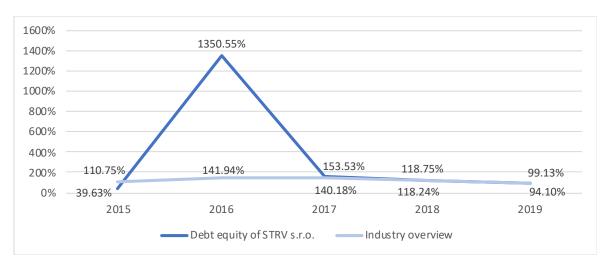
To prove hypothesis No 4 "*The company is claimed as a stable in the long run*" the debt ratio indicator needed to be calculated. The final results of the debt ratio fell into the zone of recommended values (except the year 2016) therefore the hypothesis is proven.

Debt equity

Debt equity ratio compares liabilities with the company's equity. To compare this indicator, it is important to realize its development in a time series that will show whether the share of liabilities is increasing or decreasing. In 2016, it reaches extremely high values

of 1350.55% due to an increase in the share of liabilities usable to cover the needs of the company.

This value is abnormally high for two reasons. Firstly, there was a decrease in equity due to an error in accounting caused in 2015 by transferring value profit/loss before tax from the income statement to the balance sheet's profit/loss of current accounting period (supposed to transfer value of profit/loss for the period from the income statement to the balance sheet). In 2016, the profit/loss for the period from 2015 was transferred (as retained earnings to the balance sheet) in the correct amount. Secondly, significant value of trade payables (CZK 135,044 thous.) are newly recorded, which are no longer used in subsequent years. This high amount represents a liability from renting an office space in Karlín. In the following years 2017, 2018 and 2019, the indicators gradually decrease, and the values are almost identical to the industry values.



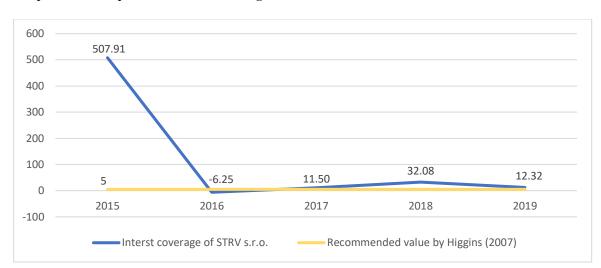
Graph 12 - Development of debt equity for 2015 – 2019 in %

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

Interest coverage

The interest coverage by the literature recommended value according to Higgins (2007, p. 211) should not be lower than 5. In 2015, the company's indicator reached the highest value 507.91. The reason is the positive EBIT (CZK 17,269 thous.) and the low value of interest expense (CZK 34 thous.). The lowest value is shown in 2016 when the indicator even reaches negative numbers -6.25. The last three years in the monitored period are in

positive values above the recommended value. This means that the reported EBIT can cover the value of interest expense.



Graph 13 - Development of interest coverage for 2015 - 2019

Own processing according to publicly available financial statements and financial analyses of the corporate sphere - MPO ČR

4.4 Analysis of aggregate indicators

The following chapter will focus on the bankruptcy and solvency models of the analyzed company, which help to reveal the financial health and the likelihood of bankruptcy. The calculation procedure for individual models is described in the theoretical part.

4.4.1 Bankruptcy model

Two bankruptcy models were chosen in the practical part. First, the Altman model, also known as the Z-score, is determined, followed by the calculation of the Credibility index IN05 model, which was formed by husband-and-wife Neumaiers.

Altman Z-score model

The first of the bankruptcy models used for the needs of this diploma thesis is the Altman Z-score model. Particularly, it is a modified model, which is created especially for companies that are not tradable in the stock exchange market. The individual calculations are attached in Table No. 21.

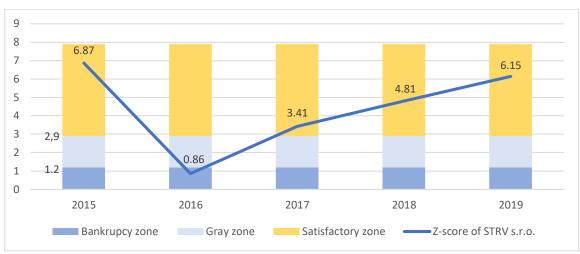
Indicator	Coefficient	2015	2016	2017	2018	2019
X1	0.717	0.78	0.12	0.44	0.38	0.36
X2	0.84	-0.01	0.08	0.16	0.19	0.32
X3	3.107	0.72	0.00	0.06	0.17	0.13
X4	0.42	2.52	0.07	0.65	0.84	1.01
X5	0.998	3.03	0.69	2.50	3.51	4.81
Z-score		6.87	0.86	3.41	4.81	6.15
Evalı	lation	Satisfactory	Bankrupcy	Satisfactory	Satisfactory	Satisfactory

Table 21 - Calculation of Altman's model of STRV s.r.o. for 2015 - 2019

Sources: Own processing according to publicly available financial statements

It can be seen from Table No. 21 and Graph No. 14 that the value of the Z-score reached the highest values in the first year of the monitored period (6.87). A large drop was recorded in 2016 (0.86), where the company falls into the bankruptcy zone. The individual indicators are mainly affected by the fact that the company reported a loss this year. In all monitored years, with the exception of the second year 2016, the resulting values fall within the interval above the minimum limit of 2.9, which according to Altman means that the company is in good financial condition.

In terms of specific indicators, the largest positive value for the aggregate value in all periods was indicator X5 which expresses the ratio between sales and total assets, which was due to the company's ability to generate high sales with relatively low assets. However, this indicator also recorded a significant decline in 2016. Among the indicators that had a negative effect on the total value falls to X2 which represents the share of retains earnings and total assets. The negative value in 2015 is caused by the negative retained earnings (CZK -264 thousand).



Graph 14 - Development of Z-score of STRV s.r.o. for 2015 - 2019

Sources: Own processing according to publicly available financial statements

Credibility index - IN05 model

The second bankruptcy model presented in this diploma thesis is a model compiled by the Neumaiers in 2005. The advantage of this model is that it is adapted for the Czech environment. Its calculation procedure is explained in detail in the theoretical part (chapter 4.4.1.1. Credibility index - IN0 model) and in the methodology part in Formula No. 6. This model indicates the likelihood of bankruptcy, and also indicates to its owners the ability to create value of the company.

