

Evaluation of the Financial Health of the Selected International Company

Master Thesis

Study programme: N0413A050030 International Management
Author: **Bc. Štěpánka Šilhartová**
Thesis Supervisors: Ing. Olga Malíková, Ph.D.
Departments of Finance a Accounting





Master Thesis Assignment Form

Evaluation of the Financial Health of the Selected International Company

Name and surname: **Bc. Štěpánka Šilhartová**
Identification number: E20000334
Study programme: N0413A050030 International Management
Assigning department: Departments of Finance a Accounting
Academic year: **2021/2022**

Rules for Elaboration:

1. Characterizing of international environment, international business.
2. Theory of financial analysis.
3. Characteristics of financial statements as a main source for financial analysis.
4. Application of chosen methods of financial analysis on the selected international company.
5. Evaluation of financial analysis results, proposals to increase the financial performance of the company, conclusions.

Scope of Graphic Work:
Scope of Report: 65 standard pages
Thesis Form: printed/electronic
Thesis Language: English



List of Specialised Literature:

- HILL, Charles, 2021. *International Business: Competing in the Global Marketplace*. 13th ed. New York: McGraw-Hill Education. ISBN 978-1-260-57586-6.
- ROBINSON, Thomas, Elaine HENRY and Michael BROIHAWN, 2020. *International Financial Statement Analysis*. 4th ed. New Jersey: Wiley. ISBN 978-1-119-62805-7.
- GRIFFIN, Michael, 2015. *How to Read and Interpret Financial Statements: A Guide to Understanding What the Numbers Really Mean*. 2nd ed. New York: AMA Self-Study. ISBN 978-0-7612-1559-2.
- RŮČKOVÁ, Petra, 2019. *Finanční analýza: metody, ukazatele, využití v praxi*. 6. vyd. Praha: Grada Publishing. ISBN 978-80-271-2028-4.
- SHERMAN, Eliot, 2015. *A Manager's Guide to Financial Analysis*. 6th ed. New York: AMA Self-Study. ISBN 978-0-7612-1561-5.
- PROQUEST, 2021. *Multidisciplinary database of articles ProQuest* [online]. Ann Arbor, MI, USA: ProQuest. [cit. 2021-09-26]. Available from: <https://knihovna.tul.cz>

Consultant: Ing. Lukáš Dlask, Expert Coordinator of External Reporting and Financial Statements

Thesis Supervisors: Ing. Olga Malíková, Ph.D.
Departments of Finance a Accounting

Date of Thesis Assignment: November 1, 2021

Date of Thesis Submission: August 31, 2023

L.S.

doc. Ing. Aleš Kocourek, Ph.D.
Dean

Ing. Martina Černíková, Ph.D.
Head of Department

Liberec November 1, 2021

Declaration

I hereby certify, I, myself, have written my master thesis as an original and primary work using the literature listed below and consulting it with my thesis supervisor and my thesis counsellor.

I acknowledge that my master thesis is fully governed by Act No. 121/2000 Coll., the Copyright Act, in particular Article 60 – School Work.

I acknowledge that the Technical University of Liberec does not infringe my copyrights by using my master thesis for internal purposes of the Technical University of Liberec.

I am aware of my obligation to inform the Technical University of Liberec on having used or granted license to use the results of my master thesis; in such a case the Technical University of Liberec may require reimbursement of the costs incurred for creating the result up to their actual amount.

At the same time, I honestly declare that the text of the printed version of my master thesis is identical with the text of the electronic version uploaded into the IS/STAG.

I acknowledge that the Technical University of Liberec will make my master thesis public in accordance with paragraph 47b of Act No. 111/1998 Coll., on Higher Education Institutions and on Amendment to Other Acts (the Higher Education Act), as amended.

I am aware of the consequences which may under the Higher Education Act result from a breach of this declaration.

May 4, 2022

Bc. Štěpánka Šilhartová

Hodnocení finančního zdraví vybraného mezinárodního podniku

Anotace

Cílem diplomové práce je zhodnocení finančního zdraví mezinárodního podniku ŠKODA AUTO a.s. během referenčního období 2017-2021. Diplomová práce nejprve vysvětluje teoretická východiska mezinárodního podnikání, s cílem provedení finanční analýzy v mezinárodním kontextu. Následně je podrobně popsáno finanční výkaznictví, jež představuje primární informační zdroj pro provedení finanční analýzy. Diplomová práce dále definuje finanční analýzu, představující základní nástroj pro zjištění finančního zdraví podniku a posouzení úspěšnosti podniku v porovnání s odvětvovými průměry či konkurenčními podniky. V závěru diplomové práce je provedena finanční analýza podniku ŠKODA AUTO a.s. prostřednictvím analýzy absolutních, rozdílových a poměrových ukazatelů, jejíž výsledky jsou následně komparovány s odvětvovými průměry a s výsledky podniku SEAT/CUPRA, který patří společně se ŠKODA AUTO a.s. mezi objemové značky koncernu Volkswagen. K posouzení, zda je podnik ohrožen bankrotem, jsou použity souhrnné ukazatele, mezi něž lze zařadit bonitní a bankrotní modely. Dle vypočtených výsledků finanční analýzy je zhodnoceno finanční zdraví podniku ŠKODA AUTO a.s. a jsou doporučeny případné návrhy na zlepšení.

Klíčová slova

Finanční analýza, finanční výkazy, finanční zdraví, mezinárodní podnik

Evaluation of the Financial Health of the Selected International Company

Annotation

The aim of the master thesis is to evaluate the financial health of the international company ŠKODA AUTO a.s. during the reference period 2017-2021. The diploma thesis first explains the theoretical basis of international business, intending to perform financial analysis in an international context. Subsequently, financial reporting, the primary source of information for conducting financial analysis, is described in detail. The master thesis further defines financial analysis, representing the basic tool for determining the company's financial health and assessing the company's success in comparison with industry averages and competing companies. At the end of the master thesis, the financial analysis of ŠKODA AUTO a.s. is carried out through the analysis of absolute, differential, and ratio indicators. The results are then compared with industry averages and with the results of SEAT/CUPRA, which together with ŠKODA AUTO a.s. belongs to the volume brands of the Volkswagen Group. Cumulative indicators, including credibility and bankruptcy models, are used to assess whether the company is at the risk of bankruptcy. According to the calculated results of the financial analysis, the financial health of ŠKODA AUTO a.s. is evaluated, and suggestions for improvement are recommended.

Key Words

Financial analysis, financial health, financial statements, international company

Acknowledgement

At this point, I would like to thank my supervisor of my master thesis, Ing. Olga Malíková, Ph.D., whose expert advice was precious for my further studies. Among other things, I thank her immensely for her patience and the time she has invested in me.

Content

List of Figures	13
List of Tables.....	14
List of Abbreviations	15
Introduction	17
1 International business	19
1.1 History of international business	20
1.2 International business objectives	21
1.3 Characteristics of international business	22
1.4 International business stages.....	23
1.5 International business environment	26
2 Financial reporting – the main source for financial analysis	28
2.1 International Financial Reporting Standards	29
2.2 Financial statements.....	31
2.2.1 Elements of financial statements	31
2.2.2 Measurement of the elements of financial statements	32
2.2.3 Statement of financial position	34
2.2.4 Statement of profit or loss and other comprehensive income.....	38
2.2.5 Statement of changes in equity	41
2.2.6 Statement of cash flows	42
3 Financial analysis – a basic tool for determining company’s financial health	44
3.1 Users of financial analysis.....	45
3.2 Information sources for financial analysis.....	48
3.3 Methods of financial analysis	49
3.3.1 Analysis of absolute indicators	49
3.3.2 Analysis of differential indicators	48
3.3.3 Analysis of ratio indicators.....	49
3.3.4 Analysis of cumulative indicators	58
4 Financial analysis of the selected international company.....	63
4.1 Introduction of Volkswagen Group.....	63
4.1.1 Volkswagen Group brands	64
4.1.2 Board of Management of Volkswagen Group.....	65
4.1.3 Financial characteristics of the Volkswagen Group	66
4.2 Introduction of ŠKODA AUTO a.s.....	68
4.2.1 Board of Management of ŠKODA AUTO a.s.....	70

4.2.2	Financial characteristics of ŠKODA AUTO a.s.	71
4.3	Automobile industry analysis	74
4.3.1	ŠKODA AUTO a.s. financial figures compared to the industry average	77
4.4	Analysis of absolute indicators of ŠKODA AUTO a.s	79
4.4.1	Horizontal analysis of assets, equity, and liabilities	79
4.4.2	Horizontal analysis of revenues, expenses, and income	84
4.4.3	Vertical analysis of assets, equity, and liabilities	88
4.4.4	Vertical analysis of revenues, expenses, and income	92
4.5	Analysis of differential indicators of ŠKODA AUTO a.s.....	94
4.6	Analysis of ratio indicators of ŠKODA AUTO a.s.	95
4.6.1	Activity ratios	95
4.6.2	Liquidity ratios	98
4.6.3	Profitability ratios	100
4.6.4	Leverage ratios	102
4.7	Analysis of cumulative indicators of ŠKODA AUTO a.s.....	104
4.7.1	Altman Z-score	104
4.7.2	Index IN05	106
4.7.3	Kralicek Quick Test.....	107
5	Company's evaluation and suggestions for improvement.....	113
	Conclusion.....	118
	Sources.....	122

List of Figures

Figure 1 - Developmental stages of international business	24
Figure 2 - Illustrative content of statement of financial position	35
Figure 3 - Illustrative content of statement of profit or loss and other comprehensive income	39
Figure 4 - Illustrative content of statement of changes in equity	41
Figure 5 - Illustrative content of statement of cash flows	43
Figure 6 - Users and steps of financial analysis	45
Figure 7 - Net working capital.....	49
Figure 8 - VW Group production plants.....	64
Figure 9 - VW Group's sales revenue from FY 2016 to FY 2021 (€ billion).....	67
Figure 10 - ŠKODA AUTO a.s. deliveries to customers based on major markets (units)..	71
Figure 11 - Sales revenue of ŠKODA AUTO a.s. (CZK billion).....	73
Figure 12 - Automobile manufacturers and their suppliers in the Czech Republic	75
Figure 13 - Data about production, sales, and export of motor vehicles (2017 to 2021)	76
Figure 14 - Portion of current and non-current assets (2017-2021)	89
Figure 15 - Portion of equity, current, and non-current liabilities (2017-2021).....	91
Figure 16 - Net working capital (2017-2021).....	95
Figure 17 - Liquidity ratios (2017-2021).....	99
Figure 18 - Profitability ratios (2017-2021)	101
Figure 19 - Leverage ratios (2017-2021).....	103
Figure 20 - Altman Z-score (2017-2021)	105
Figure 21 - Index IN05 (2017-2021).....	107

List of Tables

Table 1 - Number of jurisdictions applying IFRS	30
Table 2 - Index IN05 evaluation	60
Table 3 - The evaluation scale of the Kralicek Quick Test.....	62
Table 4 - VW Group deliveries worldwide in units	66
Table 5 - Models production based on production plants	70
Table 6 - Czech industry averages from 2015 to 2019	77
Table 7 - ŠKODA AUTO a.s. financial figures from 2015 to 2019	77
Table 8 - Financial expression of assets (CZK million).....	80
Table 9 - Horizontal analysis of assets (CZK million).....	80
Table 10 - Financial expression of equity and liabilities	82
Table 11 - Horizontal analysis of equity and liabilities (CZK million)	83
Table 12 - Financial expression revenues, expenses, and income (CZK million).....	85
Table 13 - Horizontal analysis of revenues, expenses, and income (CZK million).....	86
Table 14 - Vertical analysis of assets (CZK million).....	88
Table 15 - Vertical analysis of equity and liabilities (2017-2021).....	90
Table 16 - Vertical analysis of revenues (2017-2021)	92
Table 17 - Vertical analysis of expenses (2017-2021).....	93
Table 18 - Vertical analysis of economic result (2017-2021).....	93
Table 19 - Net working capital of ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021) ..	94
Table 20 - Data used for calculation of the activity ratios (2017-2021)	96
Table 21 - Activity ratios (2017-2021)	96
Table 22 - Data used for calculation of the liquidity ratios (2017-2021).....	98
Table 23 - Liquidity ratios (2017-2021).....	98
Table 24 - Data used for calculation of the profitability ratios (2017-2021).....	100
Table 25 - Profitability ratios (2017-2021)	100
Table 26 - Data used for calculation of the leverage ratios (2017-2021).....	102
Table 27 - Leverage ratios (2017-2021).....	102
Table 28 - Data used for calculation of the Altman Z-score (2017-2021).....	104
Table 29 - Altman Z-score (2017-2021)	105
Table 30 - Data used for calculation of the Index IN05 (2017-2021).....	106
Table 31 - Index IN05 (2017-2021)	106
Table 32 - Data used for calculation of the Kralicek Quick Test (2017-2021).....	108

Table 33 - Kralicek Quick Test of ŠKODA AUTO a.s. (2017-2021)	109
Table 34 - Kralicek Quick Test of SEAT/CUPRA (2017-2021)	111

List of Abbreviations

B2B	Business-to-business
Capex	Capital expenditures
DHO	Days of Inventory on Hand
DSO	Days of Sales Outstanding
EAT	Earnings After Taxes
EBIT	Earnings Before Interest and Taxes
EBT	Earnings Before Taxes
GATT	General Agreement on Tarrifs and Trade
GDP	Gross Domestic Product
HR	Human Resources
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IASC	International Accounting Standards Committee
IFRS	International Financial Reporting Standards
MNC	Multinational Company
ROA	Return on Assets
ROCE	Return on Capital Employed
ROE	Return on Equity
ROS	Return on Sales
TNC	Transnational Company
US GAAP	United States Generally Accepted Accounting Principles
WTO	World Trade Organization

Introduction

The main objective of the company is to ensure its financial health and effective performance. Financial analysis, which evaluates the company from an economic standpoint based on a detailed study and analysis of the financial statements, is a basic tool for determining a company's health as it provides comprehensive information about the company's financial situation, reveals weaknesses and threats that management should focus on in order to avoid potential issues and identifies strengths and opportunities that should be further successfully developed. Furthermore, the financial analysis predicts whether the company is heading for bankruptcy or prosperity. The financial analysis' results serve as a basis for financial planning, strategy determination, and quality decisions.

The aim of the thesis is to assess the financial health of ŠKODA AUTO a.s., the Czech car manufacturer and one of the Volkswagen Group volume brands, and to determine how significantly the financial health of the company has been affected during the reference period 2017-2021. The author of the master thesis chose the company ŠKODA AUTO a.s. because it is a traditional Czech manufacturer with a long history and a strong position in the Czech market. Moreover, the author has been working in this company for several years as an intern. The methods used to achieve the aim of the master thesis are the analysis of absolute indicators, differential indicators, ratio indicators, and cumulative indicators, including bankruptcy and credibility models. SEAT/CUPRA, another Volkswagen Group volume brand, is presented in the master thesis only as a comparator, and therefore, assessing its financial health is not the master thesis' aim.

The theoretical part firstly introduces international business that has historically been associated with the trend of global growth. Furthermore, the international business objectives, characteristics, international business environment, and developmental stages from a completely domestic company to a transnational company in an international context are expressed. Secondly, financial reporting, part of accounting dealing with the preparation of financial statements and the main source for performing financial analysis, is detailly explained. The International Financial Reporting Standards govern how specific transactions and events should be reported in financial statements and thus create a necessary part of chapter two. In accordance with IFRS, four financial statements are introduced, including a statement of financial position, a statement of profit or loss and other comprehensive income,

a statement of changes in equity, a statement of cash flows, together with their elements and elements' measurements. Chapter three deals with the financial analysis, which is considered a basic tool for determining the financial health of the company, comprising the analysis of absolute indicators, differential indicators, ratio indicators, and cumulative indicators. The results of financial analysis are primarily intended for external and internal users.

In the methodological part, the financial analysis of ŠKODA AUTO a.s. is executed. Initially, Volkswagen Group, the largest car manufacturer in Europe, and ŠKODA AUTO a.s., an important Group volume brand, are introduced together with their financial characteristics. Then, the Czech automobile industry is explored to be able to compare ŠKODA AUTO a.s. financial ratios with the industry averages. The thesis then continues with the performed analysis of absolute indicators, comprising horizontal and vertical analysis of ŠKODA AUTO a.s. financial statements during the reference period 2017-2021. These two analyses serve as a means for assessing the asset and financial situation of the company. Further, analysis of differential indicators, ratio indicators, and cumulative indicators are executed not only for ŠKODA AUTO a.s. but also for its comparator, VW Group volume brand SEAT/CUPRA, to be able to determine whether the calculated values are favourable or not. Within the differential indicators analysis, the net working capital of both chosen companies is calculated. The analysis of ratio indicators focuses on assessing financial health using activity, liquidity, profitability, and leverage ratios. Finally, the companies' financial stability and bankruptcy risk are detected using credibility and bankruptcy models. Publicly reported financial statements of both companies are used to obtain necessary information for executing financial analysis. The last chapter of the master thesis evaluates the financial health of ŠKODA AUTO a.s. based on values obtained from financial analysis. In the case some values do not reach recommended interval, industry average, or comparators' values, the suggestions for improvement to ŠKODA AUTO a.s. are recommended in order to maintain a competitive advantage and avoid financial distress. The author determines three hypotheses, which are examined in the methodological part of the master thesis. These hypotheses assume that during the reference period 2017-2021:

- 1) ŠKODA AUTO a.s. financial indicators are better than the industry average.
- 2) ŠKODA AUTO a.s. and SEAT/CUPRA achieved similar financial results.
- 3) The Covid-19 influenced the financial health of ŠKODA AUTO a.s. significantly.

1 International business

The core of the master thesis is the company ŠKODA AUTO a.s. and its financial health. Since the company ŠKODA AUTO a.s. is considered an international company and a part of Volkswagen Group, it is crucial to define international business and explain its objectives, characteristics, stages, and environment.

All commercial transactions, including sales, investments, and transportation, that take place between two or more countries and develop linkages between suppliers and markets are defined as international business. Such transactions are carried out for profit by private companies. Due to differences in political, social, cultural, and economic factors from one country to another, conducting and managing international business operations is a critical venture (Singh and Rani 2019). The entities engaged in international business can be private, governmental, or a combination of these two. When pursuing international business, an organization must decide on suitable modes of operations which are:

Foreign trade

The movement of physical goods and commodities among countries in the form of imports and exports is known as foreign trade. Exporting and importing are the most common international business modes and create the core international activities in most countries.

Trade in services

Trade in services can be defined as service exports and imports and is based on the movement of intangible goods. The international company is compensated for services it renders in another country. Services constitute the fastest growing sector in international trade and take many forms, such as insurance, transportation, banking, tourism, etc.

Portfolio investments

Noncontrolling financial investments made in foreign nations or another entity are defined as portfolio investments. Portfolio investment consists of shares in or loans to a company (or country) in the form of bonds, bills, or notes. They are crucial for those international firms which routinely move funds from one country to another for short-term gain.

Direct investments

Direct investments are distinguished by a much greater level of control over a foreign company by the investor. The level of control can range from full control, when a company owns a foreign subsidiary fully, to partial control, such as in joint ventures (Ajami 2014).

1.1 History of international business

The origin of international business is closely linked to the emergence of human civilization. However, greater trade openness has historically been associated with the trend of global growth. The concept of international trade as a broad term referring to the integration of economies and societies first appeared in the 19th century. The first phase of globalization was driven by the first industrial revolution in western countries such as the United Kingdom, the United States, and Germany. More precisely, the first phase of globalization began around 1870 and ended with the First World War. The main reason for the sharp increase in trade during this period was the import of raw materials by colonial empires from their colonies and the export of finished products to other countries. Consequently, various governments have initiated processes to protect domestic production by imposing several barriers to such trade. Moreover, the collapse of the gold standard has contributed to a significant decline in international trade. Following this, the world nations have felt the need for international cooperation in global trade (Singh and Rani 2019).

As a result, the International Monetary Fund and the International Bank for Reconstruction and Development, also known as the World Bank, were established. The establishment was considered to be the beginning of global cooperation. In 1947, in order to prevent protectionist policies, the International Trade Organization and the General Agreement on Tariffs and Trade (hereafter “GATT”) were established to reduce tariff barriers in international trade. On January 1, 1995, the GATT was replaced by its successor World Trade Organization (hereafter “WTO”) which, as the only international organization, deals with the rules of global trade among states. The Czech Republic has been a member of the WTO since its establishment, and the number of its members is still increasing (Ministerstvo životního prostředí České republiky 2021). The 1990s and the new millennium indicate rapid internationalization and globalization due to the increased number of international companies. Two decades ago, the term international business was not as discussed as today. Initially, the companies only exported their products to neighboring countries, but gradually

they extended their exports to far-off countries and extended operations beyond country borders. After 1980, international companies that had previously produced on the domestic market and sold them in a variety of foreign countries began to locate their plants and facilities abroad (Singh and Rani 2019).

1.2 International business objectives

Companies create value through international business by many specific ways, however, the main reason why companies engage in international business is to meet three major objectives, which guide all decisions about whether, when, and how to engage in international business. These three main operative objectives are sales expansion, resource acquisition, and risk reduction (Daniels et al. 2019).

Sales expansion

A company's sales are fully dependent on customers' demand, and obviously, the world as a whole has much more potential customers than a single country. The main motive for expanding into international markets is increased sales, and a lot of the world's largest companies derive more than 50 % of their sales outside their domestic countries. However, international business can be beneficial for small and medium companies as well. Increased international sales may allow a company to lower its per-unit costs by covering its fixed costs over a larger number of consumers. Due to decreased unit costs, sales can be boosted even more. Moreover, pursuing international sales raises potential profits (Daniels et al. 2019).

Resource acquisition

Producers and distributors search for products, services, resources, and other components mainly from foreign countries as a result of inadequate domestic supplies. They are also acquiring resources that cut costs to gain a competitive advantage. However, an international business may give companies not only lower costs but also new or better products or additional operating knowledge. By improving product quality or differentiating products from competitors, companies may gain a competitive advantage to compete globally and increase their market share and profits. Furthermore, companies operating internationally create a diverse approach among their employees, which brings new perspectives (Daniels et al. 2019).

Risk reduction

Swings in sales and profits can decrease when selling in countries with different timing of business cycles. Therefore, businesses obtain supplies of products both domestically and internationally to mitigate the impact of price swings and shortages in a single country. Companies frequently expand internationally to counteract competitive advantages in foreign markets that might harm them elsewhere. Finally, international operations may lower the operating risk of companies by smoothing sales and profits and preventing competitors from gaining competitive advantages (Daniels et al. 2019).