Indicator	Coefficient	2015	2016	2017	2018	2019
X1	3.97	0.72	0.00	0.06	0.17	0.13
X2	0.21	3.04	0.77	2.67	3.66	5.07
X3	0.13	3.52	1.08	2.26	2.36	2.46
X4	0.04	507.91	-6.25	11.50	32.08	12.32
X5	0.09	4.75	2.97	2.01	2.06	2.03
IN 05		24.70	0.30	1.74	3.20	2.57
Evaluation		Satisfactory	Bunkrupcy	Satisfactory	Satisfactory	Satisfactory

Table 22 - Calculation of IN05 model of STRV s.r.o. for 2015 - 2019

Sources: Own processing according to publicly available financial statements

Like Altman's model, this model works with some ratios, which in the numerator include the profit before interest and tax. As the company reported negative profits in 2016, this fact significantly affected the overall result of the IN05 model. That year noted the high

negative values of indicator X4, which compares the negative value of EBIT with quite low level of interest expenses. The highest value of the X4 indicator can be seen in the first year, when the company reported a very low value of interest expense (CZK 34 thous.) compared to a large increase in the profit before interest and tax (CZK 17,269 thous.) and thus the X4 indicator increased to its final value to 507.91. The company's results fall into two categories, which the authors defined for the model. The values from 2015, 2017, 2018 and 2019 fall into the range in which the company is not threatened by bankruptcy. In addition, it is highly likely to create value for owners especially in the first year 2015 which holds the highest value (24.70). However, the resulting value of 2017 (1.74) is very just above the gray zone. Negative values from 2016 indicate significant financial problems of the company.



Graph 15 - Development of IN05 model of STRV s.r.o. for 2015 - 2019

With the bankruptcy models Altman's model and IN05 model, it has been tested hypothesis No. 5 *"The company is not overall threatened with bankruptcy in the monitored period."*. The criterion was that the Z-score values must not fall below 1.2 and the IN05 values must not fall below 0.9 in 4 out of 5 monitored periods. Even though the company was categorized in both models in the bankruptcy zone in the year 2016 (and that is mainly affected by the non-standard accounting of some accounting items), all other years were in satisfactory zones. Therefore, the hypothesis is proven.

4.4.2 Solvency model

To evaluate the solvency of the company, Kralicek's Quicktest model was chosen and is calculated in detail in the following section.

Sources: Own processing according to publicly available financial statements

Kralicek's Quicktest

The model is based on four indicators, where each indicator is assigned one area of financial analysis. The monitored areas of financial analysis include stability, liquidity, profitability and the profit/loss result. Table No. 23 below shows the items that enter the model. Partial values are then scored, and the resulting points are obtained using the arithmetic mean of all individual indicators.

Indicator	2015	2016	2017	2018	2019
R1	0.72	0.07	0.29	0.36	0.41
R2	0.20	-81.13	3.59	0.84	0.94
R3	0.72	0.00	0.06	0.17	0.13
R4	0.19	-0.01	0.02	0.05	0.03
Point evaluation					
R1	4	0	3	4	4
R2	4	4	3	4	4
R3	4	0	1	4	3
R4	4	0	1	1	1
Total points	4	1	2	3.25	3
Evaluation	Satisfactory	Bankrupcy	Gray zone	Satisfactory	Satisfactory

Table 23 - Kralicek's Quicktest of STRV s.r.o. with point evaluation

Sources: Own processing according to publicly available financial statements

The R2 indicator for the monitored period (or the indicator of the time of repayment of debts from cash flow) is rated very well, which, except for 2016, reached values that are rated the highest possible points. On the contrary, the company achieves the worst evaluation points in the indicator R4 - cash flow in % of the company's performance, when the coverage of cash flow is not completely optimal with the achieved sales. Only in the first year is the point highest due to the high value of cash flow. Overall rating of STRV s.r.o. in the period from 2015 to 2019 can be evaluated as fluctuating. The company performed very well for the first year and is included in the category where there is no risk of bankruptcy. The year 2016 is very unfavorable for the company due to its generated loss. The following years, the company is recovering from the loss-making year of 2016 and is gradually getting back into a favorable zone.

The evaluation of the company shows that hypothesis No. 6. *"The company is overall creditworthy in the monitored period."* must be disproven. The company does not reach the required values in 2016 and 2017.

5 **Results and Discussion**

This chapter summarizes the results of the diploma thesis, in which the theoretical knowledge from previous chapters was practically applied. The necessary additional information supporting the financial reports was provided by CFO of STRV s.r.o to provide better understanding about the company. Furthermore, a specific recommendation will be made to improve the financial situation.

5.1 Analysis of absolute indicators

From the analysis of absolute indicators, it was found that the horizontal analysis of total assets developed a relatively declining trend. For most of the period under review, there was a decline in assets and an increase only in one year. The highest decrease in total assets was recorded between 2016 and 2017 when the total value of assets decreased by 59.5%. This is due to the reporting of long-term financial assets only in 2016 and no longer (loans and borrowings to subsidiaries). Furthermore, it was recorded sharp decline in prepayments and accrued income, when the company showed a high value in 2016 due to the lease of an office building. On the other hand, the company showed the highest increase in current assets of CZK 29,770 thous. thanks to trade receivables (receivable from a sister entity). Tangible fixed assets also increased, namely by the purchase of notebooks and furniture for the office.

Regarding the horizontal analysis of equity and liabilities, the largest decrease in equity was recorded in 2015 and 2016. Although the company recorded the largest increase in retained earnings by CZK 13,469 thousand, in 2016 reported a loss, therefore the profit/loss of current accounting period is reduced by 110.5% compared to the year 2015, where the company recorded profit. Additionally, in 2016 liabilities increased by CZK 149,814 thous. which was largely influenced by the office lease payables and the newly reported payables to the banks of CZK 11,304 thous. The company's equity recorded the largest change in 2016 and 2017 when it increased by 70.2%. That was caused by newly reported capital reserves from 2017. Between 2017 and 2018 the short-term liabilities decreased by CZK 3,362 thous. (-11.3%) for the first time in the monitored period which was most affected by the decline in payables to banks.