1.3 Characteristics of international business

The global expansion allows businesses to increase profitability and rate of profit growth in ways not possible for purely domestic enterprises. Firms that operate internationally are characterized by their ability to expand the potential size of the market for their domestic products and services by selling them in the global marketplace, realize location economies by spreading value creation in those locations around the world where economies can be performed most effectively and efficiently, realize greater economies of scale which refer to the reduction in unit cost realized by producing a huge volume of a product and finally, earn a greater return-on-investment by transferring valuable skills developed in international operations to other parts of the company (Hill 2021). The other characteristics are based on the internal and external factors that affect international businesses. Managing international business operations from one country to another is a difficult task due to variations in political, social, cultural, and economic factors. Characteristic features of international business are as follows:

- Accurate information - International enterprises need accurate information to make an appropriate decision to enter foreign countries.
- Timely information - International enterprises do not need only accurate but also timely information in order to be able to compete internationally.
- Size of the business - The size of an international business could be large enough to have an impact on the foreign economies.
- Nationalism and business policy - Nationalism could be defined as a major factor affecting people's social life in foreign countries. Additionally, nationalism also influences the international business operations of companies dramatically.

- Market segmentation - Most international enterprises distinguish their markets based on geographic market segmentation.
- Wider scope - International business is much broader than purely domestic business as it involves international marketing, international investments, management of international HR, international production and logistics, etc.
- Host country's monetary system - International business is influenced by countries as they regulate the price level, flow of money, and foreign exchange through their monetary systems.
- Cultural factors - Cultural factors vary in international business from one country to another. These factors include dressing habits, eating habits, religion, etc., and should be considered by companies while operating in foreign countries.
- Language - Even though English is a major language in business operations worldwide, international enterprises should train their employees in the local language of the host country because there still exist a lot of non-English speaking countries (Singh and Rani 2019).

1.4 International business stages

As most national markets have opened to international competition, the international dimensions of business are becoming increasingly important for all businesses, especially in Europe. In the automotive industry, for example, car parts suppliers must be able and willing to cooperate with the car manufacturers such as Volkswagen, ŠKODA, Fiat, or Toyota at multiple sites around the world if they intend to sell to the brand. Additionally, with the concept of the common market in the European Union, the definition of a home market is progressively confusing. In business-to-business (hereafter “B2B”) markets such as car parts, customers frequently operate internationally, especially in Europe, such that competition in a single country would hardly be sustainable. Thus, difficulties occur when saying what is international and what is domestic (Peng and Meyer 2019).

The various stages of development from a completely domestic company to a transnational company in the international business context are summarized in Figure 1.

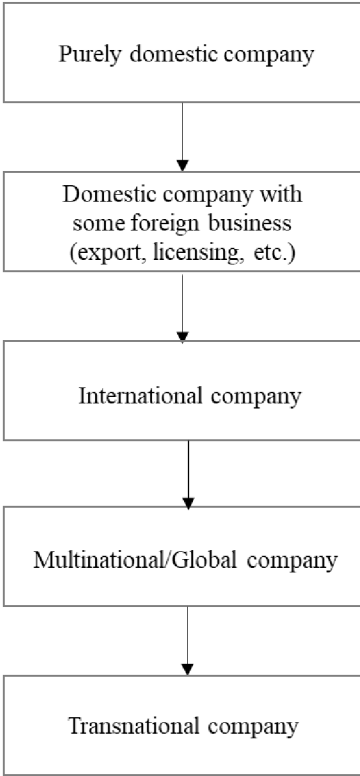


Figure 1 - Developmental stages of international business
Source: Cherunilam (2020, p. 20)

All evolutionary developmental stages of international business shown in Figure 1, including domestic, international, multinational, global, and transnational companies, are detailly characterized in the following subchapters.

Domestic company

Domestic companies restrict their operations, vision, and mission to national political borders. Domestic market opportunities, domestic suppliers, domestic consumers, and domestic financing are the focus of these businesses. Moreover, domestic companies analyse the local environment and formulate strategies to benefit from emerging opportunities. They follow the motto “if it is not happening in the home country, it is not happening.” The domestic company never thinks about being global. If the company grows, it decides on the diversification strategy of entering into new domestic markets, new products, and new services, and never selects the strategy of international expansion (Singh and Rani 2019).

International company

International companies internationalize their operations and benefit from the opportunities outside the domestic country when the domestic market capacities and production grow. However, these companies remain domestic country-oriented and believe in domestic business practices. People and products of domestic business are superior to those of foreign countries. The focus of the international company is domestic but extends abroad. Its strategy is based on locating a branch in foreign markets and extending domestic operations into foreign markets. Many companies follow this strategy because of limited resources, reduction of risks, and knowledge gained from foreign countries. As a result, the international company extends its domestic country marketing mix, business model, and practices to other countries (Singh and Rani 2019).

Multinational and global company

A multinational company is a company that produces goods or provides services in more than one country. Multinational company's management headquarters are located in one or rarely more than one country while operating in other countries (Eurostat 2019). The multinational company (hereafter "MNC") formulates different strategies for different markets and its offices. Subsidiaries and branches work as domestic companies in each country where they operate. A global company follows either a global marketing strategy or a global production strategy. It produces either in a home country or a single country with a focus on marketing these products globally or, on the other hand, it produces the products globally and markets them domestically (Singh and Rani 2019).

Transnational company

A transnational company (hereafter "TNC") is an integrated global company that produces, markets, invests, and operates worldwide and connects global resources with global markets at a profit. These companies are characterized by geocentric orientation, long-term visions, and information acquisitions. In other words, TNCs control assets of other entities in economies other than their home economy, usually by owning a portion of the equity capital. They are mostly headquartered in the United States, Europe, and Japan (Singh and Rani 2019).

1.5 International business environment

The deepening of globalization and regionalization expansion have been essential forces in the development of many entities of the contemporary economy for many decades. Changes caused by those processes also have an impact on the functioning of companies, as they gradually expand into new markets and become global. Entering foreign markets provides companies with both developmental opportunities as well as threats, enabling them to benefit from many of the advantages that an international environment provides and, on the other hand, exposing them to substantially more serious risks than those found in domestic markets (Głodowska et al. 2016).

As the international business environment is increasingly unpredictable and more competitive and dynamic than the local environment, it has a significant impact on businesses operating in this type of environment. This environment is inextricably linked to business competitiveness since it provides the company with capabilities to compete and gain a competitive advantage. Furthermore, the international business environment is an essential component of business internationalization in the global market (Głodowska et al. 2016). Trends in the international market frequently emphasize global and regional issues concerning the advancing process of globalization and economic regionalism. The factors influencing the environment as well as their development must be tracked, analysed, and predicted to conduct business on the international market (Gupta 2013).

The group of factors and activities surrounding international business in which a company operates is referred to as the international business environment. The international business environment encompasses elements that extend beyond national borders and frequently refers to the entire global community. In other words, the international business environment represents factors that affect multinational companies and international companies. Social and cultural factors, technological factors, economic factors, political factors, international factors, and natural factors have a significant impact on international business (Singh and Rani 2019).

Factors affecting the international environment can be divided into internal and external factors. Internal factors affect the company from within, and the company can influence them with its activities. Human resource management, trade unions, organizational structure, financial management, marketing, product management, and leadership style are considered

internal factors which have an impact on the international business environment. External environmental factors, on the other hand, are further distinguished into micro external factors and macro external factors. Competitors, customers, suppliers, bankers and other financial providers, shareholders, employees, and other stakeholders of the international company are all deemed micro external factors. Social and cultural factors, economic factors, technological factors, political factors, international factors, and natural factors are examples of external macro factors that are beyond the company's control, and the company cannot influence them. Above mentioned variables cover conditions that have an impact on how entities behave in the market. There are even more factors that influence businesses, such as infrastructure and communication, which could be critical in the case of a company's expansion into developing markets (Singh and Rani 2019).

The international environment can be analysed using the same categories as in the case of the micro-and macro-environments. Global aspects, on the other hand, are disproportionately more complex than the types stated above. International business strategies and structures have shifted in response to changes in the international business environment. The most significant transformation has recently been the formation of the so-called global factory. Shifts in the nature of the international operating environment consisting of communication technologies, economic liberalization, regional integration, and the increase in the number of emerging economies have expanded the locational and governance options facing the international business. As a result, international businesses have caused restructuralization and reintegration of the value chain stages closer to final markets (Buckley et al. 2018).

2 Financial reporting – the main source for financial analysis

Financial reporting can be described as a part of accounting that deals with the preparation of financial statements. The primary goal of financial statements is to provide information to a wide range of users about the company's periodic financial performance and financial position. The information from financial statements is valued especially by the company's shareholders, however, they are also used by other users, such as lenders, employees, tax authorities, creditors, investors, etc. To avoid providing misleading information about the financial situation of the company, the financial reporting is governed by rules, regulations, and standards, which are collectively referred to as the regulatory framework. The regulatory framework that applies to financial reporting by companies comprises the following key components:

- legislation,
- accounting standards,
- stock exchange regulations (Melville 2019).

Legislation

In most developed countries, legislation governing corporate financial reporting has been enacted. Nevertheless, the legislation differs from one country to another. Some of the rules involved in the legislation have arisen as a result of European Union Directives and are therefore applicable to all Member States of the European Union. The rules involved in the legislation are as follows:

- the requirement for companies to keep accounting records,
- the requirement to prepare annual accounts (financial statements),
- the requirement for the accounts to give the true and fair value,
- the requirement for accounts to be prepared in accordance with either international standards or national standards,
- the company's duty to circulate its accounts to shareholders and make them available to the public,
- the conditions under which consolidated financial statements must be prepared,
- the conditions under which an audit is required (Melville 2019).

Accounting standards

Compared to the legislation that sets out the broad rules, which companies must follow when preparing financial statements, accounting standards include detailed rules governing the accounting treatment of transactions and other items shown in the financial statements. The increasing globalisation of business requires a search for a single set of accounting standards to be identified in order to ensure that the standards would be applicable all over the world and would significantly improve financial reporting consistency. The International Accounting Standards Board (hereafter “IASB”) has developed and is continuing to develop International Financial Reporting Standards (hereafter “IFRS”) with the goal of achieving global acceptance (Melville 2019).

Stock exchange regulations

All companies whose shares are quoted on a recognised stock exchange are subject to its regulations, and some of them relate to the company’s financial statements. A stock exchange may require its member companies to publish financial statements more frequently or provide a more detailed analysis of certain financial statement items than required by law or accounting standards (Melville 2019).

2.1 International Financial Reporting Standards

Since financial statements are published by a variety of bodies around the world for a variety of reasons, different interpretations by both preparers and users of financial statements may cause their incomparability, resulting in a loss of financial statement credibility and the accounting process as a whole (Koppeschaar et al. 2019). As a result, a set of international standards governing how specific transactions and events should be reported in financial statements has been developed.

International Financial Reporting Standards, called IFRS, have been developed and published by IASB. International Accounting Standards, called IAS, have been developed and published by the International Accounting Standards Committee (hereafter “IASC”) and subsequently adopted by IASB. Therefore, IAS are still in force. Currently, the list of standards comprises sixteen IFRS and twenty-four IAS (IFRS Foundation 2021). The IFRS’s primary objective is to develop a single set of globally accepted, understandable, enforceable financial reporting standards based on clearly defined principles that require transparency

and comparability of information in financial statements and other financial reports to assist investors, lenders, creditors, and other users in making effective economic decisions. Furthermore, promoting the use and strict application of these standards, taking account of the needs of a wide range of sizes and types of entities in diverse economic settings, and promoting and facilitating the adoption of the IFRS through the convergence of national accounting standards and IFRS are equally important objectives (Melville 2019).

IFRS formulates the requirements for recognition, measurement, presentation, and disclosure of transactions and items in financial statements. The main advantages of standards are faithful representation and comparability. If the preparer of a financial statement is required to follow a set of standards, the information contained in the financial statement provides a faithful representation of the organization’s financial performance and financial position. On the other hand, comparability represents the ability of users to compare the organization’s financial statements over time and the ability to compare them with the financial statements of different organizations to assess their strengths and weaknesses. These standards are already used by 166 jurisdictions around the world. To achieve the goal of developing global accounting standards, the IFRS Foundation is creating profiles of the application of IFRS in individual jurisdictions, as shown in Table 1 (IFRS Foundation 2021).

Table 1 - Number of jurisdictions applying IFRS

Region	Number of jurisdiction	% of total
Europe	44	27 %
Africa	38	23 %
Middle East	13	8 %
Asia and Oceania	34	20 %
America	37	22 %
Total	166	100 %

Source: Own creation according to IFRS Foundation (2021)

The application of IFRS is monitored in all 166 jurisdictions, as shown in Table 1. Updates are provided on a regular basis. The IFRS Foundation jurisdiction profiles are designed to show the extent to which IFRS have been implemented worldwide. Over 140 jurisdictions now require IFRS for all or most domestic listed companies and financial institutions in their capital markets (IFRS Foundation 2021). However, several countries still prepare financial statements using their national accounting standards, such as the United States of America, which utilize the United States Generally Accepted Accounting Principles (hereafter “US GAAP”) (Collings 2013).

2.2 Financial statements

The objective of financial statements is to provide reliable information about a company's financial position, financial performance, cash flow, and changes in equity that is useful to a wide range of users in making economic decisions. Companies use four financial statements to report their business activities periodically:

- a statement of financial position,
- a statement of profit or loss and other comprehensive income,
- a statement of changes in equity,
- a statement of cash flows.

A set of notes, including information on the entity's significant accounting policies as well as other explanatory information caused by the existence of measurement uncertainty, can be implemented (IASB 2021).

The qualitative characteristics of financial statements are included in the IASB's Conceptual Framework. According to the Conceptual Framework, financial statements must contain two fundamental and four enhancing characteristics. The fundamental qualitative characteristics are faithful presentation and relevance. These characteristics must be supported by comparability, timeliness, verifiability, and understandability (Collings 2013).

2.2.1 Elements of financial statements

Financial statements provide information about the financial effects of transactions and other events by categorizing them into elements based on their economic characteristics and distinguished according to the financial statement they relate. The statement of financial position is directly related to three elements of financial statements. These elements are assets, liabilities, and equity. Within the statement of profit or loss, expenses and revenues are distinguished (CFA Institute 2022).

“An asset is defined as a present economic resource controlled by the entity as a result of past events. An economic resource is defined as a right that has the potential to produce economic benefits.” According to the Conceptual Framework, assets must be certainly measured (IASB 2021, p. 38).

“A liability is defined as the entity’s present obligation to transfer an economic resource as a result of past events. An obligation is a duty or responsibility that an entity has no practical ability to avoid.” The Conceptual Framework requires liabilities to be certainly measured (IASB 2021, p. 42-43).

“Equity is the residual interest in the assets of the entity after deducting all its liabilities” (IASB 2021, p. 49). $\text{Assets} = \text{Liabilities} + \text{Equity}$ is the well-known accounting equation used to calculate the amount of the company’s equity (Melville 2019).

“Income is increases in assets, or decreases in liabilities, that result in increases in equity, other relating to contributions from holders of equity claims” (IASB 2021, p. 50).

“Expenses are decreases in assets, or increases in liabilities, that result in decreases in equity, other than those relating to distributions to holders of equity claims” (IASB 2021, p. 50).

2.2.2 Measurement of the elements of financial statements

Measurement is the process of determining the monetary units at which elements of financial statements are shown in the statement of financial position and statement of profit or loss. This process requires selecting a measurement base to determine the amount to be applied to each element. When selecting the appropriate measurement base, the nature of the measurement base’s information in financial statements needs to be considered. The Conceptual Framework (IASB 2021) identifies several different measurement bases used to measure assets and liabilities:

- **Historical cost**

The historical cost delivers financial information about assets, liabilities, and their related income or expenses derived from the transaction price or other event that gave rise to them. Assets are measured at the amount paid to purchase them, including any acquisition or preparation costs. Historical cost does not reflect changes in value since the asset was purchased, but it is normally updated over time to reflect consumption of all or part of the economic benefits provided by the asset or events that cause all or part of the asset’s historical cost to be irrecoverable. When referring to liabilities, the historical cost means the amount of the consideration received in exchange for taking on the obligation concerned.

Nevertheless, if there is no such consideration, the liability should be measured at the amount expected to be paid to satisfy the obligation (Melville 2019).

- **Current value**

The current value measures assets and liabilities using information that has been periodically updated to reflect conditions at the measurement date. When referring to assets, the current value of an asset is the monetary amount that would have to be paid to buy the same or equivalent asset today. In the case of liabilities, the current value means the undiscounted monetary amount that would be required to settle the obligation today. The current value of an asset or liability is not related to the original price of the transaction or other event that gave rise to them. Current value includes fair value, value in use, and current cost measurement bases (Melville 2019).

- a. **Fair value**

Fair value is defined in the Conceptual Framework as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It can be determined directly by observing prices in an active market. In some cases, the fair value must be determined indirectly using appropriate measurement techniques if no such market exists (Alibhai et al. 2020).

- b. **Value in use and fulfilment value**

The value in use of an asset represents the present value of the net cash flows or other economic benefits that an entity expects to derive from the use of an asset and its eventual disposal. The fulfilment value of the liability represents the present value of the cash or other economic benefits that the entity expects to be obliged to transfer, aiming to fulfil the liability. The difference may appear between the fair value of an asset or liability and its value in use (or fulfilment value) because the former reflects the expectations of market participants, whilst the latter reflects entity-specific expectations (Melville 2019).

c. Current cost

The amount paid to acquire an equivalent asset at the measurement date is considered the current cost of an asset (i.e., replacement cost). On the other hand, the amount received for taking on an equivalent liability at the measurement date is considered the current cost of liability. Current cost, as well as historical cost, provides information on the cost of an asset consumed or income from the fulfilment of liabilities (Alibhai et al. 2020).

2.2.3 Statement of financial position

A statement of financial position (formerly referred to as a balance sheet) portrays the company's financial position by disclosing its assets, liabilities, and equity at a given point in time. Investing activities are represented by the company's assets which are financed by a combination of non-owner financing and owner financing (Easton et al. 2018). In accounting, insight into a company's financial situation is achieved through an accounting equation, typically displayed as $\text{assets} = \text{liabilities} + \text{equity}$ (Harvard Business School 2021). The illustrative content of the statement of financial position is shown in Figure 2.

XYZ plc – Statement of financial position as at 31 December 2022		
	2022	2021
ASSETS		
Non-current assets		
Property, plant, and equipment	xxx	xxx
Intangible assets	xxx	xxx
Investments	xxx	xxx
Total non-current assets	xxx	xxx
Current assets		
Inventories	xxx	xxx
Marketable securities	xxx	xxx
Account receivables	xxx	xxx
Supplies	xxx	xxx
Cash and cash equivalents	xxx	xxx
Total current assets	xxx	xxx
Total assets	xxx	xxx
EQUITY AND LIABILITIES		
Equity		
Share capital	xxx	xxx
Retained earnings	xxx	xxx
Other reserves	xxx	xxx
Total equity	xxx	xxx
Non-current liabilities		
Long-term debts	xxx	xxx
Deferred tax	xxx	xxx
Long-term provisions	xxx	xxx
Total non-current liabilities	xxx	xxx
Current liabilities		
Trade and other payables	xxx	xxx
Short-term debts	xxx	xxx
Current tax payable	xxx	xxx
Short-term provisions	xxx	xxx
Total current liabilities	xxx	xxx
Total liabilities and equity	xxx	xxx

Figure 2 - Illustrative content of statement of financial position

Source: Own creation according to Melville (2019, p. 57)

The statement of financial position is not required to follow any specific format according to IAS1 but must always balance. It also does not specify the order in which items should be displayed. However, the IAS1 includes a list of line items that should be presented separately if their size or nature makes it necessary for understanding the company's financial position (IASB 2022).

An asset is classified as a current asset if any of the following criteria are satisfied:

- the asset is held mainly to be traded,
- the asset is expected to be realised within twelve months after the reporting period,
- the asset is cash or cash equivalent,
- the asset is expected to be realised or is intended for sale or consumption within the normal operating cycle (IASB 2022).

If none of these criteria is satisfied, the asset is considered non-current. The assets commonly presented in the financial position statement include cash, marketable securities, account receivables, inventories, supplies, deferred expenses, accrued revenues, property, plant and equipment, investments, and intangible assets. These assets are further described.

- **Cash** includes currency, coins, and demand deposits in a bank.
- **Marketable securities** consist of items such as bonds, notes, stocks, and bills that are readily marketable, and the company plans to sell them in order to gain revenues.
- **Account receivables** represent legally enforceable claims against customers, usually arising from a sale made on credit.
- **Inventories** include raw materials, component parts, partially finished goods, finished goods, and work in progress.
- **Supplies** consist of incidental items such as pens and wrapping paper that are expected to be consumed rather than sold during a reporting period.
- **Deferred expense** is an expense that has already been incurred in the current accounting period but is recorded as an asset until goods or services are consumed.
- **Accrued revenue** is revenue that has been earned in the current accounting period by providing goods or services, but no payment has been received yet.
- **Property, plant, and equipment** are tangible, long-term assets held for use in the production or supply of goods and services, for rental and administrative purposes, and are expected to be used during more than one period. The cost of these assets is spread out through depreciation over their useful lives, but some exceptions that are not subject to depreciation exist, such as land and artwork.
- **Investments** mainly represent securities of another company held for more than one accounting period (Sherman 2015), (Corporate Financial Institute 2022).

- **Intangible assets** are non-monetary assets without physical substance. They include software, licenses, trademarks, patents, copyrights, goodwill, etc (IASB 2022).

When referring to liabilities, a liability is classified as a current liability if any of the following criteria are satisfied:

- the liability is held mainly to be traded,
- the liability is expected to be settled in the company's normal operating cycle,
- the liability is due to be settled within twelve months after the reporting period,
- the company does not have an unconditional right to postpone the liability settlement for at least twelve months after the reporting period (IASB 2022).

As well as in the case of assets, if none of these criteria is satisfied, the liability is considered non-current. Liabilities in the form of a loan or in the form of goods or services provided to the business before payment are commonly presented in the statement of financial position and include long-term debts, short-term debts such as accounts payable, notes payable, and other payables, accrued expenses, and deferred revenues. All these liabilities are further described.

- **Non-current liabilities** consist of obligations that are not expected to be repaid within the coming operating cycle. Long-term liability has a maturity longer than one accounting period.
- **Current liabilities** consist of obligations that are expected to be paid off within the next twelve-month period. Examples of current liabilities are accounts payable, notes payable, taxes payable, interest payable, wages payable, etc.
- **Accrued expenses** are defined as expenses that will be due for services already performed for the company.
- **Deferred revenues** (also known as unearned income) are defined as a prepayment received by the customer for goods and services that have not been delivered yet (Sherman 2015), (Corporate Financial Institute 2022).