From the horizontal analysis of the income statement can be observed that sales of goods and services in the monitored period show an increasing trend in all years. In absolute values, the highest year-on-year increase in sales was reached between 2017 and 2018, specifically CZK 64,726 thous. which was influenced by the notable increase of clients in the USA.

As the company works with foreign currency, it shows the risk of exchange rate differences. Therefore STRV s.r.o. uses derivative transactions to hedge financial potential risks caused by exchange rate fluctuation. It can be observed that exchange rate losses for all monitored periods exceed exchange rate gains except the year 2017. In 2018 are included in other financial expenses not only exchange rate losses but also costs from derivative operations (forwards) and bank fees in a total of CZK 10,829 thous. On the other hand, in 2019 the positive values were achieved from derivative transactions in a total value of CZK 8,730 thous.

By processing a vertical analysis of the total assets, it is possible to notice that the company is largely made up of short-term assets. This character is adequate for this type of business because the company does not provide any goods, therefore, it doesn't need any production facilities, machinery, and equipment that are reported in fixed assets. Instead, the most significant item is the short-term receivables which is declining year-on-year, especially in 2016 when its value falls to 2.8%, which was the lowest value in the monitor period. Another significant value in 2016 is 75.4% for prepayments and accrued income which refers to the lease of office space.

From vertical analysis of equity and liabilities, it can be noticed that equity shows a fluctuating trend. The lowest value was reached in 2016 at 6.9%. Since 2017, equity has been growing year-on-year which reflects the positive trend for the company. The retained earnings are gradually increasing as the generated profits are mostly left in the company (the largest payout from the profit was in 2019 CZK 2,000 thous.). The significant value in liabilities worth mentioning is recorded in 2016 which shows a sharp increase in the share of long-term liabilities at 86.8% which is affected by liability related to the lease of office. The declining trend of accruals and deferred income since 2017 is caused by the gradual deduction of the discount on the lease of the office space.

5.2 Ratio analysis

Within this diploma thesis were selected four different ratio analysis indicators - profitability, liquidity, activity and stability ratios. The final values of these indicators were compared with average industry values for better interpretation of results.

Profitability ratios are considerably influenced by the company's financial results. Since the individual profitability indicators are theoretically constructed in such a way that a certain form of profit (profit/loss for the period or EBIT) is part of the numerator of the calculation formula, this fact significantly affected all monitored indicators. The best results of all profitability ratios were recorded in 2015 when the profit before interest and taxes achieved the highest profit in the monitored period, which also had a positive effect on profitability indicators. The company reported the profit before interest and taxes in the amount of CZK 17,181 thous. in that year. The lowest values were reached by all profitability indicators in 2016 when the company reported the highest loss for the period under review (loss before interest and taxes - CZK 1,808 thous).

When examining liquidity ratios, it is possible to observe that the company has relatively high current assets, which affects the indicators of cash ratio and current ratio, because it appears in all the above indicators. All values of the cash ratios exceeded the recommended values and the values of the industry in all monitored periods. This indicator was closest to the recommended values in 2017, namely the value of 0.62. With regard to the current ratio, the company is classified according to two strategies based on the resulting values. In the first two years, the company is part of a conservative strategy and thus shows the highest values for the monitor period. The following years are characterized as an average strategy and the values are just above the industry values. It could be advantageous for a company to invest part of its funds and thus generate additional funds which would make better use of the cash-flow.

The activity ratios indicator – assets turnover records that most of the time the company is above the recommended limit and above the limit of the industry value. Only in 2016 the value decreased significantly due to the notable value of prepayments and accrued income CZK 127,293 thous. (rent of the office space), which indicates that the revenues earned this year didn't cover the total assets. The collection period shows rather a fluctuating trend. The longest payment period was recorded in 2015 by the value of 97 days. On the contrary, the minimum delay was reached in 2016, namely 16 days. An interesting development can be observed from 2017 to 2019, during which the turnover time gradually

decreases which is caused by annually declining receivables and in contrast the annual increase in sales. This indicator is characterized by very low values compared to industry values, therefore, may point to better payment discipline of customers of STRV s.r.o. From the overall evaluation, it follows that the company causes minimal difficulties in converting its receivables into cash. The payables period of the company manages to keep its values compare to the industry values at a very extremely low level. A significant increase was recorded in 2017, during which the payables period was 63 days thus reached its maximum for the monitored period. On the other hand, the shortest payables period was 25 days. This situation is advantageous for the company, as it proves the ability to pay its liabilities on time as opposed to its customers.

The stability ratios appear to be with some deviations in the lower levels, which is positive for the company. Debt ratio indicator records in the first year the lowest possible value, specifically 28.38%, and conversely in the following year 2016 it shows an extremely high value of 92.79%. In that year, the value is well above the recommended value and the value of the industry average. From the overall point of view, the company managed its overindebtedness very well caused in the second year by systematically reducing its debt and was able to bring it to the range of recommended values and below the values achieved in the industry. Debt equity indicator reached in 2016 extremely high values of 1350.55% due to an increase in the share of liabilities usable to cover the needs of the company. This value is abnormally high for two reasons. Firstly, there was a decrease in equity due to an error in accounting caused in 2015. Secondly, trade payables (CZK 135,044 thous.) are newly recorded, which are no longer used in subsequent years (represents a liability from renting office space). In the following years 2017, 2018, and 2019, the indicators gradually decrease, and the values are almost identical to the industry values. Interest coverage indicator reaches the highest value in 2015 specifically 507.91 due to the positive EBIT (CZK 17,269 thous.) and the low value of interest expense (CZK 34 thous.). The lowest value is shown in 2016 when the indicator even reaches negative numbers -6.25 and doesn't meet the recommended value criteria. The last three years in the monitored period are in positive values above the recommended value.