Shareholder equity can also represent the company's book value and is one of the most common data used to assess the company's financial health. In the statement of financial position, equity usually includes the following items:

- **Share capital** is defined as money that a company raises by issuing common or preferred stock. The funds raised from the sale of a security with a residual claim on the company's assets and earnings after all other claims have been met are referred to as common stock and additional paid-in capital. Common stockholders have the right to vote on all matters concerning the overall management of a company. In the case of preferred stock, the dividends must be paid to preferred stockholders before any dividends are distributed to common stockholders.
- **Retained earnings** represent the reinvested earnings over the whole life of the company, which can be increased with a net income and decreased by a net loss. Retained earnings are accumulated earnings not distributed to the shareholders but retained to provide future growth of the company (Griffin 2015).
- **Other reserves** represent a part of shareholders' equity that always has a credit balance and indicates a monetary amount used to cover future expenses or to offset any capital losses (Sherman 2015).

Statements of financial position serve two different purposes, depending on the audience reviewing them. When the statement of financial position is examined internally, it is intended to reveal whether a business is succeeding or failing. Policies and approaches can be shifted based on this information, doubling down on successes, correcting failures, and pivoting toward new opportunities. On the other hand, when it is reviewed externally, it is intended to provide information about the resources available to a company and how they were financed. Potential investors can decide whether to invest based on this information. The statement of financial position may also be used by external auditors to ensure that a company complies with any reporting laws it is subject to (Harvard Business School 2021).

2.2.4 Statement of profit or loss and other comprehensive income

The statement of profit or loss and other comprehensive income is a financial statement that shows the company's income and expenses for the reporting period and summarizes information regarding the company's performance and results of a company's operations. According to IAS1, the companies are permitted to use alternative titles for the financial statement if they wish. Therefore, shorter titles "statement of comprehensive income" or "income statement" are commonly used. The company also has the option of presenting the statement of profit or loss and other comprehensive income for the reporting period in one

statement or in two statements. Although, IASB stated that it prefers a one-statement approach, as shown in Figure 3 (Alibhai et al. 2020), (IASB 2022).

Most types of income and expenses are considered when calculating the company's profit or loss for the reporting period. Nevertheless, international standards require that certain types of income or expenses should be excluded when calculating profit or loss and instead be reported in the statement of comprehensive income under the heading "other comprehensive income." In the case of a single statement of comprehensive income, "other comprehensive income" section follows the calculation of profit or loss for the period. When creating two separate financial statements, the separate statement of profit or loss should be displayed immediately before the statement of comprehensive income. As with the statement of financial position, a specific format for the statement of profit or loss and other comprehensive income is not described within IAS1. Instead, the standard provides a list of items that should be presented separately in this statement, including revenues, financial expenses or losses, tax expenses, profits or losses accounted by for the entity method, etc (Melville 2019).

XYZ plc – Statement of profit or loss and other comprehensive income as at 31 December 2022		
	2022	2021
Revenue	xxx	xxx
Cost of sales	<u>(xxx)</u>	<u>(xxx)</u>
Gross profit	xxx	xxx
Other income	xxx	xxx
Operating expenses	<u>(xxx)</u>	<u>(xxx)</u>
Income before tax	xxx	xxx
Tax expense	<u>(xxx)</u>	<u>(xxx)</u>
NET INCOME FOR THE YEAR	xxx	xxx
Other comprehensive income		
Items that will not be reclassified to profit or loss:		
Gains on property revaluation	xxx	xxx
Investments in equity instruments	xxx	xxx
Tax relating to items that will not be reclassified	<u>(xxx)</u>	<u>(xxx)</u>
Other comprehensive income for the year net for tax	xxx	xxx
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	xxx	xxx

Figure 3 - Illustrative content of statement of profit or loss and other comprehensive income
Source: Own creation according to Melville (2019, p. 48)

From the statement of profit or loss and other comprehensive income, the users can determine whether the business is generating profit, is spending more than it earns, and has the cash to invest back into the business (Harvard Business School 2021). For many years, the statement of profit or loss and other comprehensive income had been perceived by investors, creditors, management, and other parties as the most important part of the company's financial statements as it helps to paint a picture of the company's financial health (Alibhai et al. 2020).

Moreover, it includes a detailed breakdown of income and expenses. Investors are commonly interested in the past income of the company, which is considered the key input to their predictions of the company's future earnings and cash flows. Creditors are interested in the borrower's ability to generate future cash flows to find out whether the borrower is able to pay interest (Alibhai et al. 2020).

Categories included in the statement of profit or loss are as follows:

- **Revenues** represent the amount of money a company takes in during a reporting period. They can be split out by product line or company division. Revenues are often divided into operating revenues that portray sales from a company's core business and non-operating revenues that are derived from secondary sources. Revenues have to be recorded based on an accrual basis when they are incurred.
- **Expenses** represent the amount of money a company spends during a reporting period to generate revenues. Usually, expenses are broken down into procurement costs, wages, rent, depreciation, leases, and interest paid on debt. As well as revenues, expenses are divided into operating expenses and non-operating expenses. Expenses have to be recorded based on an accrual basis.
- **The cost of goods sold** represents the total amount a business paid as a cost directly related to the sale of products.
- **Gross profit** represents total revenues minus the cost of goods sold.
- **Operating income** represents gross profit minus operating expenses.
- **Income before taxes** represents operating income minus non-operating expenses.
- **Net income** is defined as income before taxes after deducting taxes (Harvard Business School 2021).

2.2.5 Statement of changes in equity

A statement of changes in equity reports the beginning and ending balances and changes in the equity accounts that are reported in the statement of financial position during an accounting period, as shown in Figure 4. In other words, the statement of changes in equity reflects the increases and decreases in the company's net assets during the accounting period. According to IAS1, all changes in equity must be presented separately from non-owner changes in equity. The statement of changes in equity includes these components:

- total comprehensive income for the accounting period,
- the effects of retrospective application or restatement for each component of equity,
- a reconciliation between the carrying amount at the beginning and the end of the accounting period, separately disclosing changes for each component of equity (Alibhai et al. 2020), (IASB 2022).

XYZ plc – Statement of changes in equity for the year ended December 31 2022				
	Share capital	Retained earnings	Other equity	Total
Balance at 1 January 2021	xxx	xxx	xxx	xxx
Changes in equity for 2021				
Total comprehensive income		xxx		xxx
Dividends		(xxx)		(xxx)
Balance at 31 December 2021	<u>xxx</u>	<u>xxx</u>	<u>xxx</u>	<u>xxx</u>
Balance at 1 January 2022	xxx	xxx	xxx	xxx
Changes in equity for 2022				
Stock issuance	xxx			xxx
Total comprehensive income		xxx	xxx	xxx
Dividends		(xxx)		(xxx)
Other	xxx		xxx	
Balance at 31 December 2022	<u>xxx</u>	<u>xxx</u>	<u>xxx</u>	<u>xxx</u>

Figure 4 - Illustrative content of statement of changes in equity

Source: Own creation according to Melville (2019, p. 50)

Shareholder's equity can be categorised into three main subdivisions called share capital, retained earnings, and other equity (reserves), as presented in Figure 4 (Easton et al. 2018). Depending on the country, issued share capital may be further divided into stated capital and additional contributed capital (Alibhai et al. 2020).

2.2.6 Statement of cash flows

A cash flow statement provides information about the company's operating cash receipts and cash payments during an accounting period and provides insight into its investing and financial activities. It demonstrates the company's ability to generate cash flows which is the ultimate concern of investors (Harvard Business School 2021). The statement of cash flows helps investors and creditors to assess the ability to generate future positive cash flows and the ability to meet obligations and pay dividends. Moreover, it helps them to assess reasons for differences between profit or loss and cash receipts and payments. According to the IAS7, the cash flow statement is prepared separately as an integral part of the financial statements. The statement of cash flows provides users an insight into the financial structure of the company, including its solvency and liquidity. Additionally, it provides information for evaluating changes in assets, liabilities, and equity of the company and serves as an indicator of the amount, timing, and certainty of future cash flows. The statement of cash flow is divided into three main categories – cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities.

- a) **Operating activities** include all transactions that are not considered investing or financing activities. Generally, operating cash flows are cash flows resulting from transactions and events used to determine profit or loss. Operating activities are the company's most important revenue-generating activities, including delivering and producing goods for sale as well as providing services. This category also includes revenues and expenses.
- b) **Investing activities** comprise cash flows from purchasing or selling of property, plant, and equipment and other long-term assets and debt and equity instruments of other companies not considered cash equivalents or held to be traded.
- c) **Financing activities** include proceeds from the issuance of the company's bonds or stocks and the payment of dividends. Resources obtained through short-term and long-term borrowings are also included in this category (Alibhai et al. 2020).

The operating activities section of the cash flow statement can be calculated and prepared based on two common methods called direct and indirect methods, as shown in Figure 5. However, IFRS prefers the direct method of presenting net cash from operating activities (IASB 2022). The direct method shows the items which affected cash flow during an accounting period. To calculate the operation section using the direct method, cash retrieved

from operation activities must be deducted by cash disbursements from the operating activities. An important advantage of the direct method is that it helps users understand the relationships between the company's profit or loss and cash flow (Alibhai et al. 2020). On the other hand, the indirect method is widely used for the presentation of cash flow as it is easier to prepare. The indirect method primarily focuses on the differences between net operating results and cash flows. It begins with the amount of profit or loss obtained from the statement of profit and loss or other comprehensive income. The statement of cash flows prepared based on the indirect method highlights changes in the items of current assets accounts and current liabilities accounts (Alibhai et al. 2020).

Statement of cash flows for the year ended December 31 2022		
Direct method	2022	2021
Cash flows from operating activities		
Cash received from customers	X	X
Cash provided by operating activities	X	X
Cash paid to suppliers	(X)	(X)
Cash paid for operating expenses	(X)	(X)
Cash paid for income taxes	(X)	(X)
Cash disbursed for operating activities	<u>(X)</u>	<u>(X)</u>
Net cash flows from operating activities	<u>X</u>	<u>X</u>
Indirect method		
Cash flows from operating activities		
Profit before income taxes	X	X
Adjustments for:		
Depreciation	X	X
Interest expense	X	X
(Increase)/decrease in accounts receivable	(X)	(X)
(Increase)/decrease in inventories	X	X
(Increase)/decrease in prepaid expenses	X	X
Increase/(decrease) in accounts payable	(X)	(X)
Increase/(decrease) in salaries and wages	(X)	(X)
Increase/(decrease) in taxes payable	X	(X)
Net cash flow from operating activities	<u>X</u>	<u>X</u>

Figure 5 - Illustrative content of statement of cash flows

Source: Own creation according to Sherman (2015, p. 27)

The operating activities section is presented above using direct and indirect methods. The remaining two sections (investing and financing) are prepared based on the same principle. The IASB prefers the direct method mainly because of the advantage of providing information that can be used to estimate future cash flows, which is not the case when the indirect method is used instead (Alibhai et al. 2020), (IASB 2022).

3 Financial analysis – a basic tool for determining company's financial health

Measuring corporate financial health and performance has become an essential phenomenon in today's competitive environment. A successful company cannot currently exist without a thorough examination of its financial situation. Various methods are used to assess the company's financial health. In addition to the traditional methods, which are based on the calculation of conventional indicators of financial analysis, modern methods are beginning to be applied. The modern methods include environmental risks, non-financial indicators, results from current decisions, etc. Financial analysis, which evaluates a company from an economic standpoint based on a detailed study and analysis of the financial statements, is the most common method for assessing corporate financial health. The main purpose of financial analysis is to prepare a foundation for quality decisions, check the company's financial health (ex-post analysis), and create a basis for the financial plan of the company (ex-ante analysis) (Horváthová 2015).

The term "financial analysis" has a variety of definitions. However, the most concise definition describes financial analysis as a systematic analysis of the obtained data, which are contained primarily from the financial statements. The financial analysis evaluates the company's past and predicts future financial health. The main goal of financial analysis is to achieve financial stability, which can be assessed using three basic metrics – profitability, solvency, and liquidity. From a different point of view, the financial analysis is a method for identifying weaknesses in the corporate financial health, which could lead to future issues, as well as strengths related to the possible appreciation of the company's assets. Financial ratios are the basic tool of elementary financial analysis as they provide answers to various questions related to the financial health of the company (Růčková 2021).

3.1 Users of financial analysis

The results of financial analysis are primarily intended for the company's management, owners, and other external users who are associated with the company, such as suppliers, employees, competitors, the public, foreign institutions, auditors, and the state. Managers use financial analysis results for monitoring the solvency of the company in the short term. Managers are interested mainly in the capital structure, profitability, liquidity, and financial independence of the company as they are responsible for their actions directly to the company's owner. The owners verify through financial analysis whether the funds they have invested are valued sufficiently. The basic goal of the company owner is to maximize the market value of the company's equity, the development of market indicators and profitability indicators, and create a favourable relationship between cash flows and long-term liabilities. From the creditors' point of view, financial analysis can be viewed in two ways. If a bank is a creditor, it mainly monitors the company's long-term liquidity and profitability assessment. Equally important for banks is the company's ability to generate funds and the stability of their flows. Short-term creditors focus on the company's solvency, cash flow, and the structure of current assets and current liabilities. Figure 6 depicts how the financial analysis should be conducted and what economic entities should expect as a result of conducting financial analysis.

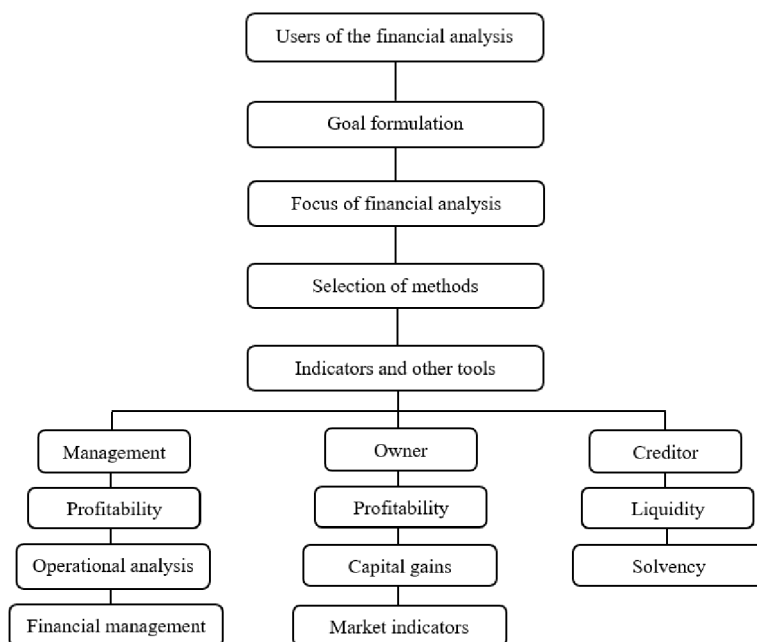


Figure 6 - Users and steps of financial analysis

Source: Own creation according to Ručková (2021, p. 28)

3.2 Information sources for financial analysis

The accuracy and expressiveness of financial analysis results depend mainly on the input information. For this reason, information collection and preparation must be done properly. Generally, the information for conducting financial analysis is summarized in three areas:

- Quantifiable non-financial information includes business statistics focused on production volume, sales, employment, consumption standards, etc.
- Unquantifiable information includes information that may not be quantifiable but are in the area of financial management's major impact.
- Financial information includes external and internal quantifiable information.

Financial reporting as a primary source of information for conducting financial analysis has already been introduced in-depth in the previous chapter. Financial statements are divided into external and internal statements based on whom they are intended for. External financial statements serve as a source of information for external users and are considered a basis for conducting financial analysis. Internal financial statements, on the other hand, are based on the internal needs of the company and therefore refine the results and eliminate deviations of the financial analysis (Růčková 2021).

Besides data obtained from the statement of financial position, statement of profit or loss and other comprehensive income, statement of cash flows, statement of changes in equity, and notes, an analyst can obtain a lot of valuable information for conducting financial analysis from the following sources:

- annual reports,
- official economic statistics and websites,
- public registers,
- databases,
- reports of managers (Knápková et al. 2017).

3.3 Methods of financial analysis

Due to the variety of reasons for performing financial analysis, the numerous methods available, and the substantial amount of data, it is critical to tailor the analytical approach to the specific situation (Robinson et al. 2015). The most common method for evaluating the financial performance of the company are the methods of fundamental and technical analysis, which evaluate the company on the basis of a detailed study and analysis of financial statements. The methods of financial analysis are based on financial indicators, which are defined as numerical characteristics of the company's economic activity. Indicators taken directly from the financial statements are expressed in monetary units. However, using arithmetic operations, results can also be obtained in other units, such as percentages or time units. There are several criteria for classifying financial indicators, including purpose, target group, and the goal of the financial analysis. The indicators are commonly divided into absolute, differential, and ratio indicators (Růčková 2021). Processing of financial analysis consists of several fundamental activities:

- 1) characteristics of the company,
- 2) analysis of the industry in which the company operates,
- 3) analysis of absolute indicators,
- 4) analysis of differential indicators,
- 5) analysis of ratio indicators,
- 6) analysis of cumulative indicators,
- 7) identification of diagnosis,
- 8) suggestions and recommendations for improvement (Knápková et al. 2017).

3.3.1 Analysis of absolute indicators

The analysis of absolute indicators is the first step in the elementary financial analysis, in which the values of individual items of the financial statements are directly assessed. Absolute indicators can be defined as data expressed in absolute terms. These data are further used to create horizontal analysis and vertical analysis (Čížinská 2018).

Horizontal analysis, also known as trend analysis, analyses the development of absolute indicators over time and thus informs users how a certain item in a given accounting period has changed compared to the previous accounting period. It is necessary to create a long time

series in order to achieve precise results when conducting horizontal analysis. The horizontal analysis highlights structural changes that have occurred in the business operations (Robinson et al. 2015). The absolute and percentage change of individual items of financial statements is determined during horizontal analysis, and the items of the financial statements are further compared with each other line by line (Růčková 2021). The formulas for calculating the absolute and percentage change are as follows:

$$\text{Absolute change} = \text{amount in comparison year} - \text{amount in base year} \quad (1)$$

$$\% \text{ change} = \frac{\text{amount in comparison year} - \text{amount in base year}}{\text{amount in base year}} * 100 \quad (2)$$

(Corporate Financial Institute 2022)

Vertical analysis, also known as common-size analysis, analyses the structure of financial statements in columns and expresses each financial statement item as a percent of a base figure which always expresses the value of 100 % (Weygandt et al. 2010). When analysing the statement of financial position, the base figure is the value of total assets or liabilities. In the case of statement of profit or loss and other comprehensive income, the base is made up of total revenues or total costs (Knápková et al. 2017).

3.3.2 Analysis of differential indicators

Differential indicators primarily serve for analysing the financial situation of the company with the orientation on its liquidity. They are calculated as the difference between two absolute indicators. Net working capital is considered the most used differential indicator, which is defined as the difference between current assets and current liabilities, as shown in Figure 7. The net working capital has a significant effect on the liquidity of the company (Knápková et al. 2017).

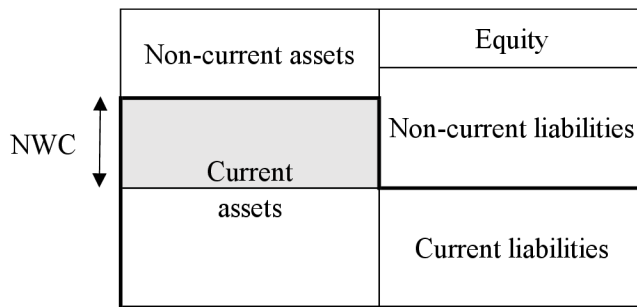


Figure 7 - Net working capital

Source: Own processing according to Knápková et al. (2017, p. 355)

In other words, the net working capital represents a part of current assets which is financed by long-term capital. The ideal situation is to have a positive value of the net working capital (Knápková et al. 2017).

3.3.3 Analysis of ratio indicators

Ratios are considered the widespread method of financial analysis as their calculation is simple, provides valuable information about the company's financial characteristics, and represents significant relationships among various items in the financial statements (Sedláček 2001). A financial ratio is calculated by dividing one item from the financial statement by another item. There are many ratios, categorised into the following classes:

- Activity ratios measure how efficiently a company performs day-to-day tasks.
- Liquidity ratios measure the company's ability to meet its short-term obligations.
- Profitability ratios measure the company's ability to generate profits from its assets.
- Leverage ratios measure the company's ability to meet long-term obligations (Robinson et al. 2015).

Activity ratios

Activity ratios measure how efficiently a company manages various activities and how effectively it utilizes its assets. When a company has more assets than the optimal level, it incurs unnecessary costs and low profits. On the other hand, if the company's assets are below the optimal level, they lose potential revenues (Synek 2011). Furthermore, activity ratios are indicators of ongoing operational performance. They generally combine information from the statement of profit or loss and other comprehensive income in the numerator with information from the statement of financial position in the denominator.

Total assets turnover indicates the effectiveness of the company's use of its total assets in generating sales. Total assets turnover is measured by dividing total net sales by total assets (Weygandt et al. 2010). The values of total assets turnover depend primarily on the type of business activity. Higher values of total assets turnover than the industry average signalizes a low or deteriorating utilization of production capacities and the company's inefficient usage of assets. Contrary, if the company's turnover is lower than the industry average, management should concentrate on increasing sales or selling inefficiently used assets (Sedláček 2001). The calculation formula of total asset turnover is as follows:

$$\text{Total assets turnover} = \frac{\text{total sales}}{\text{total assets}} \quad (3)$$

Inventory turnover measures the average number of times the inventory is turned over or sold over a given period and is used to determine the inventory liquidity. The inventory turnover ratio is calculated as sales divided by inventories and reflects management efficiency (Weygandt et al. 2010). Typically, the higher the inventory turnover rate, the higher the chances of higher profits. Inventory turnover can also be converted to days of inventory on hand (hereafter "DOH") by dividing inventory turnover into the number of days in the accounting period (usually 365 days). The following formulas are commonly used to calculate the inventory turnover and DOH:

$$\text{Inventory turnover} = \frac{\text{total sales}}{\text{inventory}} \quad (4)$$

$$\text{DOH} = \frac{\text{inventory}}{\frac{\text{total sales}}{365}} = \frac{\text{number of days in period (365)}}{\text{inventory turnover}} \quad (5)$$

(Robinson et al. 2015)

Receivables turnover measures the liquidity of the company's accounts receivable. It is expressed as total sales divided by accounts receivable. The ratio measures the number of times, on average, the company collects accounts receivable during the accounting period. An additional variant in which the receivables turnover ratio can be converted is called days of sales outstanding (hereafter "DSO"). The number of DSO represents for how long receivables are repaid on average. The recommended value of the receivables turnover ratio is the invoice due date. However, the financial analyst must also consider the company's size. The following formulas are used to calculate the receivables turnover and DSO:

$$\text{Receivables turnover} = \frac{\text{total sales}}{\text{receivables}} \quad (6)$$

$$\text{DOS} = \frac{\text{receivables}}{\frac{\text{total sales}}{365}} = \frac{\text{number of days in period (365)}}{\text{receivables turnover}} \quad (7)$$

DOS should be decreasing over time as it indicates an increase in the creditor's payment discipline. The higher the receivables turnover ratio, the more funds the company receives from receivables. On the other hand, a relatively low receivables turnover ratio raises questions about the efficiency of the company's credit procedures (Robinson et al. 2015), (Weygandt et al. 2010).

Payables turnover measures how many times per year the company theoretically pays off all its creditors. This ratio is calculated as the company's total sales divided by its payables. Additionally, the number of days of payables is also measured to reflect how quickly the company's payables are repaid. Generally, the number of days of payables should be longer than the days of sales outstanding to not disrupt the company's financial balance. Both ratios are very important for potential creditors who can find out how the company adheres to the business-credit policy (Růčková 2021). The following formulas are used to calculate payables turnover and the number of days of payables:

$$\text{Payables turnover} = \frac{\text{total sales}}{\text{total payables}} \quad (8)$$

$$\text{Number of days of payables} = \frac{\text{payables}}{\frac{\text{total sales}}{365}} = \frac{\text{number of days in period (365)}}{\text{payables turnover}} \quad (9)$$

The optimal situation occurs when the payables turnover increases and the number of days of payables decreases. An excessively low payables turnover and high days payable indicate the company's trouble making payments on time or exploitation of supplier terms.

Liquidity ratios

Liquidity expresses the ability of a certain component of assets to be converted into cash without much loss of value, which is considered a necessary precondition for the company's solvency. The term solvency, which is secured by all the company's assets, then expresses the ability of the company to pay off its liabilities on time.

Lack of liquidity causes a company to be unable to take advantage of the profitable opportunities that arise in business and may also result in the company's insolvency or even bankruptcy. On the contrary, excess liquidity represents the insufficient appreciation of the current assets (Čížinská 2018).

The level of liquidity needed differs from one industry to another. Larger companies are often better at controlling the level and composition of their liabilities than smaller companies. For this reason, managers of smaller companies should not be interested only in maximizing profit but also in maintaining the company's solvency. The liquidity ratios reflect a company's position at a point in time only and as they usually use data obtained on the balance sheet date. The liquidity ratios are composed of the current, quick, and cash ratios. Each ratio uses a progressively stricter definition of liquid assets, as described below (Robinson et al. 2015).

Current ratio is a widely used indicator for measuring the company's liquidity and short-term debt-paying ability. The ratio shows how many current assets cover the company's current liabilities. In other words, it expresses the company's ability to satisfy its creditors if the company converts all current assets into cash. The current ratio has limited explanatory power because of disregard for the structure of current assets in terms of liquidity, the structure of current liabilities in terms of maturity, and affectability at the balance sheet date by postponing certain purchases (Růčková 2021). According to Weygandt et al. (2010), the formula for measuring the current ratio is as follows:

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}} \quad (10)$$

Recommended values for the current ratio are 1.5 - 2.5. However, the specific level is closely dependent on the company's industry, financial management strategy, and current market situation (Kubičková 2015).

Quick ratio, also known as the acid test, expresses the company's ability to settle liabilities without selling inventories as they might not be easily and quickly converted into cash. The quick ratio is considered more conservative than the current ratio because it includes only the more liquid current assets in relation to current liabilities (Robinson et al. 2015). The quick ratio is very industry-specific. Nevertheless, the numerator should be equal to the

denominator (1:1). In this case, the company should be able to meet its current liabilities without the need to sell inventories (Růčková 2021). The following formulas are widely used to calculate quick ratio:

$$\text{Quick ratio} = \frac{(\text{current assets} - \text{inventory})}{\text{current liabilities}} \quad (11)$$

$$\text{Quick ratio} = \frac{\text{cash} + \text{short-term investments} + \text{receivables}}{\text{current liabilities}} \quad (12)$$

The recommended value of the quick ratio is in the range of 1,0 – 1,5 (Scholleová 2017).

Cash ratio represents the narrowest definition of liquidity as only the most liquid assets are included in the calculation. It expresses the relationship between cash (and cash equivalents) and current liabilities and thus evaluates the company's immediate ability to pay off its current liabilities (Martinovičová et al. 2019). The following formula is applicable to calculate the cash ratio:

$$\text{Cash ratio} = \frac{\text{cash} + \text{cash equivalents}}{\text{current liabilities}} \quad (13)$$

The recommended value of the cash ratio ranges from 0,2 to 0,5 (Scholleová 2017). However, non-compliance with these values does not necessarily mean the company's financial issues as the companies often use accounting overloads which may not be apparent from the data of the statement of financial position (Růčková 2021).

Profitability ratios

Well-executed profitability analysis gathers information about the profitability of sales, assets, and equity, which is especially valuable for internal and external users to make certain decisions. The ratios might help management not only to forecast the company's profitability but also precisely evaluate potential risks and opportunities. Profitability ratios portray the company's ability to generate profits and efficiently use the invested capital. Additionally, the profitability analysis helps to efficiently manage the company's resources, make the right investment and financial decisions, and ensure the company's solvency (Tamulevičienė 2016).

A lot of valuable information is obtained when comparing the profitability ratios of the financial year with the profitability ratios of the previous financial years, other similar companies, and average rates of the industry sector's profitability (Tamulevičienė 2016). The ratios are often based on data from the statement of financial position and the statement of profit or loss and other comprehensive income. The selected category of income creates the numerator of the profitability ratio, such as earnings before interest and taxes (hereafter "EBIT"), earnings before taxes (hereafter "EBT"), and earnings after taxes (hereafter "EAT"), whereas the denominator contains capital or revenues. The results of profitability analysis are usually converted to a percentage. In practice, return on assets, return on equity, and return on sales are mostly used to determine profitability (Čižinská 2018).

Return on assets is a financial ratio that measures the return earned by a company on its assets over a set period of time and thus evaluates the company's financial health and performance. Return on assets (hereafter "ROA") is used primarily by managers as it determines how effectively a company uses its resources to generate profit (Robinson et al. 2015). The ROA numerator may vary according to the purpose of the analysis performed, and therefore, it is not fixed. Conversely, the ROA denominator is always made up of total assets (Čižinská 2018). The calculation is performed according to the following formula:

$$\text{Return on assets} = \frac{EBIT}{\text{total assets}} \times 100 \quad (14)$$

Generally, the higher the return on assets ratio, the more efficient the company is at generating profits from its assets.

Return on equity expresses the return on capital invested in the company by its shareholders or owners. Data for calculation are gathered from the statement of profit or loss and other comprehensive income and the statement of financial position (Birken 2022). Moreover, it is appropriate to compare ROE with previous figures to understand whether the company is better or worse in delivering profits than in the past. The ratio is calculated by dividing net profit (EAT) by shareholder's equity, expressed as a percentage, and similarly to ROA, widely used to measure the company's financial performance. For this reason, the company's owners are mainly interested in such a ratio (Robinson et al. 2015).

The following equation is used to compute the return on equity:

$$\text{Return on equity} = \frac{EAT}{equity} \times 100 \quad (15)$$

Return on equity should be greater than the return on assets, ie. ROE > ROA. If the company's ROE is steadily increasing, the company is good at generating profits from its equity. Such companies are usually less dependent on debt financing. On the other hand, if the ROE decreases over time, the management evidently struggles to make the right decisions (Corporate Financial Institute 2022).

Return on sales measures how efficiently the company turns sales into profits and thus evaluates the company's operational efficiency. In other words, it reflects how much profit is being produced per monetary unit of sales. Additionally, it serves to express the profit margin. The return on sales (hereafter "ROS") numerator may vary according to the purpose of the analysis performed and may include an income in various forms. Conversely, the ROS denominator is made up of total net sales or total revenues. The ratio can be compared with the company's past figures and with similar companies' figures that are operating in the same industry (Hayes 2021), (Růčková 2021). The calculation is performed according to the following formula:

$$\text{Return on sales} = \frac{EBIT, EBT, EAT}{net sales} \times 100 \quad (16)$$

An increasing ROS indicates the company is growing efficiently, while a decreasing ROS signals imminent financial troubles, which can be caused by problems in production.

Return on capital employed (hereafter "ROCE") is a key indicator that expresses the capital efficiency of the company. In other words, it reflects how well a company is at generating profit from its capital employed. ROCE is calculated as EBIT divided by long-term capital employed. Long-term capital employed is represented in the statement of financial position by items of long-term liabilities and the company's equity. Usually, the return on capital employed is a more preferred ratio for investors and creditors than the return on equity and return on assets as it considers both debt and equity financing. The ratio is especially useful when comparing companies within the same industry (Hayes 2021), (Maverick 2022).

The following equation is used to calculate the return on capital invested:

$$\text{Return on capital employed} = \frac{\text{EBIT}}{\text{capital employed}} \times 100 \quad (17)$$

$$\text{Capital employed} = \text{total assets} - \text{current liabilities} \quad (18)$$

A higher return on capital employed indicates an efficient company at least at generating profit from capital employed. The company aims to generate a ROCE which is steadily ahead of its weighted average cost of capital (Maverick 2022).

Leverage ratios

Leverage ratios serve to evaluate a company's solvency, which is considered an ability to meet its long-term debt obligations. In evaluating the solvency of the company, leverage ratios can provide information about the relative amount of debt in the company's capital structure as they focus on the statement of financial position and measure the extent to which a company uses liabilities rather than equity to finance its assets. Furthermore, these ratios are useful to measure a company's performance over time compared to the performance of other companies (Robinson et al. 2015). It is necessary to mention that the use of a certain amount of debt financing is beneficial for the company, as it can lead to an increase in the profitability of equity. The essence of leverage analysis is, therefore, the search for the company's optimal capital structure. The results of leverage analysis are especially important for the creditors. The higher the company's use of foreign capital, the higher the risk of default for the creditors. The most well-known ratios of leverage analysis include debt ratio, equity ratio, and debt-to-equity ratio (Růčková 2021).

Debt ratio is considered an essential indicator that measures the extent of a company's leverage and is calculated as total liabilities divided by total assets. The ratio should be examined in relation to the overall profitability of the company and its foreign capital structure. The debt ratio is commonly used by creditors to determine the company's ability to repay its debts and to make sure the company is solvent enough. An equation for the calculation of the debt ratio is as follows:

$$\text{Debt ratio} = \frac{\text{total liabilities}}{\text{total assets}} \times 100 \quad (19)$$

Companies with a higher debt ratio have a higher degree of leverage and thus are riskier for creditors and investors. For this reason, a lower ratio is preferable for the company's creditors since the risk of insolvency is lower. The recommended value of the ratio is in the range of 30-60%. At the same time, it is necessary to respect the industry values (Knápková et al. 2017).

Equity ratio is an additional leverage ratio to the debt ratio that expresses the proportion in which the company's assets are financed by owners' equity. The sum of the debt ratio and the equity ratio should be close to 1. It serves primarily to assess the overall financial situation of the company. However, the ratio should be examined in relation to the profitability ratios (Růčková 2021). An equation for the calculation of the equity ratio is as follows:

$$\text{Equity ratio} = \frac{\text{total equity}}{\text{total assets}} \times 100 \quad (20)$$

Generally, a higher equity ratio is more favourable for companies because of several reasons. The higher investment levels show potential shareholders that the company is solvent and suitable for investing. Like other ratios, the equity ratio is dependent on the industry in which the company operates.

Debt-to-equity ratio combines the two previously mentioned leverage ratios. It measures the proportion of debt capital relative to shareholders' equity. The ratio and its time evolution are extremely important for banks when applying for a loan, as the ratio indicates the extent to which creditors' claims could be jeopardized. The debt-to-equity ratio uses total equity as a denominator instead of total assets. An equation for the calculation of the debt-to-equity ratio is as follows:

$$\text{Debt-to-equity ratio} = \frac{\text{total liabilities}}{\text{total equity}} \times 100 \quad (21)$$

Generally, a high debt-to-equity ratio is usually associated with a higher financial risk as the company finances its growth with debt. The ideal value varies widely by industry, but it should not be higher than 200% (Munichiello 2022).

3.3.4 Analysis of cumulative indicators

Analysis of cumulative indicators aims to express the overall financial and economic performance of a company by connecting multiple ratios and analysing the existing interconnections among them since some of the above-mentioned ratios have limited explanatory power as too many indicators make orientation difficult and thus distort the analyst's view of the company. The primary goals of a cumulative indicator analysis are to show the impact of individual ratios on the company's overall performance, to make the development of financial performance more transparent, and to provide a foundation for future decision-making. The techniques used to create a set of cumulative indicators are divided into two basic groups – pyramid decomposition and credibility and bankruptcy models. The essence of the pyramid decomposition is a detailed breakdown of the top indicator into partial components on the basis of mathematical relationships. The essence of credibility and bankruptcy models is to diagnose the company's financial situation and predict its future financial development (Růčková 2021). Special attention is paid to the credibility and bankruptcy models in the following text.

Bankruptcy and credibility models

Bankruptcy and credibility models are widely used techniques for the evaluation of the company's overall financial health. Although the objective of both models is similar, the difference lies in the purpose for which the models were created. **Bankruptcy models** are designed to inform users whether there is a probability of a company going bankrupt in the foreseeable future as they are well-known measurements of the company's financial distress. These models are based on the fact that each company that is going bankrupt has already shown the symptoms that are typical for bankruptcy before the event of bankruptcy. The most typical symptoms are a shortage of liquidity, an insufficient level of net working capital, and issues with the return on equity ratio (Růčková 2021). Bankruptcy models include, for example, the Altman Z-score, the Taffler model, and the IN model.

Altman Z-score

The Altman Z-score model is considered a financial bankruptcy model based on the calculation of global indexes, respectively, overall evaluation indexes. The concept of the model was created by professor E.I. Altman in 1968. Altman used the statistic discrimination analysis to predict the risk of going bankrupt, whereby the weighted coefficients of a linear combination of the specific business ratios were estimated. Altman's formula includes financial ratios mentioned above, such as activity, profitability, liquidity, and solvency. In addition, Altman determined the weight of the individual ratios, which is a reflection of its importance for the financial health of the company. Based on the changing economic situation in individual companies and countries, the model currently has three differentiated formulas, derived for companies publicly traded on a stock exchange market, non-traded companies, and companies operating in developing countries. The difference lies only in the values of weights of the individual ratios. As the company analysed in the master thesis is a traded company, the equation applicable for publicly traded companies is presented.

$$Z = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 1X_5 \quad (22)$$

where:

X_1 = net working capital/total assets,

X_2 = retained earnings/total assets,

X_3 = EBIT/total assets,

X_4 = equity/total liabilities,

X_5 = sales/total assets (Kislingerová 2001).

If the value of the Z-score is higher than 2,99 (safe zone), the company is considered financially stable. The range of 1,81-2,98 is called a grey area where the financial stability of the company cannot be defined precisely. Values under 1,81 (distress zone) signalize significant financial issues and thus a high possibility of bankruptcy (Růčková 2021).

Index IN

Index IN is considered a Czech version of the financial distress prediction model that reflects the conditions of Czech companies. The authors of the bankruptcy IN indexes are Ivan and Inka Neumaier, who created and tested the indexes based on data obtained from almost 2,000

Czech companies. Like other bankruptcy models, the IN Index created on the basis of discriminatory analysis contains estimated financial ratios and weighted coefficients. Moreover, the IN index takes into account specifics of the industry. Ivan and Inka Neumaier created four indexes over the years, namely the IN95 creditor variant, IN99 proprietary variant, IN01 complex variant, and IN05 modified complex variant. For this master thesis, the IN05 will be applied. Inka and Ivan Neumaier (2008) indicate the following advantages of the IN05 Index:

- the calculation is relatively simple,
- financial ratio algorithms are transparent,
- IN05 works with publicly available financial data about the company,
- IN05 is usable for both publicly traded and non-traded companies,
- IN05 gives clear results and has high explanatory power in the case of medium and large companies,
- IN05 is an update of the IN01 Index, while the weights of individual ratios have changed as well as the boundaries for business classifications.

The equation applicable for IN05 is as follows:

$$IN05 = 0,13 \times \frac{assets}{liabilities} + 0,04 \times \frac{EBIT}{interest\ expense} + 3,97 \times \frac{EBIT}{assets} + 0,21 \times \frac{revenues}{assets} + 0,09 \times \frac{current\ assets}{current\ liabilities} \quad (23)$$

Based on the calculated values, it is possible to predict whether the company will face bankruptcy or will have trouble with repaying its liabilities. The intervals for the evaluation of the company are given in Table 2.

Table 2 - Index IN05 evaluation

Result	Evaluation
IN > 1,6	A company creates value
0,9 < IN ≤ 1,6	A company does not create value, but it is also not bankrupt
IN ≤ 0,9	A company goes bankrupt due to serious financial issues

Source: Own processing according to Bochenková (2011, p. 24)

If the value of IN05 is higher than 1.6, the company is considered financially stable with a probability of 67%. The range between 0.9 to 1.6 is called a grey zone. If the IN05 value is less than 0.9, the company has an 86 % probability of going bankrupt (Růčková 2021).

Credibility models are based on the diagnosis of the financial health of the company by assigning the financial point criteria. From the obtained points, a company can be assigned to a specific category. However, when applying these models, specifics of a particular industry and economic conditions of a country should be taken into account. Credibility models include, for example, Kralicek Quick Test, Tamari's Index, and Credibility Index (Kuběnka 2015).

Kralicek Quick Test

Kralicek Quick Test was developed by an Austrian economist Peter Kralicek in 1990, and since then, it has become a well-known multifactorial model in Central Europe, especially in the Czech Republic, Austria, and Germany. It evaluates the company's financial situation by testing four financial factors. Two factors examine the financial stability of the company, while the remaining two factors estimate the profit situation. However, the model does not assign different weights as in the case of previous models. Kralicek Quick Test uses data obtained from the statement of cash flows because it shows the real market information. Two indicators are set for the area of the financial stability, which are the equity ratio (R1) and the debt repayment period from CF (R2). For the company's profit situation, the cash flow in % of sales (R3) and return on assets (R4) are used (Kuběnka 2015). Their calculation is captured below:

$$R1 = (\text{Equity}/\text{total assets}) \times 100 (\%)$$

$$R2 = (\text{Liabilities} - \text{cash})/\text{operating CF (years)}$$

$$R3 = (\text{Operating CF}/\text{sales}) \times 100 (\%)$$

$$R4 = (\text{EBIT}/\text{total assets}) \times 100 (\%)$$

Table 3 illustrates the scale which is used for the evaluation of the financial stability and profit situation of the company. Each result of the four indicators achieves a 1-5 rating. Further, an arithmetic average of both areas, financial stability, and profit situation are calculated. The total grade is then calculated as a sum of these values divided by two. A company is considered financially stable if the final value is in the range of 1 to 2. The interval from 2 to 3 is defined as a grey zone. Companies with a score worse than 3 will possibly have serious financial issues (Polo and Caca 2014).

Table 3 - The evaluation scale of the Kralicek Quick Test

Kralicek Quick Test		Rating scale				
Evaluation	An indicator	1 Very good	2 Good	3 Middle	4 Poor	5 Insolvency
Financial stability	R1	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4	>15 %	>12 %	> 8 %	> 0 %	Negative

Source: Own processing according to Kralicek (2006, p. 7)

4 Financial analysis of the selected international company

This chapter presents one of the leading multi-brand groups in the automotive industry, Volkswagen Group, together with the volume brand of the Group, ŠKODA AUTO a.s. company, which is considered a core of this master thesis. In order to ensure that the figures of the financial analysis of ŠKODA AUTO a.s. have sufficient explanatory power, the financial analysis figures will be compared with the figures of another Volkswagen Group volume brand SEAT/CUPRA. This brand is only a comparator, and thus no suggestions will be recommended, as this is not the purpose of this master thesis.

After the introduction of VW Group, ŠKODA AUTO a.s., and their financial characteristics, an analysis of the Czech automotive industry will be performed. The chapter then continues with the analysis of absolute indicators, i.e., the implementation of the horizontal and vertical analysis of ŠKODA AUTO a.s. financial statements and the calculation of the company's net working capital. Then, the selected activity, profitability, liquidity, and leverage ratios of ŠKODA AUTO a.s. and its comparator will be calculated. Afterwards, cumulative analysis of the companies will be performed using bankruptcy and credibility models, such as the Altman Z-score, the Index IN05, and the Kralicek Quick Test.

4.1 Introduction of Volkswagen Group

Volkswagen Group, headquartered in Wolfsburg, Germany, and established in 1937, is one of the world's leading manufacturers of passenger cars and commercial vehicles and the largest car manufacturer in Europe. Except for vehicle production, Group also provides financial services. For this reason, Volkswagen Group consists of two divisions: the Automotive Division and the Financial Services Division. The Automotive Division comprises three business areas which are Passenger Cars, Commercial Vehicles, and Power Engineering. Automotive activities include the development of vehicles, engines, and software and the production and sale of passenger cars, trucks, buses, motorcycles, and light commercial vehicles. Additionally, VW Group produces and sells its genuine parts, accessories, and other components. The Financial Services Division consists of dealer and customer financing, vehicle leasing, fleet management, mobility services, and banking and insurance activities (Volkswagen Group 2021).

4.1.1 Volkswagen Group brands

Volkswagen Group comprises ten brands from five European countries. These brands are Volkswagen, Volkswagen Commercial vehicles, ŠKODA, SEAT, CUPRA, Audi, Lamborghini, Bentley, Porsche, and Ducati. In the NEW AUTO Strategy, all brands are divided into three main pillars based on their specifics:

- **Volume brands** with ŠKODA, SEAT/CUPRA, Volkswagen Passenger Cars, and Volkswagen Commercial Vehicles.
- **Premium brands** with Audi, Lamborghini, Bentley, and Ducati,
- **Sport & Luxury brands** with Porsche (Volkswagen AG 2022).

Currently, the Volkswagen Group has 120 production plants in 29 countries worldwide. Most of them are located in 19 European countries and further 10 countries in America, Asia, and Africa, as shown in Figure 8.