5.3 Analysis of aggregate indicators

After applying Altman's model to STRV s.r.o. it can be observed that the company had a relatively satisfactory development in the results of this model except in 2016. Even this model works with some forms of profit/loss which reduces the overall result due to the reported loss in 2016. Despite the fact that this year falls into bankruptcy zone, the company has managed to improve its financial results and following years its values are gradually growing into the satisfactory zone.

The overall evaluation of the IN05 model is based on the same results as the Alman model. The first year reached the best value, namely 24.7. The company performed the weakest in 2016, when, due to the reported negative EBIT and very low values of interest expenses, the partial indicator X4 reached the negative values, which significantly affected the overall results of the model. In those years, the resulting values threatened the existence of the company and placed the company in a zone indicating bankruptcy. Next years, the results of the model have significantly improved, and the company has moved into a zone where there is no risk of bankruptcy.

Kralicek's Quicktest, broken down into one of the solvency models, identified the company, according to the achieved results, into all three zones that the author defined for this model. The first year was the most satisfactory as it has the highest number of points and, on the contrary, 2016 achieved the poorest evaluation again. When analyzing the individual indicators, the R2 indicator which is characterized as the time of repayment of a company's debts from cash flow is rated very favorably, which, except for 2016, reached values that are rated the highest possible points. On the contrary, R4 reached the lowest points, which represents the financial performance of the company.

5.4 **Recommendations**

The company STRV s.r.o. signed a lease agreement in 2015 until 2022 for 5,634 m2 of office space in Karlín, Prague 8. This decision was made in order to predict an excessive increase in the number of employees. However, the company is not able to fill these spaces to their full capacity. Currently, STRV uses only 60% and even this capacity is not effectively filled as the company premises are partly empty. At the same time, the global pandemic Covid19 forces STRV employees to work from home, and the premises are generally unused. This represents a large cost for the company that could be reduced.

Based on these circumstances, the author of this thesis proposed the following recommendations to improve the financial situation of the company. The proposal contains a calculation of the lease to the third party of the remaining unused space and is divided into three strategies. Strategy A implies subleasing 40% of the currently unused office space. Strategy B which is a more conservative option is to sublease at least 30% of the unused space, as due to the current situation threatened by Covid19, it is possible that the company will not be able to find a suitable candidate. Strategy C is the most convenient option for the company but rather not as predictable, as it allows the possibility of subleasing 50% of the total leased space (the situation where most of the employees work from home due to lower office space). The calculated values inform how much the company would save in each of the proposed strategies. According to Association for Real Estate Market Development³ report the average rented space price used for commercial purposes per m2 falls between EUR 14-17 (which is between CZK 366-440) in the Prague 8 area. To take into consideration the current Covid19 situation where office spaces in the market are mainly unused and rent prices are going down, the author of this work proposed a lower price for the sublease, specifically 330 m2 which is a lower value than the average price. According to the most likely to happen strategy B, the calculation of subleasing 30% of the total leased office space, results in CZK 6,693,192. In addition to rent, it needs to be taken into account another cost associated with the rent as services charged and parking fees. Therefore, the total amount of CZK 8,715,702 is the amount by which the income would increase, respectively the operating profit would increase if the company decides to use strategy B.

The calculation of the company's actual rent without any other charges paid for 6 years (total lease payment) falls to around CZK 133, 863 thous. It is to be considered whether it would not be more advantageous for the company to buy a property of its own using a bank loan. If the company continues with office space in Karlín, they should agree on new conditions for the lease agreement from 2022 and reduce its premises.

³ ARTN - Overview of the Czech real estate market [online]. [28-12-2020] available from: http://artn.cz/wp-content/uploads/2020/02/TrendReport-2020_CZ-1.pdf

Strategy	Total office space in m2	Subleasing space in m2	Price per m2 for month	Rent for year	Services charges	Parking	Total cost
Strategy A (40%)	5,634	2,254	330	8,924,256	2,472,248	224,432	11,620,936
Strategy B (30%)	5,634	1,690	330	6,693,192	1,854,186	168,324	8,715,702
Strategy C (50%)	5,634	2,817	330	11,155,320	3,090,310	280,540	14,526,170

Table 24 - Calculation of proposed strategies for subleasing office space

Sources: Own processing

6 Conclusion

The main objective of this diploma thesis was the evaluation of a selected company based on the methods of financial analysis in the period 2015 - 2019. The chosen selected company was STRV s.r.o. - a technology company that develops digital products for clients such as Lufthansa, Microsoft or Boosted. Based on the identified outputs, the aim was to propose certain measures to improve their financial situation if necessary.

As this is an external financial analysis, the underlying data were drawn from publicly available sources, specifically the Annual Reports of STRV s.r.o., which the company publishes annually in the Public Register.

At the beginning of the practical part, the company STRV s.r.o. was introduced. During the elaboration of the financial analysis, horizontal and vertical analysis of the balance sheet and income statement were performed, ratio analysis and the overall situation of the company was evaluated using bankruptcy and solvency models. In order to create a better idea of the company as a whole, some indicators were compared with industry values.

First, a horizontal analysis was performed, which informs about absolute and relative changes in individual monitored years items. The analysis showed that the assets values were the most significant between 2015 and 2016 due to the method of accounting for the newly reported lease of office space. In the following years, assets were gradually decreasing by the change of accounting. Between 2017 and 2018 equity increases, the decline occurred after the payment of dividends in 2019.

Furthermore, a vertical analysis was performed, in which it was found that the majority of total assets are current assets, namely short-term and long-term receivables. This character is adequate for this type of business because the company does not provide any goods, therefore, it doesn't need any production facilities, machinery, and equipment that are reported in fixed assets. The most significant decrease in short-term receivables occurred in 2016 when they accounted for only 2.8% of total assets. An interesting increase that year was recorded for prepayments and accrued income (the share of total assets represents 75.4%) which refers to the rent of office space in future periods.

When equity and liabilities are compared, it can be found that except in 2015, the share of liabilities represents a higher part than equity. The lowest value of equity was reached in 2016 at 6.9% caused by reporting losses of CZK -1,808 thous. Since 2017, equity has been growing year-on-year which reflects the positive trend for the company. The

retained earnings are gradually increasing as the generated profits are mostly left in the company. The significant value in liabilities worth mentioning is recorded in 2016 which shows a sharp increase in the share of long-term liabilities at 86.8% which is affected by liability related to the lease of office.