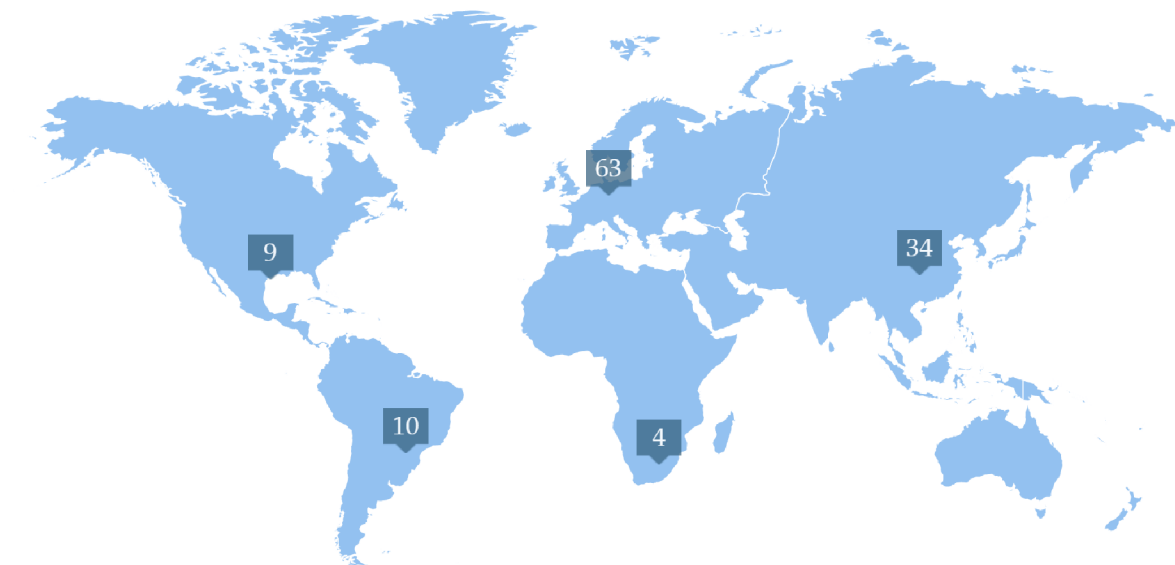


Figure 8 - VW Group production plants
Source: Volkswagen AG (2022)

Globally, more than 662,575 employees work in VW Group, produce and sell vehicles, or work in vehicle-related services. In 2021, the VW Group vehicles were sold in 153 countries (Volkswagen AG 2022).

4.1.2 Board of Management of Volkswagen Group

The Volkswagen Group Board of Management comprises eleven members who are responsible for managing the Company with the best interests, in accordance with the rules issued by the VW Group Supervisory Board. Each Board member is responsible for one or more functions. The core Board functions include the Volume brand group, Sport & Luxury brand group, Premium brand group, as well as Procurement, Technology, Finance, Human Resources and Truck & Bus, Integrity and Legal Affairs, IT, and China. The board-level function of China will be assigned to a specific member as of August 1, 2022. An important milestone was reached in December 2021, when the Supervisory Board decided to increase the number of members of the Board with a new management function for Volkswagen Passenger Cars represented by Mr. Ralf Brandstätter as of January 1, 2022, as well as a board-level management function for Group Sales represented by Mrs. Hildegard Wortmann as of February 1, 2022 (Volkswagen Group 2021).

The Management Board's organizational structure is listed below:

- Herbert Diess – Chairman of Volkswagen Group,
- Ralf Brandstätter – Chief Executive Officer of Volkswagen Passenger Cars,
- Oliver Blume – Sport & Luxury brand group,
- Markus Duesmann – Premium brand group,
- Murat Aksel – Procurement,
- Thomas Schmall-von Westerholt – Technology,
- Gunnar Kilian – Human Resources and Truck & Bus,
- Hildegard Wortmann – Sales,
- Manfred Döss – Integrity and Legal Affairs,
- Hauke Stars – IT,
- Arno Anlitz – Finance.

Each member has to manage the area of responsibility independently. The Board of Management is monitored and controlled by the Supervisory Board, whose aim is to approve corporate decisions (Volkswagen AG 2022).

4.1.3 Financial characteristics of the Volkswagen Group

Volkswagen Group focuses primarily on nine key performance indicators, which are derived from its strategic goals, namely deliveries to customers, sales revenues, operating result, operating return on sales, research and development ratio, the ratio of capex to sales revenue, net cash flow, net liquidity, and return on investment, all in the Automotive Division (Volkswagen Group 2021).

Volkswagen Group deliveries

Volkswagen Group delivered 8,881,957 vehicles to customers worldwide in the fiscal year 2021, which was a decrease of 4.5% from the previous year. While sales figures for the Passenger Cars Business Area declined compared to the prior-year figure, Commercial Vehicles Business Area rose compared to the prior-year figure, as shown in Table 4.

Table 4 - VW Group deliveries worldwide in units

Division	2021	2020	%
Passenger Cars	8,610,747	9,114,804	-5.5%
Commercial Vehicles	271,210	190,187	42.6%
Total	8,881,957	9,304,991	-4.5%

Source: Volkswagen Group (2021)

A decrease in passenger cars deliveries was caused by a limited vehicle availability as a result of a semiconductors shortage. On the other hand, commercial vehicles deliveries increased significantly compared to the previous year, when the demand was affected by a slump in major markets resulting from the uncertainty related to the Covid-19 pandemic.

Financial figures

The financial results of VW Group are reported in accordance with IFRS. At the beginning of July 2021, a TRATON GROUP company, a member of Volkswagen Group, acquired Navistar International Corporation, a US manufacturer of commercial vehicles. The acquisition led to an increase of €3.5 billion in the Volkswagen Group’s sales revenue as of December 31, 2021. VW Group generated **sales revenue** of €250.2 billion in 2021, which is an increase of 12.3% from the previous year, mainly because of better price positioning, and the impressive business performance of the Financial Services Division together with Commercial Vehicles Business Area. Figure 9 illustrates VW Group’s sales revenue figures from 2016 to 2021.

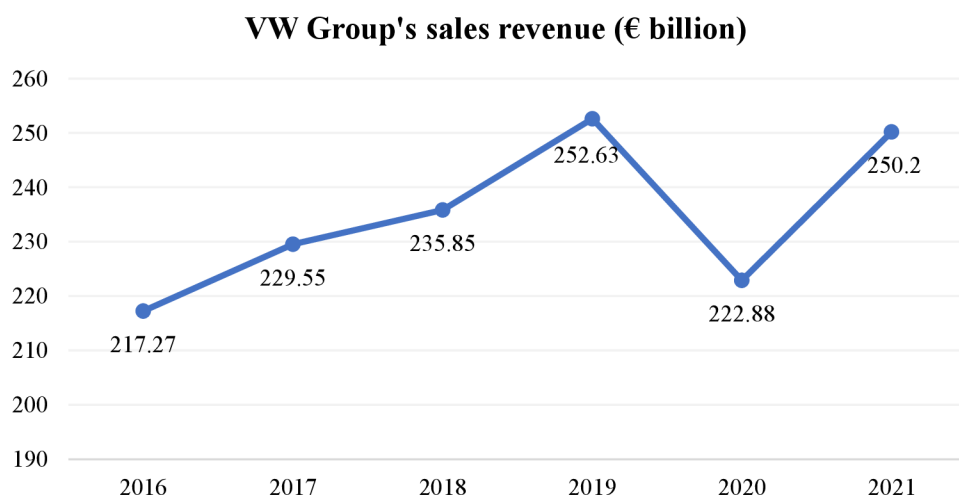


Figure 9 - VW Group's sales revenue from FY 2016 to FY 2021 (€ billion)

Source: Own processing according to Volkswagen Group (2016-2021)

Since 2016, the VW Group's sales revenue has been growing steadily. In 2019, the sales revenue reached a peak at a total amount of €252.63 billion. In 2020, the Volkswagen Group experienced a significant slump due to the consequences of the United Kingdom's exit from the European Union and the Covid-19 pandemic, which massively reduced the possibility of selling vehicles because of contact restrictions. In 2021, the automotive industry faced continuing supply bottlenecks in the form of a shortage of semiconductors. Even so, the Volkswagen Group rose its sales revenue to €250.2 billion.

Due to increased sales revenue and decreased capital expenditure, the ratio of capex to sales revenue in the Automotive Division decreased from the previous 6.1% to 5.1%. Moreover, the VW Group's **profit margin** climbed by €8.3 billion to €47.2 billion. The Automotive Division's **operating result** doubled in 2021 to €13.2 billion. Besides, the **operating return on sales** of the Automotive Division increased from 3.7% to 6.4%. The reasons for such increases are favourable price positioning and the fair value measurement of derivatives. **The research and development ratio** in the Automotive Division did not change from the previous year and was still reaching 7.6%. Currently, the main focus related to research and development is given to new models, electrification, digitalization, new technologies, and modern platforms (Volkswagen Group 2021).

Despite the investment in Navistar, the **net cash flow** reached €8.6 billion in 2021, which was higher by €2.3 billion than in the previous year. On the other hand, the **net liquidity** decreased due to the acquisition of Navistar by €0.1 billion and stood at €26.7 billion at the

end of the year 2021. However, the net liquidity figure was better than recently estimated. The **ROI** in the Automotive Division reached 10.4% due to higher operating result and earnings-related factors at the end of the year 2021, which is an increase of 3.9%, contrary to the previous year and a minimum required rate of ROI of 9% (Volkswagen Group 2021).

The Volkswagen Group expects the sales revenue in 2022 to be from 8% to 13% higher than at the end of the fiscal year 2021. The Group's operating return on sales is estimated to be in the range of 7% to 8.5% in 2022. In the Automotive Division, the research and development ratio is forecasted to be settled at around 7%, and the ratio of capex to sales revenue at around 5.5% in 2022. A further goal of the VW Group is the net liquidity to be up to 15% than the previous year's figure. Finally, the ROI is forecasted to be in the range of 12% to 15% in 2022 (Volkswagen Group 2021).

4.2 Introduction of ŠKODA AUTO a.s.

ŠKODA AUTO a.s., headquartered in Mladá Boleslav, Czech Republic, is one of the oldest car manufacturers in the world and simultaneously the largest car manufacturer in the Czech Republic. The history of the company goes back to 1895, when the foundation for today's global company was established by Václav Laurin and Václav Klement. Nevertheless, an important milestone was also reached in 1991, when ŠKODA AUTO a.s. became a member of Volkswagen Group, and since then, it has become an internationally successful company with an extensive product portfolio. ŠKODA AUTO a.s. is an important pillar of the Czech economy as it employs more than 35,000 employees. The main production plant is located in Mladá Boleslav. In addition, there are two other Czech production plants located in Vrchlabí and Kvasiny. Manufacturing operations have also been expanded to other markets, such as China, Russia, Slovakia, India, and Ukraine. However, the development of the Russian production plants depends on the further unfolding of the Russian-Ukrainian conflict. ŠKODA AUTO a.s. not only focuses on the development, manufacture, and sale of passenger cars but also on its components, original parts, brand accessories, and after sales services. Currently, ŠKODA AUTO a.s. offers a broad product portfolio, which was extended in 2021 by several new models or facelifts. The greatest success was the launch of the first all-electric SUV, the ENYAQ iV, on international markets and the introduction of the new generation of the FABIA. The company also launched two new models, the

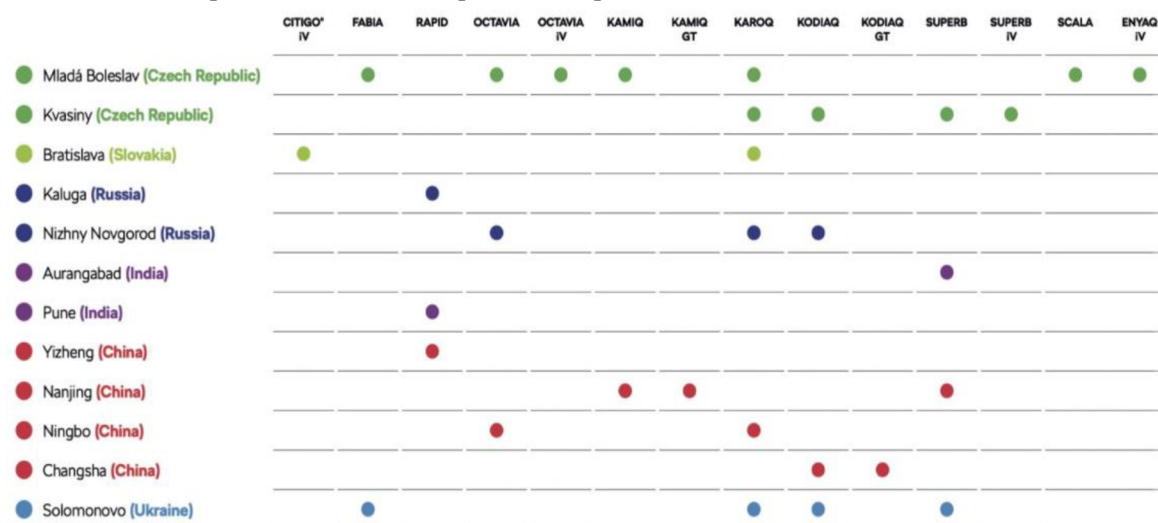
KUSHAQ and the SLAVIA, which are available only in the Indian market. The product portfolio is listed below:

- FABIA (4th generation), a key brand model, was given a new appearance.
- SLAVIA, a part of the INDIA 2.0 project, is available only in the Indian market.
- RAPID, popular due to its relatively low price, is available only in the Russian, Chinese, and Indian markets.
- SCALA, characterized by its sporty design and high-level functionalities, replaced the RAPID model on the Czech market.
- OCTAVIA (4th generation), available in liftback and estate versions and equipped with advanced assistance systems, holds the title of the best-selling ŠKODA model.
- KAMIQ, the third company's SUV, satisfies the needs of family-focused customers. Another version, KAMIQ GT SUV Coupé, is sold exclusively in the Chinese market.
- KAROQ, the second company's SUV, will be upgraded with plenty of improvements in 2022,
- KUSHAQ, the first model in the INDIA 2.0 project, symbolises the beginning of a new era at ŠKODA AUTO a.s. in India.
- KODIAQ, the first and largest SUV, was upgraded with animated indicators and other features in 2021. The KODIAQ is also available in SPORTLINE, L&K, RS, and GT.
- SUPERB, the company's flagship, is also available in SCOUT and SPORTLINE versions and in plug-in hybrid drive.
- ENYAQ iV, the purely electric SUV, marks another step in bringing the electromobility strategy of the company to fruition (ŠKODA AUTO a.s. 2021).

On January 31, 2022, the new ŠKODA ENYAQ COUPÉ RS iV World Premiere took place.

Table 5 illustrates in which production plants the individual models are manufactured. Most models are produced in Mladá Boleslav. The production plant in Vrchlabí is not listed in the table, as its main purpose is the production of gearboxes for ŠKODA and other VW Group brands (ŠKODA Storyboard 2020)

Table 5 - Models production based on production plants



Source: ŠKODA Storyboard (2020)

In September 2020, the former member of the Board for Sales and Marketing announced the end of production of the CITIGO iV model, which a similar model will not replace. Consequently, Slovakia's production plant does not manufacture the CITIGO iV anymore.

4.2.1 Board of Management of ŠKODA AUTO a.s.

As of December 31, 2021, the Board of Management comprises seven members, namely:

- Dipl.-Ing. Thomas Schäfer – Chairman of the Board of Management,
- Maren Gräf – People and Culture,
- Ing. Martin Jahn – Sales and Marketing,
- Dr.-Ing. Johannes Neft – Technical development,
- Dr. Michael Oeljeklaus – Production and Logistics,
- Dipl.-Vw. Christian Schenk – Finance and IT,
- Dipl.-Ing. Karsten Schnake – Procurement (ŠKODA AUTO a.s. 2021).

The Supervisory Board is superior to the Board of Management and comprises nine members. The main task of the Supervisory Board is to control and monitor the Board of Management's actions. After the meeting of the Supervisory Board, which took place on December 9, 2021, Mr. Herbert Diess announced that the current head of ŠKODA AUTO, Mr. Thomas Schäffer, will take over the management of Volkswagen from July 1, 2022, where he will replace Mr. Ralf Brandstätter. The current head of Volkswagen will take over Volkswagen's activities in China from August 2022 (Kinkor 2021).

As of July 1, 2022, the new Chairman of the Board of Management of ŠKODA AUTO a.s. will be Klaus Zellmer, who is currently the Volkswagen brand Board member responsible for Sales, Marketing, and After Sales.

4.2.2 Financial characteristics of ŠKODA AUTO a.s.

The financial results of ŠKODA AUTO a.s. are reported in accordance with IFRS. The fiscal year 2021 was significantly affected by the impact of the pandemic, which caused bottlenecks in the supplies, especially a shortage of semiconductors and other components. All these issues led to a strict cost reduction, which resulted in a positive operating result and financial stability. The key figures of ŠKODA AUTO a.s. are deliveries to customers, sales revenue, gross profit, net liquidity, the investment ratio, and the equity ratio.

Deliveries to customers

ŠKODA AUTO a.s. delivered a total of 878,202 cars in 2021, representing a decline of 12.6% from the previous year, caused by the pandemic and the shortage of semiconductors. Figure 10 distinguishes deliveries to customers according to the major markets. Data are obtained from the annual report, which is considered a primary source of information.

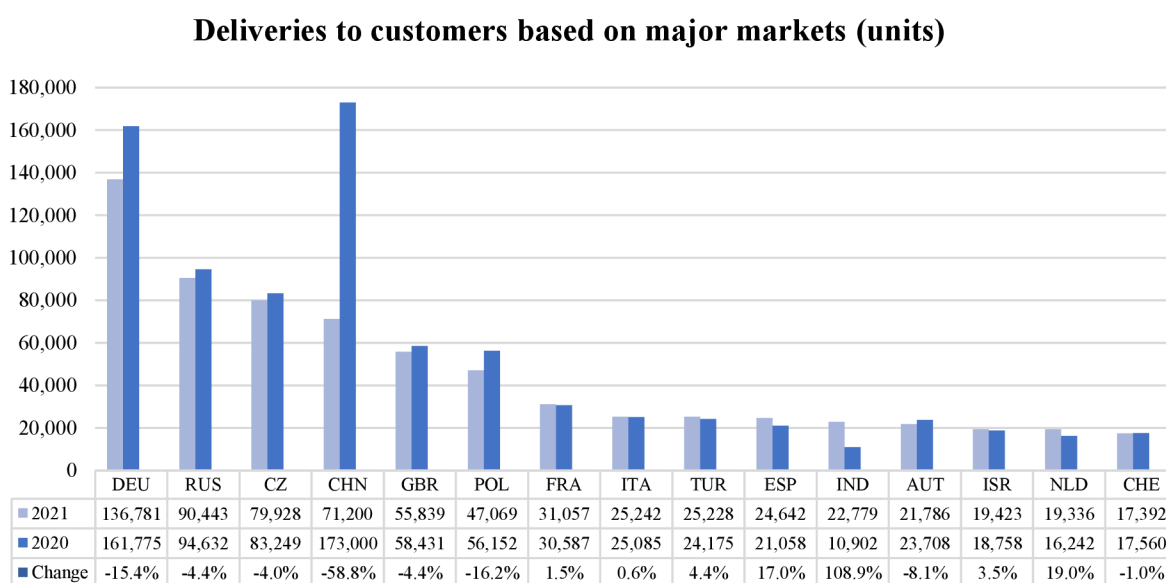


Figure 10 - ŠKODA AUTO a.s. deliveries to customers based on major markets (units)

Source: Own processing according to ŠKODA AUTO a.s. (2021)

In Germany, the biggest market of the company, it was delivered 136,781 cars to customers, which is a 15.4% fall from the previous year. Russia moved up to second place in deliveries to customers but marked a drop of 4.4%. The Czech Republic also experienced a drop of 4%, which was caused (as in the case of other markets) by an insufficient market coverage due to a lack of semiconductors and other components. ŠKODA AUTO a.s. was also hit by a huge fall in deliveries to China, the previous largest market. Consequently, China lost its leading position after several years as a result of persistent price wars with competitors. However, there is an effort to increase deliveries to China again. On the other hand, ŠKODA AUTO a.s. experienced a growth in the deliveries to India by 108.9% as a result of the launch of KUSHAQ. Norway is not listed in the graph as it is currently not considered one of the largest markets, however, there was a rise of 36.9% in the deliveries in 2021, which was caused mainly by a high demand for a purely electric vehicle, ENYAQ iV (ŠKODA AUTO a.s. 2021).

Sales

Since 2020, the company's management has taken several measures to mitigate the effects of the pandemic, particularly in the areas of cost savings, capital expenditures, and working capital optimization. Due to a shortage of semiconductors, the company's production plants were required to reduce car production, resulting in a drop in sales. The production curtailment also resulted in an increase in personnel costs which, together with the decrease in sales, had an impact on the company's financial performance. The sales revenues decreased by 0.4% from the previous year and reached CZK 422.6 billion. However, the return on sales rose to 6.5% from the previous 4.2%. The evolution of the company's sales revenue is illustrated in Figure 11.

Sales revenue of ŠKODA AUTO a.s. (CZK billion)

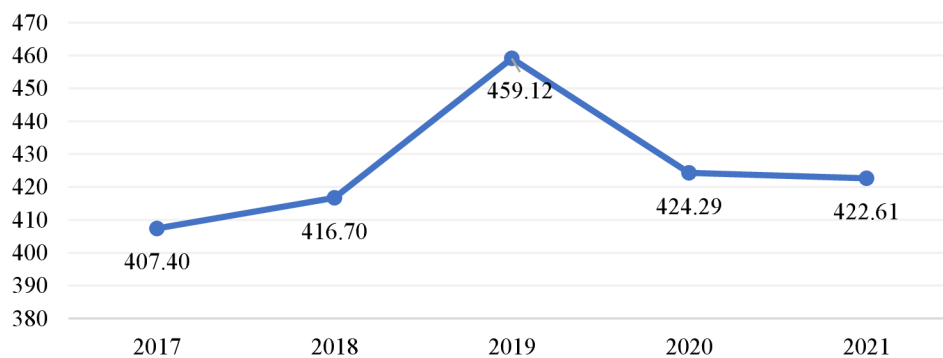


Figure 11 - Sales revenue of ŠKODA AUTO a.s. (CZK billion)

Source: Own processing according to ŠKODA AUTO a.s. (2021)

Until 2019, the company's sales revenue was growing steadily and reached a peak at the total amount of 459,122 million CZK. Since 2020, the company has been experiencing a decline in sales revenue due to a significant reduction in car production caused by a lack of semiconductor supplies (ŠKODA AUTO a.s. 2021).

Assets

The company's statement of the financial position reached CZK 231.5 billion in 2021, representing a rise of CZK 3.5 billion from the previous year. Non-current assets increased slightly year-on-year by 0.2% to CZK 144.9 billion, while current assets climbed to CZK 86.6 billion as of December 31, 2021, from the previous CZK 83.3 billion. This rise in the total assets occurred as a result of increased work in progress because of the lack of semiconductor supplies. Net liquidity experienced a significant fall since 2017, when its amount was CZK 95,078 million, to the year 2020, when the net liquidity was almost six times lower. As of December 2021, the net liquidity stood at CZK 20,418 million, however, it is still much lower than in 2017 (ŠKODA AUTO a.s. Annual Report 2021).