Profitability ratios are considerably influenced by the company's financial results and due to the fact that the company suffered a loss in 2016, all profitability indicators come in negative values in this specific year. The best results of all profitability ratios were recorded in 2015 when the company's EBIT (CZK 17,633 thous.) achieved the highest profit in the monitored period, which also had a positive effect on profitability indicators. In this year, the company was above the average industry value in all indicators. In the case of comparing indicators with the industry, the worst-performing indicator was the ROS, which found itself above the industry value only in 2015. Using profitability, hypothesis No. 1 "*The company's profitability shows a stable or increasing trend in the monitor period*." was tested. This hypothesis was disproven as the company's profitability indicators point rather unstable and declining trend.

Liquidity ratios are relatively influenced by the company ratio of current assets compare to short-term liabilities. In the case of the cash ratio, all of the outcomes exceeded the recommended values and the values of the industry in all monitored periods. With regard to the current ratio, the company was classified according to two strategies based on the resulting values. In the years 2015 and 2016, the company belonged to conservative strategy and thus showed the highest values for the monitor period. The following years were identified as an average strategy and the values were just above the industry values. Hypothesis No. 2 *"The company is able to repay its liabilities well in the long run"* was tested with the help of both liquidity ratios. Since both indicators reported desirable results in all years, this hypothesis was proven.

In the area of activity ratios, the company performed generally favorably. The assets turnover delivered very promising results for the company as that most of the time the values were above the recommended limit and above the limit of the industry value. Except for 2016 the value decreased significantly due to the notable value of prepayments and accrued income of CZK 127,293 thous. which was caused by the rent of the office space. The collection period shows rather a fluctuating trend when the longest payment period was recorded in 2015 by the value of 97 days and the minimum delay was reached in 2016 of 16 days. From the overall evaluation, it follows that the company causes minimal difficulties in

converting its receivables into cash. The payables period of the company managed to keep its values compare to the industry values at a very extremely low level. This situation is advantageous for the company, as it proves the ability to pay its liabilities on time as opposed to its customers. The fact that the company pays its liabilities in a shorter period of time than it receives the payment of receivables refers to hypothesis No 3 *"The company reports a shorter payables period than the collection period."* which can be considered proven.

The stability indicator, specifically debt ratio reached the best values in the first year, particularly 28.38%. The most crucial year for the company was recorded in 2016 which reveals an extremely high value of 92.79%. From the overall point of view, the company managed its over-indebtedness caused in 2016 very well by systematically reducing its debt, and STRV s.r.o. was able to bring it to the range of recommended values and below the values achieved in the industry. Thanks to the pleasant results in debt ratios (except the year 2016) hypothesis No 4 *"The company is claimed as a stable in the long run"* is considered to be proven. The debt equity indicator reached abnormally high values in 2016 of 1350.55% due to an increase in the share of liabilities usable to cover the needs of the company. The reason for such an extreme number is caused by two reasons - firstly, there was a decrease in equity due to an error in accounting caused in 2015, and secondly, trade payables (CZK 135,044 thous.) are newly recorded, which are no longer used in subsequent years (represents a liability from renting office space). In the following years, indicators continuously decrease, and the values were nearly equal to the industry values.

Based on the results of the Altman model and the IN05 model, the values fell for most of the period under review to a zone that does not indicate a threat of bankruptcy, except in 2016. This year was evaluated in the bankruptcy zone. In the case of the IN05 model, the partial indicator X4 even reached the negative values for that year which significantly affected the overall results of the model. Despite the fact that the year 2016 fell into bankruptcy zone, the company has managed to improve its financial results and following years its values were gradually growing into the satisfactory zone. These two models are closely connected to hypothesis No. 5 *"The company is not overall threatened with bankruptcy in the monitored period."*. Even though the company was categorized in both models in the bankruptcy zone in the year 2016 all other years were classified in satisfactory zones and therefore, the hypothesis is proven.

Kralicek's Quicktest identified the company, according to the achieved results, into all three zones. The first year was the most satisfactory as it has the highest number of points and, on the other hand, 2016 achieved the poorest evaluation again. According to the individual indicators, the R2 indicator was rated very favorably, and except for 2016, reaching values that were rated the highest possible points. On the contrary, R4 reached the lowest points, which outlines the financial performance of the company. According to the results of Kralicek's Quicktest, hypothesis No. 6. *"The company is overall creditworthy in the monitored period."* must be disproven. The company did not reach the required values in 2016 and 2017.

This dissertation tested one main hypothesis and six sub-hypotheses, which served to confirm the main hypothesis. Only two of these six sub-hypotheses were rejected. For this reason, the main hypothesis of this work *"The financial situation of the company is generally evaluated as healthy in the monitored period."* was proven. From overall point of view the company STRV s.r.o. shows generally favorable financial results which are very often in the recommended values and frequently in better values than the industry. It is convenient for the company that its sister company (STRV Inc.) has well-established business positions, specifically in the USA, where clients are creditworthy and, despite the risk of exchange rate losses, the client deals are more profitable than with Czech clients. The generated profit is paid only partially, which does not endanger the financial stability of the company. Equity fully covers not only fixed assets but also current assets. Dependence on credit sources is minimal. Credit resources are not fully drawn and are used only for the needs of operating cash flow.

Based on the fact that the STRV s.r.o. uses only 60% of the total leased space 5,634 m2 (and even this proportion is not completely filled), the author of this thesis proposed three strategies for subleasing the remaining space to a third party and thus reducing the company's operating costs that are wasted. As the Czech Republic is affected by the global pandemic Covid19, companies let their employees work at home, and thus a large part of unused office spaces are available on the market and rental prices go down. This is inconvenient for STRV as it has to reduce the price per m2 to suit the market. Therefore, the author of this work proposed a lower price for the sublease, specifically 330 m2 which is a lower value than the average price (according to Association for Real Estate Market Development). The proposal of implementing strategy A refers to subleasing 40% of the currently unused office space. Based on the Covid19 situation, STRV s.r.o. may have a problem finding a suitable candidate therefore strategy B which is a more conservative option is to sublease only 30% of the unused space. Strategy C is the most convenient option

for the company but rather not as predictable, as it allows the possibility of subleasing 50% of the total office space. According to the final calculation performed in Table No. 24, it can be observed that using the most suitable strategy B results in CZK 6,693,192 earned from the third party for rent in one year. In addition to rent, it needs to be taken into account another cost associated with the rent as services charged and parking fees. Therefore, the total amount of CZK 8,715,702 is the amount by which the revenue would increase, respectively the operating profit would increase if the company decides to use strategy B.

The main goal of this diploma thesis together with the sub-goals have been met as well as the main hypothesis with the sub-hypothesis were tested.

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8 Appendix

Ident.	Text	line		Current acc	counting peric	d (Netto)	
			2015	2016	2017	2018 67,175 0 0 4 8,569 0 574 0 0 0 574 0 0 0 574 0 0	2019
	TOTAL ASSETS	001	23,994	168,801	68,370	67,175	58,039
Α.	Receivables for subscribed capital	002	0	0	0	0	C
В.	FIXED ASSETS	003	227	11,264	5,554	8,569	7,237
B. I.	Intangible assets	004	0	0	0	574	355
B. I. 1	Research and development	005	0	0	0	0	C
2	Valuable rights	006	0	0	0	574	355
2.1	Software	007	0	0	0	574	355
2.2	Other valuable rights	008	0	0	0	0	C
3	Goodwill	009	0	0	0	0	C
4	Other intangibles	010	0	0	0	0	C
5	Advances for intangible assets and Intangible assets under construction	011	0	0	0	0	C
5.1	Advances for intangible assets	012	0	0	0	0	C
5.2	Intangible assets under construction	013	0	0	0	-	0
B. II.	Tangible fixed assets	010	202	1,032	5,554		6,882
B. II. 1	Land and buildings	014	0	1,032	0,004 0		1,780
		016	0	0	0	,	1,700
1.1	Land	016	0	0	0	-	1,780
1.2	Buildings and structures	017	202	1,032	0 5,112	,	5,102
2	Machinery, equipment, vehicles, fixtures and fittings			· · · · ·	-		
3	Valuation differences to acquired assets	019	0	0	0	-	0
4	Other tangible fixed assets	020	0	0	-	-	0
4.1	Orchards and vineyards	021	0	0	-	-	0
4.2	Livestock (herd and draught animals)	022	0	0	0	-	0
4.3	Other tangible fixed assets	023	0	0	0	0	C
5	Advances for tangible fixed assets and Tangible fixed assets under construction	024	0	0	442	241	C
5.1	Advances for tangible fixed assets	025	0	0	0	161	C
5.2	Tangible fixed assets under construction	026	0	0	442	80	0
B. III.	Financial assets	027	25	10,232	0	0	0
B. III. 1	Investments in subsidiaries	028	0	0	0	0	0
2	Loans and borrowings to subsidiaries	029	0	7,311	0	0	C
3	Investments in associates	030	0	0	0	0	C
4	Loans and borrowings to associates	031	0	0	0	0	C
5	Other securities and investments	032	0	0	0	0	C
6	Other loans and borrowings	033	0	0	0	0	C
7	Other financial assets	034	25	2,921	0	0	0
7.1	Other financial assets	035	25	2,921	0	0	C
7.2	Advances for investments	036	0	_,=_!	0	0	0
C.	CURRENT ASSETS	037	23,753	30,244	60,014		46,433
C. I.	Inventories	038	20,700	00,244	00,014		
C. I. 1	Raw material	039	0	0	0	-	0
2	Work-in-progress and semi-finished products	040	0	0	0	-	0
3	Finished products and goods	040	0	0	0	-	0
	Finished products	041	0	0	0	0	0
3.1			0	0	0	0	0
3.2	Goods	043					
4	Animals	044	0	0	0	-	0
5	Prepayments on inventories	045	0	0			
C. II.	Receivables	046	19,668	5,052	41,528		30,551
C. II. 1	Long-term receivables	047	0	387	0		2,628
1.1	Trade receivables	048	0	0	0		2,628
1.2	Receivables from controlling entities	049	0	126	0	-	0
	Receivables from associates	050	0	0	0		0
1.3		051	0	0	0		C
1.4	Deferred tax receivable						· · · · ·
1.4 1.5	Other receivables	052	0	261	0		
1.4 1.5 1.5.1	Other receivables Receivables from partners	052 053	0	0	0	0	C
1.4 1.5	Other receivables Receivables from partners	052 053 054	0 0	0 0	0 0	0 0	C C
1.4 1.5 1.5.1	Other receivables Receivables from partners Long-term advances	052 053	0	0	0	0	0 0 0 0 0

Table 25 - Balance sheet of total assets of STRV for the period 2015–2019

C. II	. 2	Short-term receivables	057	19,668	4,665	41,528	32,561	27,923
	2.1	Trade receivables	058	8,412	531	34,296	29,887	22,526
	2.2	Receivables from controlling entities	059	0	0	1,397	0	0
	2.3	Receivables from associates	060	0	0	0	0	0
	2.4	Other receivables	061	11,256	4,134	5,835	2,674	5,397
	2.4.1	Receivables from partners	062	0	0	0	0	0
	2.4.2	Social security and health insurance	063	0	0	0	0	0
	2.4.3	Government - tax receivables	064	476	997	2,344	2,639	3,650
	2.4.4	Short-term advances	065	10,780	3,137	924	34	18
	2.4.5	Estimated accrued revenues	066	0	0	0	0	0
	2.4.6	Other receivables	067	0	0	2,567	1	1,729
C. II	. 3	Prepayments and accrued income	068	0	0	0	0	0
	3.1	Prepaid expenses	069	0	0	0	0	0
	3.2	Complex prepaid expenses	070	0	0	0	0	0
	3.3	Accrued income	071	0	0	0	0	0
C. III		Current financial assets	072	0	0	0	2	2
C. III	. 1	Investments in subsidiaries	073	0	0	0	0	0
	2	Other short-term financial assets	074	0	0	0	2	2
C. IV	′.	Cash and bank accounts	075	4,085	25,192	18,486	19,393	15,880
C. IV	′. 1	Cash	076	125	207	29	36	32
	2	Bank accounts	077	3,960	24,985	18,457	19,357	15,848
D.		PREPAYMENTS AND ACCRUED INCOME	078	14	127,293	2,802	4,127	4,369
D.	1	Prepaid expenses	079	14	127,508	2,802	4,127	4,369
	2	Complex prepaid expenses	080	0	0	0	0	0
	3	Accrued income	081	0	-215	0	0	0