Capital structure

Equity increased by CZK 6.6 billion in 2021 to a total of CZK 101.5 billion from the previous CZK 94.92 billion, especially as a result of a growth in the economic result. In addition, the equity ratio stood at 43.8% in 2021. On the other hand, current liabilities declined to CZK 26.1 billion, and non-current liabilities decreased to CZK 103.8 billion in comparison with the previous year. The company used its capital to invest in new models, technologies, electromobility, and digitalisation, and the investment ratio stood at 3.6% as of December 2021 (ŠKODA AUTO a.s. 2021).

4.3 Automobile industry analysis

The automotive industry, like other economic activities, is included in a uniform classification of economic activities NACE, which has been used in the Czech Republic since 2008. This classification is mandatory for all members of the European Union. The CZ-NACE code is used for activities performed within the Czech Republic. The classification of the automotive industry according to the CZ-NACE classification is following:

C Manufacturing industry

29 Manufacture of motor vehicles, trailers, and semi-trailers

29.1 Manufacture of motor vehicles and their engines

29.2 Manufacture of motor vehicle bodies, production of trailers and semi-trailers

29.3 Manufacture of parts and accessories for motor vehicles and their engines

(Ministerstvo průmyslu a obchodu České republiky 2009)

The Czech automotive industry, as a part of the manufacturing industry, is one of the key industries contributing significantly to gross domestic product creation. There are three key car manufacturers in the Czech Republic which are ŠKODA AUTO a.s., TPCA, and Hyundai Motor Manufacturing Czech. Moreover, the Czech Republic plays an important role for other related sectors mainly due to its unique location, infrastructure, skilled workforce, and excellent opportunities for suppliers. Figure 12 illustrates the automobile manufacturers and their suppliers located in the Czech Republic (Czech Invest 2019).



Figure 12 - Automobile manufacturers and their suppliers in the Czech Republic
 Source: Czech Invest (2019)

The suppliers mainly produce vehicle components. Nowadays, the automobile industry also closely cooperates with other sectors, such as research and development, because of developing new technologies and electromobility components.

The Czech Republic is the second largest car manufacturer in the world per capita and the fourth largest EU car manufacturer. Additionally, the Czech Republic is ranked eleventh in the production of passenger cars (AutoSAP 2020). However, the Czech Republic experienced the deepest economic fall. GDP fell by a record of 5.8% in 2020 due to the Covid-19 pandemic, which resulted in a production reduction and other issues. The expected recovery in 2021 was coming only slowly and only in some sectors of the economy. The industry as a whole has not yet achieved complete recovery, mainly because of the automotive industry, which has been hit by further issues such as supply chain disruption issues. These issues have been caused by an increase in input and shipping prices and a shortage of production components, especially semiconductors (Ministerstvo průmyslu a obchodu České republiky 2021).

Based on advanced indicators, predictions of reputable institutions, as well as the latest developments in new industrial orders, the gradual recovery of domestic industry is expected. In the 3rd quarter of 2021, the production of the automotive industry was 22.9% lower than in the previous year, which was also the largest decline in the entire manufacturing industry. Sales in the Czech industry in the 3rd quarter of 2021 rose by 2%

and in the manufacturing industry by 2.4%. However, the automobile industry sales decreased by 20.2%, which was the highest decline in sales within the manufacturing industry. Consequently, the automotive industry sales dragged down the industry sales as a whole (Ministerstvo průmyslu a obchodu České republiky 2021).

The motor vehicle fleet grew by 221,212 vehicles to 8,558,529 in 2021, and its average lifespan reached 18.58 years, which is 0.3 years more than in the previous year. The increase experienced all motor vehicle categories except tractors. In the passenger cars category, of which 6,293,125 were registered as of December 31, 2021, the average lifespan rose to 15.58 years. In this category, the shortage of new vehicles has a significant impact on aging, as well as the composition of imports of used vehicles, of which more than 50% are older than 10 years and 21% older than 15 years (Svaz dovozců automobilů 2022).

Figure 13 illustrates summary data about the production, domestic sales, and export of basic categories of motor vehicles from 2017 to 2021.

Summary data about motor vehicles from 2017 to 2021 (units)

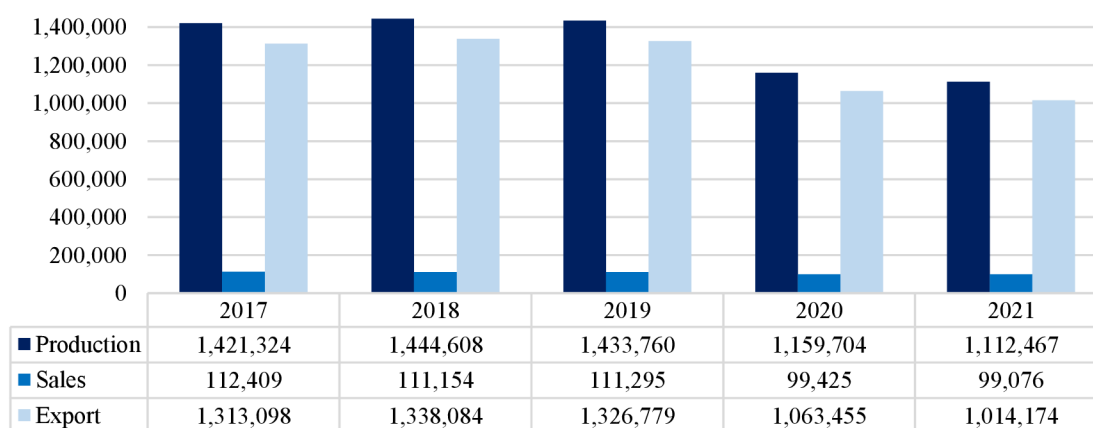


Figure 13 - Data about production, sales, and export of motor vehicles (2017 to 2021)

Source: Own processing according to AutoSAP (2021)

Until 2018, the production and export of motor vehicles were steadily increasing, while the domestic sales were gradually decreasing. The figures in 2019 decreased because of several reasons, especially the transition to electromobility and Brexit. The automobile industry experienced a significant decline as a consequence of the Covid-19 pandemic in 2020. Although, the expected recovery did not occur in 2021 because of an increase in input and shipping prices and a shortage of production components, especially semiconductors.

4.3.1 ŠKODA AUTO a.s. financial figures compared to the industry average

An understanding of the automotive industry and its development is essential to be able to compare the financial performance of any car manufacturer with an industry average. As these averages relate to the Czech industry, it would not be desirable to compare them with financial figures of car manufacturers registered in other countries, such as SEAT S.A., which is registered in Barcelona, Spain, and Volkswagen, which is registered in Wolfsburg, Germany. For this reason, the industrial averages will be compared only with ŠKODA AUTO a.s. financial figures since the company is registered in Prague, Czech Republic. Tables 6 and 7 compare the company's financial figures with the industry averages obtained from the statistics of the Ministry of Industry and Trade of the Czech Republic from 2015 to 2019 and then calculated, as the data about the last two years have not been published yet. The company's financial figures are calculated based on the data from the annual reports.

Table 6 - Czech industry averages from 2015 to 2019

Industry averages	2015	2016	2017	2018	2019
ROE	16.90%	14.89%	14.90%	13.28%	23.32%
ROA	10.75%	9.73%	9.59%	8.68%	8.34%
Total assets turnover	1.39	1.34	1.37	1.35	1.40
Inventory turnover	8.94	8.50	8.48	7.99	8.38
Current ratio	1.57	1.59	1.56	1.53	1.56
Quick ratio	1.12	1.13	1.10	1.05	1.07
Cash ratio	0.27	0.28	0.27	0.25	0.25
Debt ratio	48.63%	47.78%	49.10%	48.79%	47.23%
Equity ratio	51.08%	51.12%	50.36%	50.58%	52.17%
Debt-to-equity ratio	95.20%	93.47%	97.50%	96.45%	90.53%

Source: Own processing according to Ministry of Industry and Trade (2015-2019)

Table 7 - ŠKODA AUTO a.s. financial figures from 2015 to 2019

ŠKODA AUTO a.s.	2015	2016	2017	2018	2019
ROE	26.23%	18.29%	27.10%	25.87%	28.91%
ROA	17.35%	13.54%	16.16%	15.43%	15.40%
Total assets turnover	1.55	1.53	1.62	1.90	1.90
Inventory turnover	20.83	21.62	23.13	20.62	18.47
Current ratio	1.43	1.71	1.24	1.14	0.93
Quick ratio	1.21	1.49	1.09	0.91	0.70
Cash ratio	0.94	1.02	0.83	0.52	0.43
Debt ratio	42.0%	39.7%	53.2%	49.1%	54.6%
Equity ratio	58.0%	60.3%	46.8%	50.9%	45.4%
Debt-to-equity ratio	72.46%	65.85%	113.53%	96.39%	120.42%

Source: Own processing according to ŠKODA AUTO a.s. (2015-2019)

The profitability ratios of ŠKODA AUTO a.s. are steadily higher than the industry averages in 2017 and 2018, even almost twice, which indicates the stable financial health of the company and its outstanding ability to generate profit from its equity and assets. At the same time, the rule ROE is higher than ROA is met. However, the figures of ROE and ROA decreased by a few percent in 2018 compared to previous years because of a slump in EAT (and EBIT). Expenditures related to changes in emissions legislation, expenditures on new products, technologies, electromobility, and increased personnel costs are behind this reduction. Additionally, ŠKODA AUTO a.s. total assets turnover is higher each year than the industry average, which is always more favourable as it means that the company is generating more revenue per CZK of assets. The growing trend of the total assets turnover is caused by increasing sales resulting from a larger number of passenger cars sold. ŠKODA AUTO a.s. inventory turnover is significantly higher than the industry average, usually more than twice. Nevertheless, the inventory turnover fell over the years because of an increase in the company's work in progress in 2018 and finished products and goods in 2019. Generally, the higher the ratio, the better as it indicates strong sales. High-volume industries tend to have high inventory turnovers.

The current ratio has been below the industry average throughout the years, except for the year 2016. The main reason for such a low level from 2017 to 2019 is the increase in trade payables and the decrease in current assets, especially cash and cash equivalents. In 2017, the decision to pay a dividend was also the reason for the increase in current liabilities to CZK 116.6 billion, as the dividend was not paid at the end of the year. In 2019, the dividend was paid from retained earnings of previous years 2017 and 2018. Consequently, the current ratio did not reach an ideal value in the range of 1.5 – 2.0 in 2015 and from 2017 to 2019. Based on these values, the company looks like it did not have enough assets to repay its liabilities. For this reason, the quick and cash ratios must be calculated, too. The quick ratio had higher values than the industry average until 2017. Since 2017, the current assets decreased, however, the inventories which are deducted from current assets increased, and thus the quick ratio declined significantly. Similar to the current ratio, the quick ratio did not reach an ideal value in the range of 1 – 1.5 in 2018 and 2019. However, the cash ratio, which is the strictest as it includes only cash and cash equivalents, was higher than the industry averages over the years. It can even be noted that the company holds more cash and cash equivalents than necessary, as the ideal values are in the range of 0.2 - 0.5. The leverage ratios of ŠKODA AUTO a.s. are mainly influenced by a decrease in equity, which was

caused by a dividend payment in 2017. Moreover, the non-current liabilities increased as a consequence of an extended warranty and the increase in reserves in 2019. Therefore, the debt ratio has increased and exceeded industry averages since 2017. Even though the values exceeded industry averages, they are still considered the ideal values as they are in the range of 30-60%. Contrary, the equity ratio experienced an inverted development and was below the industry average in 2017 and 2019. Despite the lower values compared to the industry average, the equity ratio reached ideal values (70-40%) over the years.

The debt-to-equity ratio was below the industry average, except for the years 2017 and 2019, which is desirable as it indicates financing the company's growth not only with debts. Besides, debt-to-equity ratios did not exceed the critical value of 200% over the years and thus are associated with low financial risk (ŠKODA AUTO a.s. 2015-2019).

4.4 Analysis of absolute indicators of ŠKODA AUTO a.s

This chapter includes the analysis of absolute indicators based on performing horizontal and vertical analyses of the statement of financial position and statement of profit or loss and other comprehensive income. Changes in the structure of assets, liabilities, revenues, and expenses will be calculated. The indicators draw on the company's financial statements for the last five accounting periods (2017-2021).

4.4.1 Horizontal analysis of assets, equity, and liabilities

For performing the horizontal analysis of assets, Table 8 has been created to represent the selected items of assets from 2017 to 2021. Then, Table 9 illustrates the performed horizontal analysis, including absolute and percentage changes of these assets.

Table 8 - Financial expression of assets (CZK million)

Item	Year				
	2017	2018	2019	2020	2021
Intangible assets	23,497	30,589	39,422	44,600	48,697
Property, plant and equipment	66,060	72,767	87,316	85,632	81,867
Investments in subsidiaries	79	149	594	600	228
Investments in associates	2,352	2,356	2,356	2,356	2,934
Other non-current receivables and financial assets	12,890	11,469	9,473	10,196	10,291
Deferred tax asset	1,797	1,541	2,363	1,267	885
Non-current assets	106,675	118,871	141,524	144,651	144,902
Inventories	17,614	20,211	24,863	24,516	31,901
Trade receivables	18,452	22,614	21,686	31,665	22,784
Other current receivables and financial assets	4,971	3,869	831	2,500	3,885
Current non-financial assets	5,946	6,127	6,978	5,982	5,333
Prepaid income tax	0	1,780	0	0	236
Cash and cash equivalents	97,201	45,846	45,753	18,669	22,422
Current assets	144,184	100,447	100,111	83,332	86,561
Total assets	250,859	219,318	241,635	227,983	231,463

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Table 9 - Horizontal analysis of assets (CZK million)

Item	2018/2017		2019/2018		2020/2019		2021/2020	
	ABS	%	ABS	%	ABS	%	ABS	%
Intangible assets	7,092	30.18%	8,833	28.88%	5,178	13.13%	4,097	9.19%
Property, plant, and equipment	6,707	10.15%	14,549	19.99%	-1,684	-1.93%	-3,765	-4.40%
Investments in subsidiaries	70	88.61%	445	298.66%	6	1.01%	-372	-62.00%
Investments in associates	4	0.17%	0	0.00%	0	0.00%	578	24.53%
Other non-current receivables and financial assets	-1,421	-11.02%	-1,996	-17.40%	723	7.63%	95	0.93%
Deferred tax asset	-256	-14.25%	822	53.34%	-1,096	-46.38%	-382	-30.15%
Non-current assets	12,196	11.43%	22,653	19.06%	3,127	2.21%	251	0.17%
Inventories	2,597	14.74%	4,652	23.02%	-347	-1.40%	7,385	30.12%
Trade receivables	4,162	22.56%	-928	-4.10%	9,979	46.02%	-8,881	-28.05%
Other current receivables and financial assets	-1,102	-22.17%	-3,038	-78.52%	1,669	200.84%	1,385	55.40%
Current non-financial assets	181	3.04%	851	13.89%	-996	-14.27%	-649	-10.85%
Prepaid income tax	1,780	x	0	-100.00%	0	0.00%	236	x
Cash and cash equivalents	-51,355	-52.83%	-93	-0.20%	-27,084	-59.20%	3,753	20.10%
Current assets	-43,737	-30.33%	-336	-0.33%	-16,779	-16.76%	3,229	3.87%
Total assets	-31,541	-12.57%	22,317	10.18%	-13,652	-5.65%	3,480	1.53%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The total value of assets declined by 7.7%, alternating decreases and increases during the five-year period. The assets' decline was caused by the gradual reduction of current assets. The development of net liquidity was the main factor projected in this decrease. Moreover, the cash and cash equivalents fell in 2020 by 59.20%, representing a decrease of CZK 27,084 million, due to the uncertain pandemic situation. The largest decrease by CZK 43,737 million in current assets was recorded in 2018. The total amount of inventories increased significantly by more than 81% during the five-year period as a result of the growing number of work in progress due to the pandemic and the lack of components, especially semiconductors. For this reason, the inventories climbed by almost 30% in 2021, which represents more than CZK 7,385 million, and thus increased the value of current assets in 2021. Trade receivables, other current receivables, and financial assets experienced jumps and falls. The trade receivables experienced growth of 23.5% during the five-year period. The lowest amount of trade receivables (CZK 18,452 million) was recorded in 2017, and the highest peak was reached in 2020 in the amount of CZK 31,665 million. In 2020, the trade receivables climbed by more than 46%, representing the amount of CZK 9,979 million. However, in 2021, they fell by CZK 8,881 million. The other current receivables and financial assets noted a rapid growth of more than 200% in 2020 and 55.4% in 2021.

The non-current assets experienced growth, which gradually slowed down. During the five-year period, the non-current assets rose by almost 36%. The investment in subsidiaries increased its value over the years by 188,81%. The transactions with Volkswagen AG and the establishment of the company DigiLab s.r.o., whose 100% parent company is ŠKODA AUTO a.s. since 2017, are considered the reasons for the growth in investments. There was a significant decrease in subsidiary investments in 2021 by 62%. On the other hand, for the period 2018/2019, the investments in subsidiaries increased by almost 300%.

An important component of non-current assets is intangible assets, which recorded a growth of 107% in the five-year period and thus contributed significantly to maintaining the value of total assets. The main reason for such an increase was the research and development costs of new models, new engines, production of batteries, electromobility, and digitalization. However, in the last year, the growth of intangible assets slowed and was only 9.19% in 2021, mainly because of the cost reduction as a result of the Covid-19 pandemic and other above-mentioned issues. Despite this fact, the intangible assets reached a peak in 2021 at the amount of CZK 48,697 million. Property, plant, and equipment rose by almost 24% during

the five-year period. However, they increased only until 2019 to the amount of CZK 87,316 million. At the turn of 2018/2019, the property, plant, and equipment rose by almost 20% (CZK 14,549 million) as a result of an increase in technical equipment, machinery, tooling, office, and other equipment. At the turn of 2020/2021, they declined by CZK 4.4 million as a result of a fall in advances paid and assets under construction. The amount of other non-current receivables and financial assets were gradually falling until 2019, and since then, they have relatively grown. At the turn of 2018/2019, the largest decline occurred by more than 17% (CZK 1,996 million). One year later, the other non-current receivables and financial assets rose by 7.63% (CZK 723 million). Based on the same principle, the horizontal analysis of equity and liabilities is performed below. Table 10 expresses the selected items of equity and liabilities from 2017 to 2021 in CZK million obtained from annual reports, while Table 11 illustrates the performed horizontal analysis of the statement of financial position, including absolute and percentage changes of the equity and liabilities.

Table 10 - Financial expression of equity and liabilities

Item	Year				
	2017	2018	2019	2020	2021
Share capital	16,709	16,709	16,709	16,709	16,709
Share premium	1,578	1,578	1,578	1,578	1,578
Retained earnings	88,177	85,078	87,877	71,372	78,612
Other reserves	11,020	8,309	3,462	5,261	4,629
Equity	117,484	111,674	109,626	94,920	101,528
Non-current financial liabilities	94	259	2,864	2,404	2,322
Non-current non-financial liabilities	3,356	6,207	6,837	6,783	7,017
Non-current provisions	13,302	13,120	15,169	17,242	16,757
Non-current liabilities	16,752	19,586	24,870	26,429	26,096
Trade liabilities	43,350	57,600	70,267	66,153	58,230
Other current financial liabilities	39,014	492	1,752	1,376	1,720
Current non-financial liabilities	9,007	9,542	15,212	12,576	14,811
Current income tax liabilities	2,165	0	691	260	0
Current provision	23,087	20,424	19,217	26,269	29,078
Current liabilities	116,623	88,058	107,139	106,634	103,839
Total equity and liabilities	250,859	219,318	241,635	227,983	231,463

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Table 11 - Horizontal analysis of equity and liabilities (CZK million)

Item	2018/2017		2019/2018		2020/2019		2021/2020	
	ABS	%	ABS	%	ABS	%	ABS	%
Share capital	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Share premium	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Retained earnings	-3,099	-3.51%	2,799	3.29%	-16,505	-18.78%	7,240	10.14%
Other reserves	-2,711	-24.60%	-4,847	-58.33%	1,799	51.96%	-632	-12.01%
Equity	-5,810	-4.95%	-2,048	-1.83%	-14,706	-13.41%	6,608	6.96%
Non-current financial liabilities	165	175.53%	2,605	1005.79%	-460	-16.06%	-82	-3.41%
Non-current non-financial liabilities	2,851	84.95%	630	10.15%	-54	-0.79%	234	3.45%
Non-current provisions	-182	-1.37%	2,049	15.62%	2,073	13.67%	-485	-2.81%
Non-current liabilities	2,834	16.92%	5,284	26.98%	1,559	6.27%	-333	-1.26%
Trade liabilities	14,250	32.87%	12,667	21.99%	-4,114	-5.85%	-7,923	-11.98%
Other current financial liabilities	-38,522	-98.74%	1,260	256.10%	-376	-21.46%	344	25.00%
Current non-financial liabilities	535	5.94%	5,670	59.42%	-2,636	-17.33%	2,235	17.77%
Current income tax liabilities	-2,165	-100.00%	691	x	-431	-62.37%	-260	-100.00%
Current provisions	-2,663	-11.53%	-1,207	-5.91%	7,052	36.70%	2,809	10.69%
Current liabilities	-28,565	-24.49%	19,081	21.67%	-505	-0.47%	-2,795	-2.62%
Total equity and liabilities	-31,541	-12.57%	22,317	10.18%	-13,652	-5.65%	3,480	1.53%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The total equity and liabilities decreased by CZK 19,396 million, representing 7.7% during the five-year period. Generally, the total equity and liabilities experienced both increases and decreases, but the decreases prevailed. They reached CZK 250,859 million in 2017, which was considered the highest amount throughout the period. However, at the turn of 2017/2018, they experienced a decrease by CZK 31,541 million, representing 12.57%, which was caused mainly by a significant decline in current liabilities. At the turn of 2018/2019, they increased by CZK 22,317 million, representing more than 10%, due to a higher amount of current and non-current liabilities. The equity dipped during 2017 by CZK 20,100 million to a total of CZK 117,484 million. The sole shareholder's decision to use retained earnings to pay out approximately CZK 38,500 million in dividends triggered the drop in equity. Moreover, the equity dropped by CZK 14,706 million, representing 13.4%, due to a decrease in the economic result at the turn of 2020/2019. At the turn of 2020/2021, the equity rose by CZK 6,608 million. Shared capital and shared premium did not change at all over the period. The retained earnings dropped by CZK 9,565 million, representing 10.8%, over the five-year period as a result of dividend payment. The retained earnings decreased significantly at the turn of 2019/2020 by 18.8%. The other reserves reported a decline of CZK 6,391 million (58%) over the five-year period due to the fall in the reserves for cash flow hedges.