Sources: Own processing according to publicly available financial statements

Table 26 - Balance sheet of total liabilities and equity of STRV for 2015–2019

Ident.	Text	line	Current accounting period (Netto)					
			2015	2016	2017	2018	2019	
	TOTAL LIABILITIES AND EQUITY	082	23,994	168,801	68,370	67,175	58,039	
A.	EQUITY	083	17,181	11,597	19,735	24,013	23,777	
A. I.	Subscribed capital	084	200	200	200	200	200	
1	Subscribed capital	085	200	200	200	200	200	
2	Treasury shares	086	0	0	0	0	0	
3	Changes in subscribed capital	087	0	0	0	0	0	
A. II.	Share premium and capital reserves	088	0	0	6,632	3,522	792	
A. II. 1	Share premium	089	0	0	0	0	0	
2	Capital reserves	090	0	0	6,632	3,522	792	
2.1	Other capital reserves	091	0	0	6,632	3,522	0	
2.2	Valuation differences from revaluation of assets and liabilities	092	0	0	0	0	792	
2.3	Valuation differences from revaluation by transformation	093	0	0	0	0	0	
2.4	Differences in company transformation	094	0	0	0	0	0	
2.5	Differences from valuation company transformation	095	0	0	0	0	0	
A. III.	Revenue reserves	096	0	0	0	0	0	
A. III. 1	Other reserve fund	097	0	0	0	0	0	
2	Statutory and other reserve	098	0	0	0	0	0	
A. IV.	Retained earnings	099	-264	13,205	10,849	12,468	18,291	
A. IV. 1	Retained earnings and accumulated losses of previous years	100	-264	13,205	10,849	12,468	18,291	
2	Other retained earnings	101	0	0	0	0	0	
A. V.	Profit / loss of current accounting period	102	17,245	-1,808	2,054	7,823	4,494	
A. VI.	Decided on advanced payment for dividends	103	0	0	0	0	0	
B. + C.	LIABILITIES	104	6,809	156,623	30,300	28,515	23,569	
В.	Provisions	105	0	0	447	2,024	438	
B. 1	Provisions for pensions and similar obligations	106	0	0	0	0	0	
2	Provision for income tax	107	0	0	152	1,217	0	
3	Provision according to special legal regulations	108	0	0	0	0	0	
4	Others provisions	109	0	0	295	807	438	

C.	PAYABLES	110	6,809	156,623	29,853	26,491	23,131
C. I.	Long-term liabilities	111	1,805	146,438	0	0	258
C. I. 1	Bonds issued	112	0	0	0	0	0
1.1	Exhangable bonds	113	0	0	0	0	0
1.2	Other bonds	114	0	0	0	0	0
2	Payables to banks	115	0	11,304	0	0	0
3	Long-term advances received	116	0	0	0	0	0
4	Trade payables	117	131	135,044	0	0	0
5	Long-term promissory notes payable	118	0	0	0	0	0
6	Payables - controlling or controlled entity	119	0	0	0	0	0
7	Payables to associates	120	0	0	0	0	0
8	Deferred tax liabilities	121	0	0	0	0	258
9	Other payables	122	1,674	90	0	0	0
9.1	Payables to partners	123	1,056	0	0	0	0
9.2	Estimated payables	124	618	90	0	0	0
9.3	Other payables	125	0	0	0	0	0
C. II.	Short-term liabilities	126	5,004	10,185	29,853	26,491	22,873
C. II. 1	Bonds issued	127	0	0	0	0	0
1.1	Exhangable bonds	128	0	0	0	0	0
1.2	Other bonds	129	0	0	0	0	0
2	Payables to banks	130	4	0	16,276	1,255	0
3	Short-term advances received	131	19	3,371	0	900	0
4	Trade payables	132	3,213	5,483	8,903	13,158	13,739
5	Short-term notes payable	133	0	0	0	0	0
6	Payables - controlling or controlled entity	134	0	0	0	0	0
7	Payables to associates	135	0	0	0	0	0
8	Other payables	136	1,768	1,331	4,674	11,178	9,134
8.1	Payables to partners	137	0	0	0	0	0
8.2	Short-term borrowings	138	0	0	2,731	0	0
8.3	Payables to employees	139	989	717	776	1,203	2,519
8.4	Payables to social security and health insurance	140	579	455	440	684	1,509
8.5	Government - tax payables and subsidies	141	200	159	165	256	585
8.6	Estimated accrued items	142	0	0	552	298	508
8.7	Other payables	143	0	0	10	8,737	4,013
C. III.	Accruals and deferred income	144	0	0	0	0	0
C. III. 1	Accrued expenses	145	0	0	0	0	0
2	Deferred income	146	0	0	0	0	0
D.	Accruals and deferred income	147	4	581	18,335	14,647	10,693
D. 1	Accrued expenses	148	4	621	18,335	14,647	10,693
2	Deferred income	149	0	-40	0	0	0