The non-current liabilities grew by 55.6% during the whole period, which represents CZK 9,433 million. The main reason for such an increase in non-current liabilities is driven mainly by the inclusion of liabilities from the future leasing payments, increase in provisions, advances received, liabilities to employees, and contract liabilities arising from extended guarantees, which rose the non-current non-financial liabilities by almost 1,006% in 2019.

On the other hand, the current liabilities dipped by almost 11% during the five-year period and experienced a significant fall in 2018 by almost 24.5% (CZK 28,565 million), which was caused by paying out the dividend from retained earnings related to the previous accounting periods. The trade liabilities increased throughout the five-year period by 34%, representing CZK 14,880 million. However, they dropped by 5.85% (CZK 4,114 million) in 2020 and by almost 12% (CZK 7,923 million) in 2021 due to a decrease in advanced payments from customer contracts and trade liabilities to third parties. The other current financial liabilities fell significantly in 2018 by almost 99% (CZK 38,522 million) as the dividend was paid out, and thus the liability was extinguished. Moreover, the current provisions dropped in 2019 to CZK 19,217 million, but then they were continuously growing due to the increased provision for warranty claims and recycling, covering emission expenditures, employee benefits, and litigation risk.

4.4.2 Horizontal analysis of revenues, expenses, and income

Table 12 expresses the selected items of revenues, expenses, and income from 2017 to 2021 in CZK million obtained from annual reports. Afterwards, Table 13 illustrates the performed horizontal analysis of the Company's income statement, including absolute and percentage changes in the revenues, expenses, and income.

Table 12 - Financial expression revenues, expenses, and income (CZK million)

Item	Year				
	2017	2018	2019	2020	2021
Sales from cars	343,452	347,256	382,122	343,502	327,656
Sales from spare parts and accessories	21,064	21,459	23,572	21,356	23,940
Supplies of components (VW Group)	34,183	34,249	38,631	44,847	50,999
Income from licence fees	2,636	2,307	3,479	3,127	2,215
Revenues from services	2,916	3,338	5,370	7,264	9,493
Other	3,149	4,544	3,866	4,189	6,893
Gains from derivative transactions	0	3,542	2,082	7	1,411
Total sales	407,400	416,695	459,122	424,292	422,607
Cost of sales	347,519	359,421	397,086	381,221	380,689
Gross profit	59,881	57,274	62,036	43,071	41,918
Distribution expenses	15,040	14,046	14,735	12,349	10,287
Administrative expenses	9,710	12,366	13,234	13,565	12,271
Other operating revenues	13,397	8,690	8,143	12,508	13,876
Other operating expenses	7,997	5,712	4,990	12,349	7,020
Operating profit	40,531	33,840	37,220	17,316	26,216
Financial revenues	3,373	1,793	1,959	2,842	2,460
Financial expenses	4,779	502	681	2,295	1,356
Net financial result	(1406)	1,291	1,278	547	1,104
Profit before tax	39,125	35,131	38,498	17,863	27,320
Income tax expense	7,284	6,239	6,809	2,688	4,910
Profit for the year	31,841	28,892	31,689	15,175	22,410

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Table 13 - Horizontal analysis of revenues, expenses, and income (CZK million)

Item	2018/2017		2019/2018		2020/2019		2021/2020	
	ABS	%	ABS	%	ABS	%	ABS	%
Sales of cars	3,804	1.11%	34,866	10.04%	-38,620	-10.11%	-15,846	-4.61%
Sales of spare parts and accessories	395	1.88%	2,113	9.85%	-2,216	-9.40%	2,584	12.10%
Supplies of components	66	0.19%	4,382	12.79%	6,216	16.09%	6,152	13.72%
Income from licence fees	-329	-12.48%	1,172	50.80%	-352	-10.12%	-912	-29.17%
Revenues from services	422	14.47%	2,032	60.87%	1,894	35.27%	2,229	30.69%
Other	1,395	44.30%	-678	-14.92%	323	8.35%	2,704	64.55%
Gains from derivative transactions	3,542	x	-1,460	-41.22%	-2,075	-99.66%	1,404	20057.14%
Total sales	9,295	2.28%	42,427	10.18%	-34,830	-7.59%	-1,685	-0.40%
Cost of sales	11,902	3.42%	37,665	10.48%	-15,865	-4.00%	-532	-0.14%
Gross profit	-2,607	-4.35%	4,762	8.31%	-18,965	-30.57%	-1,153	-2.68%
Distribution expenses	-994	-6.61%	689	4.91%	-2,386	-16.19%	-2,062	-16.70%
Administrative expenses	2,656	27.35%	868	7.02%	331	2.50%	-1,294	-9.54%
Other operating revenues	-4,707	-35.13%	-547	-6.29%	4,365	53.60%	1,368	10.94%
Other operating expenses	-2,285	-28.57%	-722	-12.64%	7,359	147.47%	-5,329	-43.15%
Operating profit	-6,691	-16.51%	3,380	9.99%	-19,904	-53.48%	8,900	51.40%
Financial revenues	-1,580	-46.84%	166	9.26%	883	45.07%	-382	-13.44%
Financial expenses	-4,277	-89.50%	179	35.66%	1,614	237.00%	-939	-40.92%
Net financial result	2,697	-191.82%	-13	-1.01%	-731	-57.20%	557	101.83%
Profit before tax	-3,994	-10.21%	3,367	9.58%	-20,635	-53.60%	9,457	52.94%
Income tax expense	-1,045	-14.35%	570	9.14%	-4,121	-60.52%	2,222	82.66%
Profit for the year	-2,949	-9.26%	2,797	9.68%	-16,514	-52.11%	7,235	47.68%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Revenues of ŠKODA AUTO a.s. comprise sales from cars, sales from spare parts and accessories, supplies of components within Volkswagen Group, income from licence fees, revenues from services, gains from derivative transactions, and other revenues, however, the most significant impact on the revenues has the number of cars sold. During the five-year period, the total revenues increased by CZK 15,207 million, representing only 3.7%. The horizontal analysis showed a drop in revenues by almost 7.6% at the turn of 2019/2020 and 0.4% at the turn of 2020/2021. The decreases were caused unequivocally due to the Covid-19 pandemic, which restricted the car sales as a result of closed dealerships and other issues. Moreover, the lack of components deepened the decline as the vehicles could not be sold, and thus the cars stood in the parking lots. The total sales from cars dipped by CZK 15,706 million, representing 4.6%. Also, the revenues from services and supplies of components within the Volkswagen Group were growing continuously and became an important part of sales. The gains from the derivative transaction – hedges receivables increased by 20,057% at the turn of 2020/2021. Other operating income, comprising income from licence fees not relating to the ordinary activities, foreign exchange gains, gains from derivative transactions, gains of non-current assets disposal, reversal of provisions, and reversal of loss allowance provision for receivables, declined by CZK 479 million and financial income, comprising

interest income, foreign exchange gains from cash and spot operations, dividend income, and other financial income, fell by CZK 913 million during the whole period.

The cost of sales, including raw materials, goods, and other supplies, recorded a gradual growth until 2020, and since then, as the Covid-19 pandemic occurred, the company decided to reduce the cost to improve its financial situation. Despite the necessary cost reduction, the cost of sales increased during the five-year period by CZK 33,170 million, representing 9.5%. Furthermore, the distribution expenses, including material costs, advertising, sales promotion, market research, customer service, and costs of shipping, were gradually decreasing and were finally reduced to CZK 10,287 million. They dipped by CZK 4,753 million, representing 31.6%. The administrative expenses, including personnel costs and overheads, were gradually increasing during the five-year period, except for the year 2021. The administrative expenses, especially wages, climbed because a relatively large portion of workers had to remain at home with 85% of their wages as the production of cars was limited after the pandemic. Other operating expenses, including foreign exchange losses, losses from derivative transactions, receivables write-offs and impairments, additions to provisions for mitigating risks, and provisions for other business risks, reached a peak in the amount of CZK 12,349 million in 2020. However, they dropped by CZK 977 million, representing 12.2% during the five-year period. Financial expenses, which comprise interest expense of lease liabilities, other interest expenses, foreign exchange losses from cash and spot operations, factoring fees, and other financial expenses, declined by CZK 3,423 million, representing 71.6%, during the whole period.

The economic result stood positive each year, but it experienced a considerable decline by CZK 9,431 million, representing 29.6%, during the five-year period. A drop in the amount of CZK 16,514 million, representing 52.11%, occurred in 2020 as a result of the issues related to the Covid-19 pandemic. In the following year, the economic result improved despite the lack of components and production limitation by CZK 7,235 million. The year 2019 was the most successful financial year in the history of ŠKODA AUTO a.s. because of record sales and turnover, the value of operating profit, outstanding financial performance and stability, successful measures, and rising volume and better structure of sales. Since 2020, ŠKODA AUTO a.s. has been experiencing critical years as well as other businesses.

4.4.3 Vertical analysis of assets, equity, and liabilities

The vertical analysis illustrates the structure of financial statements and expresses each financial item as a percentage of a base figure. Table 14 shows the performed vertical analysis of the company's assets from 2017 to 2021 in CZK million. Figure 15 represents the percentage of individual items contributing to the total amount of the company's assets.

Table 14 - Vertical analysis of assets (CZK million)

Item	Year				
	2017	2018	2019	2020	2021
Intangible assets	22.03%	25.73%	27.86%	30.83%	33.61%
Property, plant and equipment	61.93%	61.22%	61.70%	59.20%	56.50%
Investments in subsidiaries	0.07%	0.13%	0.42%	0.41%	0.16%
Investments in associates	2.20%	1.98%	1.66%	1.63%	2.02%
Other non-current receivables and financial assets	12.08%	9.65%	6.69%	7.05%	7.10%
Deferred tax asset	1.68%	1.30%	1.67%	0.88%	0.61%
Non-current assets	42.52%	54.20%	58.57%	63.45%	62.60%
Inventories	12.22%	20.12%	24.84%	29.42%	36.85%
Trade receivables	12.80%	22.51%	21.66%	38.00%	26.32%
Other current receivables and financial assets	3.45%	3.85%	0.83%	3.00%	4.49%
Current non-financial assets	4.12%	6.10%	6.97%	7.18%	6.16%
Prepaid income tax	0.00%	1.77%	0.00%	0.00%	0.27%
Cash and cash equivalents	67.41%	45.64%	45.70%	22.40%	25.90%
Current assets	57.48%	45.80%	41.43%	36.55%	37.40%
Total assets	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The structure of total assets was slightly changing during the five-year period. The total assets comprised 42.52% of non-current assets in 2017, and its portion was gradually increasing to 54.20% in 2018, 58.57% in 2019, and finally 63.45% in 2020. In the following year, the non-current assets experienced a gentle drop to 62.60%. The current assets represented 57.48% of total assets in 2017, and since then, they started to decline to 45.80% in 2018, 41.43% in 2019, and finally 36.55% in 2020. At the end of the period, the current assets recorded a slight increase to 37.40%. Two-thirds of non-current assets were created by property, plant, and equipment, followed by intangible assets and non-current receivables and financial assets, representing one-third of total assets. Investments in subsidiaries and associates, together with deferred tax assets, represented the smallest portion of the non-current assets. At the beginning of the period, the cash and cash equivalents created two-thirds of current assets, followed by trade receivables, inventories, and current non-financial

assets. However, cash and cash equivalents were decreasing gradually, and in 2020, they dipped significantly to 22.40%. Trade receivables reached a peak of 36% in 2020, which is three times higher than at the beginning of the five-year period. The inventories rose considerably because of the unfinished cars and thus contributed significantly to the total amount of current assets. Current receivables and other financial assets, together with prepaid income tax, represent the smallest portion of current assets. Figure 14 shows the portion of current and non-current assets on total assets from 2017 to 2021.

Portion of current and non-current assets (2017-2021)

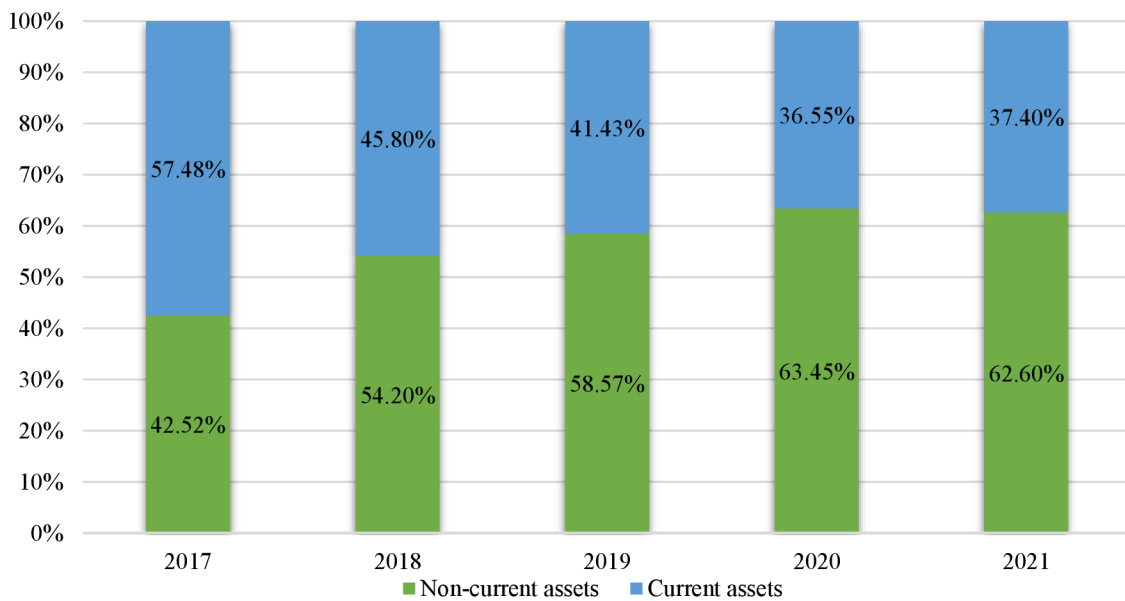


Figure 14 - Portion of current and non-current assets (2017-2021)
 Source: Own creation according to ŠKODA AUTO a.s. (2017-2021)

Figure 14 shows the growing trend of non-current assets on total assets during the five-year period. In 2021, the growth of non-current assets stopped as the current assets increased more noticeably as a result of the Covid-19 crisis when the level of inventories, especially work in progress, increased due to a decrease in car production and a shortage of components. Table 15 illustrates the performed vertical analysis of equity and liabilities from 2017 to 2021.

Table 15 - Vertical analysis of equity and liabilities (2017-2021)

Item	Year				
	2017	2018	2019	2020	2021
Share capital	14.22%	14.96%	15.24%	17.60%	16.46%
Share premium	1.34%	1.41%	1.44%	1.66%	1.55%
Retained earnings	75.05%	76.18%	80.16%	75.19%	77.43%
Other reserves	9.38%	7.44%	3.16%	5.54%	4.56%
Equity	46.83%	50.92%	45.37%	41.63%	43.86%
Non-current financial liabilities	0.56%	1.32%	11.52%	9.10%	8.90%
Non-current non-financial liabilities	20.03%	31.69%	27.49%	25.66%	26.89%
Non-current provisions	79.41%	66.99%	60.99%	65.24%	64.21%
Non-current liabilities	6.68%	8.93%	10.29%	11.59%	11.27%
Trade liabilities	37.17%	65.41%	65.58%	62.04%	56.08%
Other current financial liabilities	33.45%	0.56%	1.64%	1.29%	1.66%
Current non-financial liabilities	7.72%	10.84%	14.20%	11.79%	14.26%
Current income tax liabilities	1.86%	0.00%	0.64%	0.24%	0.00%
Current provision	19.80%	23.19%	17.94%	24.63%	28.00%
Current liabilities	46.49%	40.15%	44.34%	46.77%	44.86%
Total equity and liabilities	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The liabilities represented a larger portion of total equity and liabilities than the equity during the five-year period, except in the year 2018. In 2018, the equity reached a peak, representing 50.92% of total equity and liabilities. A year later, however, it dipped to 45.37% as a result of paying out the dividend from retained earnings and drawing on the reserves. In 2021, the portion of equity experienced a slight growth to 43.86%. The largest portion of equity creates retained earnings, followed by share capital and reserves. Current liabilities created 46.49% of total liabilities and equity in 2017, however, they fell to 40.15% in 2018. Since 2019, the current liabilities accounted for 44-46% of total liabilities and equity. The largest portion of current liabilities represented trade liabilities, which climbed considerably from the previous 37.17% in 2017 to 65.41% in 2018. In the following years, the trade receivables still kept a high percentage. The other current financial liabilities dropped tremendously from 33.45% of current assets in 2017 to 0.56% in 2018. The current provisions, which created approximately one-fifth of current assets, experienced a growing trend, except 2019, as well as current non-financial liabilities. The smallest portion of current assets is represented by current income tax liabilities. Non-current liabilities were gradually rising, and their portion of total equity and liabilities almost doubled from 6.68% in 2017 to 11.59% in 2020. In 2021, they slightly declined but still hold the portion of total equity and liabilities above 11%. The largest portion of non-current assets is represented by non-current provisions, which reached

a peak at 79.41% in 2017, representing more than two-thirds of non-current assets. Despite subsequent increases and decreases, they hold a portion of non-current assets higher than 60%. The second largest portion of non-current assets is represented by non-current non-financial liabilities, which accounted for 20.03% of non-current liabilities in 2017 and increased during the five-year period to 26.89%. The non-current financial liabilities portion jumped from 0.56% in 2017 to 8.90% in 2021. Despite this increase, they are considered the smallest portion of non-current assets. The portion of equity, current, and non-current liabilities is shown in Figure 15.

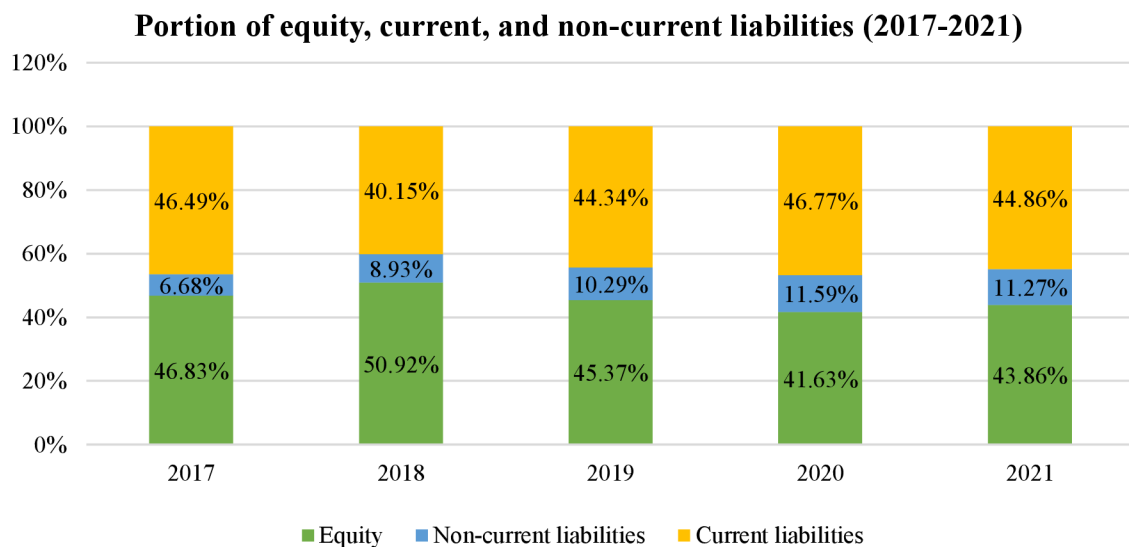


Figure 15 - Portion of equity, current, and non-current liabilities (2017-2021)
 Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Figure 15 shows a decrease in equity caused mainly by paying out the dividend and decreased economic result. The equity portion of total equity and liabilities was the most prominent in 2018. Oppositely, the current and non-current liabilities portions were the largest in 2020 as a result of the pandemic crisis. Since then, ŠKODA AUTO a.s. has strived to balance the portion of equity and liabilities.

4.4.4 Vertical analysis of revenues, expenses, and income

The vertical analysis of the income statement items will be performed separately in order to achieve better clarity. Table 16 illustrates the vertical analysis of revenues from 2017 to 2021.

Table 16 - Vertical analysis of revenues (2017-2021)

Item	Year				
	2017	2018	2019	2020	2021
Sales of cars	84.30%	83.34%	83.23%	80.96%	77.53%
Sales of spare parts and accessories	5.17%	5.15%	5.13%	5.03%	5.66%
Supplies of components (VW Group)	8.39%	8.22%	8.41%	10.57%	12.07%
Income from licence fees	0.65%	0.55%	0.76%	0.74%	0.52%
Revenues from services	0.72%	0.80%	1.17%	1.71%	2.25%
Other	0.77%	1.09%	0.84%	0.99%	1.63%
Gains from derivative transactions	0.00%	0.85%	0.45%	0.00%	0.33%
Total sales	96.05%	97.55%	97.85%	96.51%	96.28%
Other operating revenues	3.16%	2.03%	1.74%	2.85%	3.16%
Financial revenues	0.80%	0.42%	0.42%	0.65%	0.56%
Total revenues	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Sales, especially sales of cars, represent the most considerable portion of total revenues. Sales represented around 96-97% of total revenues during the five-year period. The sales were gradually increasing as a result of increased deliveries to customers and product prices. The pandemic crisis and supply chain issues had a significant, negative impact on sales. Supplies of components within Volkswagen Group grew from 8.39% in 2017 to 12.07% of total sales in 2021. The portion of sales of spare parts and accessories represented around 5% of total sales during the whole period. Income from licence fees, revenues from services, and other revenues create only a minor portion of total sales, however, the importance of service revenues will boost. The other operating revenues experienced ups and downs but created the same portion (3.16%) of total revenues in 2021 as in 2017. At the beginning of the five-year period, the financial revenues represented 0.80% of total revenues, and since then, they slightly declined to 0.42%. In 2021, the financial revenues created 0.56% of total revenues. Table 17 shows the vertical analysis of expenses from 2017 to 2021.

Table 17 - Vertical analysis of expenses (2017-2021)

Item	Year				
	2017	2018	2019	2020	2021
Cost of sales	88.58%	90.24%	90.76%	89.81%	91.39%
Distribution expenses	3.83%	3.53%	3.37%	2.91%	2.47%
Administrative expenses	2.47%	3.10%	3.02%	3.20%	2.95%
Other operating expenses	2.04%	1.43%	1.14%	2.91%	1.69%
Financial expenses	1.22%	0.13%	0.16%	0.54%	0.33%
Income tax expense	1.86%	1.57%	1.56%	0.63%	1.18%
Total expenses	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The most significant portion of expenses is represented by the cost of sales, including raw materials, goods, and supplies. The cost of sales portion of total expenses increased from 88.58% to 91.39% during the five-year period. The expenses were increasing mainly because of the increased prices of raw materials and the pandemic crisis. The distribution expenses were gradually falling from 3.83% in 2017 to 2.47% in 2021 as a result of the strict cost reduction. The administrative expenses experienced up and downs but created a portion of 2.4-3.2% of total expenses over the years. Moreover, ŠKODA AUTO a.s. strives to reduce financial expenses. The financial expenses declined from 1.22% in 2017 to 0.13% in 2018, and since then, they held a minor portion of 0.13-0.54% of total expenses. Other operating expenses represented 2.04% of total expenses in 2017 but were reduced to 1.69% at the end of the period. Table 18 shows the vertical analysis of the economic result from 2017 to 2021.