Sources: Own processing according to publicly available financial statements

ldent.	Text	line		Current ac	counting perio	od (Netto)	
iueni.	TEXL	inte	2015	2016	2017	2018	2019
I.	Sales of goods and services	01	72,633	116,719	171,255	235,981	279,068
II.	Sales of goods	02	0	0	0	0	
۸.	Consumption from production	03	45,394	107,973	152,530	185,155	223,96
1.	Costs of goods sold	04	0	0	0	0	
2.	Consumption of material and energy	05	6,890	18,845	6,098	7,380	6,74
3.	Services	06	38,504	89,128	146,432	177,775	217,21
3.	Increase/decrease in finished goods and in work in progress	07	0	0	0	0	
).	Own work capitalized	08	0	0	0	0	
).	Staff costs	09	9,264	20,346	17,769	22,695	39,36
1.	Wages and salaries	10	7,021	14,739	13,156	16,974	29,36
2.	Social security and health insurance costs and other costs	11	2,243	5,607	4,613	5,721	10,00
2. 1	Social security and health insurance costs	12	2,220	4,897	4,470	5,623	9,86
2. 2	Other social costs	13	23	710	143	98	1:
<u> </u>	Adjustment of values in operating activities	14	132	188	939	2,571	4,04
 1.	Adjustment of values of Intangible and tangible assets	15	132	188	939	2,571	4,04
1. 1		16	132	188	939	2,571	4,04
1. 1	Adjustment of values of Intangible and tangible assets - permanent	10	0	0	939	2,571	4,04
1. Z 2.	Adjustment of values of Intangible and tangible assets - temporaly	17	0	0	0	0	
2. 3.	Adjustment of values of inventories Adjustment of values of receivables	10	0	0	0	0	
3. III.	· ·	20	62	12,014	1,705	669	2,30
	Other operating income	20		-	,		2,31
III. 1	Proceeds on sale of fixed assets		0	0	0	46	
2	Proceeds on sale of material	22	0	-	0	0	0.0
3	Other operating income	23	62	12,014	1,705	623	2,30
	Other operating expenses	24	432	724	3,450	905	-1:
1.	Net book value of fixed assets sold	25	0	0	0	33	
2.	Material sold	26	0	0	0	0	
3.	Taxes and fees relating to operating activities	27	2	10	6	6	
4.	Provisions and adjustments relating to operating activities and complex deferred expenses	28	0	0	295	512	-30
5.	Other operating expenses	29	430	714	3.149	354	24
*	Profit/loss from operating activities	30	17,473	-498	-1,728	25,324	14,11
IV.	Revenues from long-term investments	31	0	0	0	0	,.
IV. 1	Revenues from investments in subsidiaries	32	0	0	0	0	
2	Other revenues from investments	33	0	0	0	0	
. 2		34	0	0	0	0	
v. V.	Expenses spend on investments sold	35	0	0	0	0	
	Revenues from other long-term investments			0	0	0	
V. 1	Revenues from other long-term investments in subsidiaries	36	0	0	0	0	
2	Other revenues from long-term investments	37	0	-	-	-	
	Expenses related to other long-term financial assets	38	0	0	0	0	4
VI.	Interest income and similar income	39	0	128	126	36	1
VI. 1	Interest income and similar income in subsidiaries	40	0	128	126	0	
	Other interest income and similar income	41	0	0	0	36	1
	Adjustments relating to finantial activities	42	0	0	0	0	
	Interest expense and similar expenses	43	34	133	365	349	6
1.	Interest expense and similar expenses in subsidiaries	44	34	1	0	0	
2.	Other interest expense and similar expenses	45	0	132	365	349	6
VII.	Other financial revenues	46	228	1,104	9,393	8,963	12,8
	Other financial expenses	47	432	1,565	3,592	23,128	19,59
*	Profit/loss from financial activities	48	-238	-466	5,562	-14,478	-7,2
**	Profit/loss before tax	49	17,235	-964	3,834	10,846	6,8
	Income tax	50	3,766	844	1,780	3,023	2,4
1.	Income tax due	51	3,766	844	1,780	3,023	2,3
2.	Income tax deferred	52	0	0	0	0	
**	Profit/loss after tax	53	13,469	-1,808	2,054	7,823	4,49
1.	Transfer of profit to partners	54	0	0	0	0	
***	Profit/loss for the period	55	13,469	-1,808	2,054	7,823	4,49
*	Netto turnover for the period	56	72,923	129,965	182,479	245,649	294,3

Table 27 - Income statement of STRV for the period 2015-2019

Sources: Own processing according to publicly available financial statements

Industry indicators	2015	2016	2017	2018	2019
Profit/loss for the period	1,202,542	1,714,549	624,277	1,562,874	3,235,308
Equity	9,087,350	10,143,252	9,451,440	11,543,141	14,313,767
EBIT	1,514,002	2,526,551	1,553,142	2,077,136	4,135,740
Total assets	21,313,409	26,655,441	24,322,737	26,877,446	30,873,923
Sales of goods and services	29,109,206	32,919,686	32,379,609	33,320,901	34,476,754
Sales of goods	6,249,448	7,004,430	6,840,360	4,077,443	6,687,291
Long-term liabilities	1,479,056	3,643,269	3,928,572	4,241,680	3,553,974
Provisions	774,800	1,100,279	710,521	703,257	1,105,971
Current assets	14,273,935	17,514,343	15,579,875	14,006,042	16,576,050
Short-term liabilities	7,810,466	9,653,933	8,610,192	8,692,819	8,808,640
Cash and bank accounts	3,138,169	4,974,516	3,867,865	2,731,121	3,669,610
Fixed assets	6,244,722	8,129,051	7,796,791	11,902,720	13,208,705
Receivables	10,499,232	9,788,921	8,996,658	8,800,541	10,557,786
Liabilities	10,064,322	14,397,481	13,249,285	13,648,699	13,468,585
ROE	13.23%	16.90%	6.61%	13.54%	22.60%
ROA	7.10%	9.48%	6.39%	7.73%	13.40%
ROS	4.28%	6.33%	3.96%	5.55%	10.05%
ROCE	13.35%	16.97%	11.02%	12.60%	21.80%
Current ratio	1.83	1.81	1.81	1.61	1.88
Cash ratio	0.40	0.52	0.45	0.31	0.42
Assets turnover	1.66	1.50	1.61	1.39	1.33
Fixed assets turnover	5.66	4.91	5.03	3.14	3.12
Collection period	106.90	88.27	82.58	84.71	92.33
Payables period	79.52	87.05	79.03	83.68	77.04
Debt ratio	47.22%	54.01%	54.47%	50.78%	43.62%
Debt equity	110.75%	141.94%	140.18%	118.24%	94.10%

Table 28 - Industry overview of indicators from financial statements

Sources: Own processing according to financial analyses of the corporate sphere - MPO ČR