Table 18 - Vertical analysis of economic result (2017-2021)

Item	Year				
	2017	2018	2019	2020	2021
Profit before tax	100.00%	100.00%	100.00%	100.00%	100.00%
Operating profit	103.59%	96.33%	96.68%	96.94%	95.96%
Net financial result	-3.59%	3.67%	3.32%	3.06%	4.04%
Profit for the year	81.38%	82.24%	82.31%	84.95%	82.03%
Income tax expense	18.62%	17.76%	17.69%	15.05%	17.97%

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The vertical analysis represents that the profit before tax comprises mainly the operating profit during the period. In 2017, the operating profit even exceeded the portion of 103% of profit before tax, however, the net financial result turned out to be negative, and thus its portion of profit before tax was negative, too. Since 2018, the operating profit has accounted for 95-96% of profit before tax, and the rest was made up of net financial result.

4.5 Analysis of differential indicators of ŠKODA AUTO a.s.

In this chapter, the net working capital of the company ŠKODA AUTO a.s. will be calculated. In order to determine whether the calculated value is favourable or not, it will be further compared with the net working capital of another volume brand - SEAT/CUPRA. Volkswagen AG publishes both Volkswagen Group and Volkswagen AG annual reports, which include only consolidated financial statements. All brands publish their annual reports separately, except Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. For this reason, these brands could not be a comparator as their detailed financial figures are unknown, and thus SEAT/CUPRA will be the only comparator. The data source for the analysis of differential indicators is the statements of financial position of the companies. To be able to compare ŠKODA AUTO a.s. and SEAT/CUPRA financial figures, currencies must be converted into euros. The current exchange rate of the Czech National Bank is CZK 24.485/EUR as of April 8, 2022. Table 19 shows the development of the net working capital in € million of ŠKODA AUTO a.s. and SEAT/CUPRA from 2017 to 2021. All values are calculated based on the annual reports, the primary source of information.

Table 19 - Net working capital of ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Net working capital	Year				
	2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	1,125.63	505.98	-287.03	-951.68	-705.66
SEAT/CUPRA	-1,139.10	-1,287.50	-1,486.20	-2,181.80	-2,558.60

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The net working capital of ŠKODA AUTO a.s. reached a peak of €1,125.63 million in 2017, and since then, it was gradually decreasing to €505.98 million in 2018 and even slumped to negative results, especially in 2020, as a result of higher current liabilities and lowered current assets, which were caused by the pandemic crisis. However, based on the calculated data, ŠKODA AUTO a.s. strives to improve the results. On the other hand, the SEAT/CUPRA net working capital is falling deeply. Each year, the results were negative, starting with €-1,139.10 million in 2017 and ended doubling lower with a result of €-2,558.60 million. The negative values for an extended period of time indicate potential concerns for creditors since the company may not have sufficient financial strength to cover its current liabilities. The development of the companies' net working capital is illustrated in Figure 16.

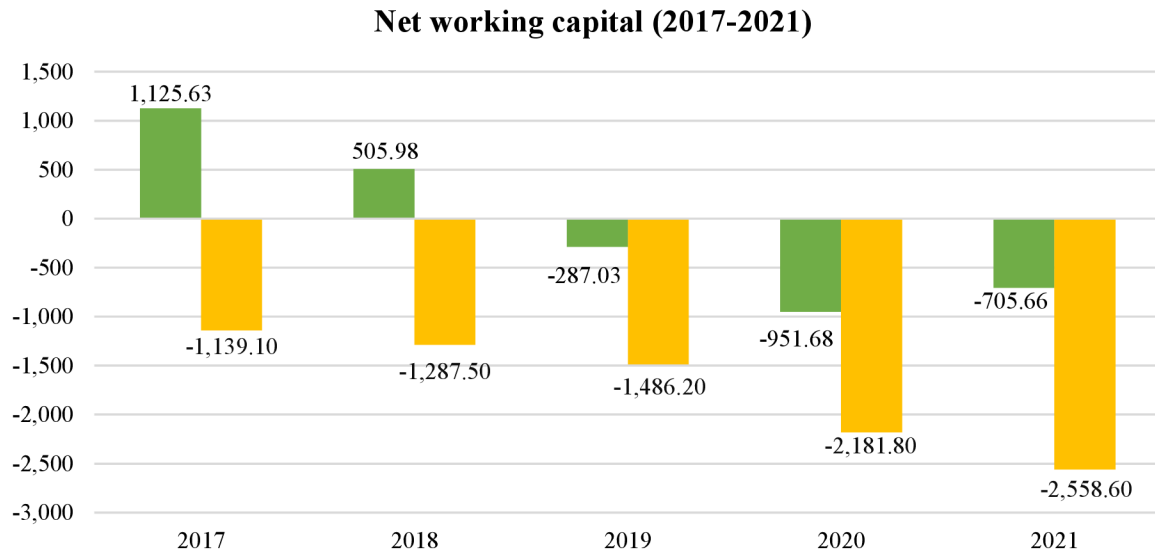


Figure 16 - Net working capital (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Despite the fact that the net working capital is much better in the case of ŠKODA AUTO a.s., it needs to be improved as only positive net working capital is desirable. There is a gradual decline in ŠKODA AUTO a.s. net working capital, which is not a good signal for creditors who may not be willing to lend money to a company in the future. Nevertheless, an effort to increase the company's net working capital is visible.

4.6 Analysis of ratio indicators of ŠKODA AUTO a.s.

This chapter provides calculations of activity, profitability, liquidity, and leverage ratios of the company ŠKODA AUTO a.s. from 2017 to 2021, and the ratios will be again compared to the SEAT/CUPRA ratios in order to verify whether they are favourable or not. For the calculation of ratio indicators, the data from annual reports, which are considered a primary source of information, is used.

4.6.1 Activity ratios

The data used for the calculation of activity ratios, obtained from the annual reports of both companies, are listed in Table 20. The companies' activity ratios, including total assets turnover, inventory turnover, days of inventory on hand, receivables turnover, days of sales outstanding, payables turnover, and the number of days of payables, are listed in Table 21.

Table 20 - Data used for calculation of the activity ratios (2017-2021)

ŠKODA AUTO a.s. (CZK million)

Total assets	250,859	219,318	241,635	227,983	231,463
Total sales	407,400	416,695	459,122	424,292	422,607
Inventories	17,614	20,211	24,863	24,516	31,901
Trade receivables	18,452	22,614	21,686	31,665	22,784
Trade liabilities	43,350	57,600	70,267	66,153	58,230

SEAT/CUPRA (€ million)

Total assets	5,044	5,064	5,843	5,501	5,562
Total sales	8,487	9,991	11,157	8,784	9,257
Inventories	382	423	547	479	454
Trade receivables	808	849	659	553	593
Trade payables	1,994	1,871	2,067	2,006	1,961

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Table 21 - Activity ratios (2017-2021)

Company	Activity ratios	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	Total asset turnover	1.62	1.90	1.90	1.86	1.83
	Inventory turnover	23.13	20.62	18.47	17.31	13.25
	Days of inventory on hand	15.78	17.70	19.77	21.09	27.55
	Receivables turnover	22.08	18.43	21.17	13.40	18.55
	Days of sales outstanding	16.53	19.81	17.24	27.24	19.68
	Payables turnover	9.40	7.23	6.53	6.41	7.26
	Number of days of payables	38.84	50.45	55.86	56.91	50.29
SEAT/CUPRA	Total asset turnover	1.68	1.97	1.91	1.60	1.66
	Inventory turnover	22.20	23.63	20.40	18.33	20.39
	Days of inventory on hand	16.44	15.45	17.89	19.91	17.90
	Receivables turnover	10.51	11.77	16.93	15.88	15.61
	Days of sales outstanding	34.73	31.01	21.56	22.98	23.38
	Payables turnover	4.26	5.34	5.40	4.38	4.72
	Number of days of payables	85.75	68.36	67.62	83.37	77.32

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

When comparing the companies' total asset turnover, SEAT/CUPRA achieved higher results until 2019, which indicates that the company was more able to generate sales from its assets. However, the results have reversed, and since 2020, ŠKODA AUTO a.s. has gained a higher turnover of total assets than SEAT/CUPRA. Generally, when the value of total asset turnover exceeds 1, the company is efficient enough to use its assets to produce sales.

The inventory turnover of ŠKODA AUTO a.s. had a declining trend during the five-year period, and days of inventory on hand were gradually increasing. Contrary, SEAT/CUPRA increased its inventory turnover to 23.63 in 2018 but then experienced a slight decline. At the end of the period, the SEAT/CUPRA inventory ratio increased to 20.39.

Days of inventory on hand were firstly decreasing, but in 2018 and 2019, they grew to 19.91, and thus SEAT/CUPRA approaches the ideal values more than ŠKODA AUTO a.s. In general, the higher the inventory turnover and shorter days of inventory on hand, the better the company's situation. For this reason, the inventory turnover and days of inventory on hand of ŠKODA AUTO a.s. should be improved.

Receivables turnover of ŠKODA AUTO a.s. experienced ups and downs during the five-year period, starting with 22.08 in 2017 and ending with 18.55 in 2021. Days of sales outstanding were 16.53 in 2017, 19.58 in 2018, 17.24 in 2019, 27.24 in 2020, and 19.68 in 2021. The recommended situation is when the receivables turnover is increasing while days of sales payables are decreasing, which did not happen in the case of ŠKODA AUTO a.s. SEAT/CUPRA receivables turnover, oppositely, climbed from 10.51 in 2017 to 15.61 in 2021, and the days of sales outstanding declined from 34.73 in 2017 to 23.38 in 2021. Nevertheless, the SEAT/CUPRA has lower values of receivables turnover and higher values of days of sales outstanding than ŠKODA AUTO a.s. and thus lags behind the Czech car manufacturer.

Payables turnover of ŠKODA AUTO a.s. fell from 9.40 in 2017 to 6.41 in 2020 and then rose again to 7.26 in 2021. Overall, the payables turnover dipped during the five-year period. On the other hand, the number of days of payables was gradually growing from 38.84 in 2017 to 50.29 in 2021. Payables turnover of SEAT/CUPRA stood at 4.26 in 2017 and increased to 4.72 in 2021. The number of days of payables, oppositely, reached 85.75 in 2017 and dropped to 77.32 during the five-year period. Generally, the optimal situation occurs when the payables turnover ratio is increasing and the number of days of payables is decreasing, and thus ŠKODA AUTO a.s. should improve the payables ratio and number of days of payables in the future. Nevertheless, the Czech car manufacturer reached higher values than its comparator. Also, the number of days of payables should be longer than the days of sales outstanding to not disrupt the company's financial balance, which is met by both companies. An excessively low payables turnover ratio and high days payable indicate the company's trouble making payments on time or exploitation of supplier terms, which could potentially be a SEAT/CUPRA issue based on the results.

4.6.2 Liquidity ratios

Liquidity ratios help to analyse the company's solvency or, in other words, the ability to repay its current liabilities by converting assets into cash. Table 22 contains the data obtained from the annual reports of both companies, which are needed to calculate the individual ratios. The companies' current ratio, quick ratio, and cash ratio are listed in Table 23. For graphical comparison, the liquidity ratios of both companies are shown in Figure 17.

Table 22 - Data used for calculation of the liquidity ratios (2017-2021)

ŠKODA AUTO a.s. (CZK million)

Current assets	144,184	100,447	100,111	83,332	86,561
Current liabilities	116,623	88,058	107,139	106,634	103,839
Inventories	17,614	20,211	24,863	24,516	31,901
Cash and cash equivalents	97,201	45,846	45,753	18,669	22,422

SEAT/CUPRA (€ million)

Current assets	1,899	1,599	1,759	1,103	1,122
Current liabilities	3,039	2,887	3,245	3,285	3,662
Inventories	382	423	547	479	454
Cash and cash equivalents	0	1	1	0	0

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Table 23 - Liquidity ratios (2017-2021)

Company	Liquidity ratios	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	Current ratio	1.24	1.14	0.93	0.78	0.83
	Quick ratio	1.09	0.91	0.70	0.55	0.53
	Cash ratio	0.83	0.52	0.43	0.18	0.22
SEAT/CUPRA	Current ratio	0.63	0.55	0.54	0.34	0.31
	Quick ratio	0.50	0.41	0.37	0.19	0.18
	Cash ratio	0.00	0.00	0.00	0.00	0.00

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Liquidity ratios (2017-2021)

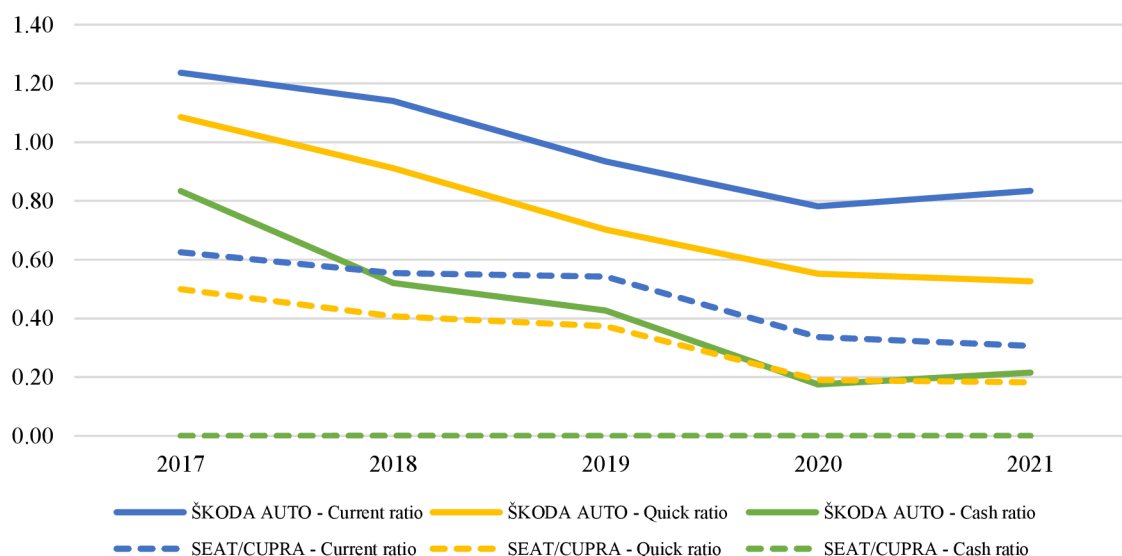


Figure 17 - Liquidity ratios (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The current ratio of ŠKODA AUTO a.s. dropped from 1.24 in 2017 to 0.83 in 2021. This slump was caused by significantly lower cash and cash equivalents. As a result, the values are below recommended interval of 1.5-2.5 and thus should be improved. On the other hand, the current ratio of SEAT/CUPRA decreased from 0.63 in 2017 to twice less 0.31 in 2021. These values are considered a serious financial issue as the current assets do not cover current liabilities, and thus the company is not able to repay its current liabilities. The quick ratio represents the ability of the company to repay its current liabilities without selling inventories.

The quick ratio of ŠKODA AUTO a.s. experienced a declining trend from 1.09 in 2017 to twice less 0.53 in 2021 as a result of lower cash and cash equivalents. Moreover, the inventories grew as a result of work in progress. For this reason, the quick ratio values of ŠKODA AUTO a.s. are below the recommended interval of 1-1.5, except in 2017, and thus should be improved, too. SEAT/CUPRA quick ratio again signalizes serious liquidity issues for creditors as it declined from an already deficient value of 0.50 in 2017 to 0.18 in 2021.

The cash ratio evaluates the company's immediate ability to pay off its current liabilities. Despite the decreasing trend of ŠKODA AUTO a.s. cash ratio, it occurs in the recommended interval of 0.2-0.5 during the five-year period, except in 2020, when it dipped to 0.18 as a result of the pandemic crisis. SEAT/CUPRA's interesting fact is its published amount of

cash and cash equivalents, which is three times zero. Consequently, the cash ratio of SEAT/CUPRA was also zero each year, which is a signal of the financial imbalance.

4.6.3 Profitability ratios

Profitability ratios provide information about the company's profitability of sales, assets, and equity. The data used for the calculation of profitability ratios, obtained from the annual reports of both companies, are shown in Table 24. The well-known profitability ratios, including return on assets, return on equity, return on sales, and return on capital employed, are calculated in Table 25. All calculated profitability ratios of ŠKODA AUTO a.s. and SEAT/CUPRA are shown in Figure 18.

Table 24 - Data used for calculation of the profitability ratios (2017-2021)

ŠKODA AUTO a.s. (CZK million)					
EBIT	40,531	33,840	37,220	17,316	26,216
Total assets	250,859	219,318	241,635	227,983	231,463
EAT	31,841	28,892	31,689	15,175	22,410
Equity	117,484	111,674	109,626	94,920	101,528
Sales	407,400	416,695	459,122	424,292	422,607
Current liabilities	17,614	20,211	24,863	24,516	31,901
SEAT/CUPRA (€ million)					
EBIT	116	223	352	-418	-371
Total assets	5,044	5,064	5,843	5,501	5,562
EAT	281	294	346	-194	-256
Equity	1,516	1,664	1,991	1,512	1,208
Sales	8,487	9,991	11,157	8,784	9,257
Current liabilities	3,039	2,887	3,245	3,285	3,662

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Table 25 - Profitability ratios (2017-2021)

Company	Profitability ratios	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	ROCE	17.38%	17.00%	17.17%	8.51%	13.14%
	ROA	16.16%	15.43%	15.40%	7.60%	11.33%
	ROS	7.82%	6.93%	6.90%	3.58%	5.30%
	ROE	27.10%	25.87%	28.91%	15.99%	22.07%
SEAT/CUPRA	ROCE	5.77%	10.26%	13.30%	-8.76%	-19.50%
	ROA	2.29%	4.41%	6.02%	-7.59%	-6.66%
	ROS	3.31%	2.94%	3.10%	-2.21%	-2.77%
	ROE	18.55%	17.68%	17.35%	12.84%	21.22%

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Profitability ratios (2017-2021)

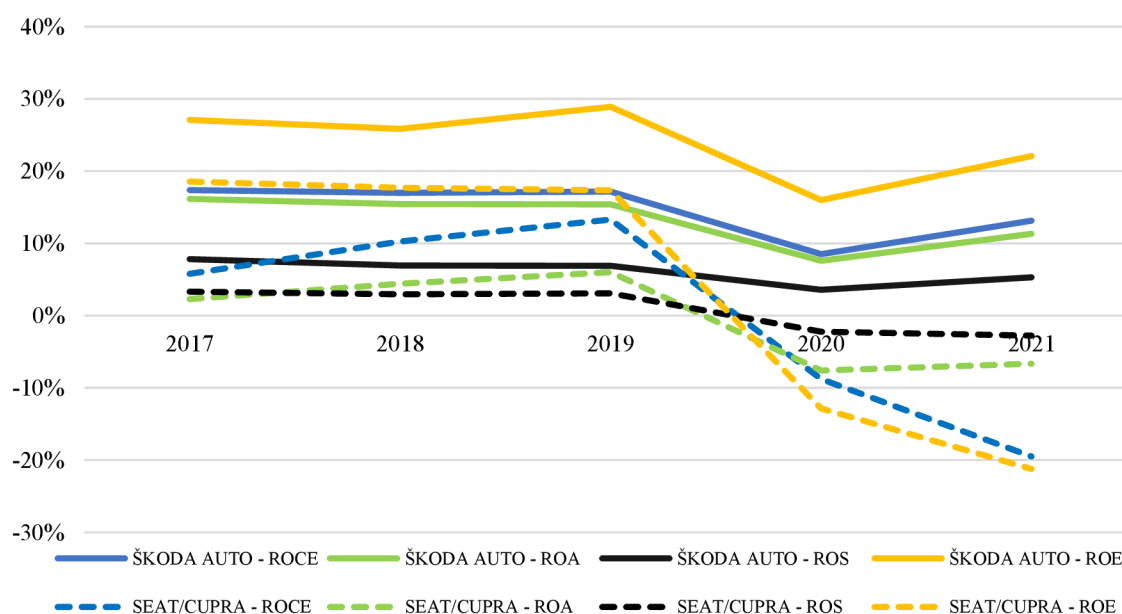


Figure 18 - Profitability ratios (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The return on capital employed of ŠKODA AUTO a.s. ranged around 17% until 2019. However, it dropped to 8.51% in 2020 as a result of twice lower EBIT. Moreover, the current liabilities increased, which also caused such a fall. In 2021, the company reached EBIT in the amount of CZK 26,216 million, which is CZK 8,900 million more than in 2020, and thus the profitability of capital employed climbed significantly. SEAT/CUPRA, on the other hand, experienced a gradual growth of return on capital employed from 2017 to 2019. Nevertheless, it deepened to negative values in 2020 as a result of the pandemic crisis and probably the lack of components as the whole VW Group was facing this issue. The negative values deepened again more significantly in 2021, which indicates that the company financially struggles. Overall, ŠKODA AUTO a.s. improves its ROCE and generates profit from its capital employed.

The return on assets decreased slightly from 16.16% to 15.43% until 2019. However, it deepened to 7.60% in 2020 due to decreased EAT. At the end of the five-year period, the ROE increased to 11.33%, which means that the company survived a challenging year and improved its ability to generate profit from its assets. Contrary, SEAT/CUPRA's ROE declined tremendously and deepened to negative values again, which is also the case of other profitability ratios as the company's EBIT/EAT was negative in 2020 and 2021. The return of sales of ŠKODA AUTO a.s. is relatively low during the five-year period and could be

improved in the future. However, the ROS is positive all the time, despite all the bottlenecks with production, the lack of components, and thus the limited possibility of sales. SEAT/CUPRA experienced the same slump as in the previous profitability ratios.

The return on equity of ŠKODA AUTO a.s. experienced increases and decreases during the five-year period. The increases in ROE were caused mainly by paying out the dividend from retained earnings. The decreases in ROE are the cause of significantly lower EAT. Despite these trends, the ratio reached 22.07% in 2021, which indicates that the company is successful enough in generating profit from its equity. SEAT/CUPRA experienced the same drop as in the above-mentioned profitability ratios.

4.6.4 Leverage ratios

The leverage ratios measure the company's solvency and ability to repay its non-current liabilities. The financial figures obtained from the companies' statements of financial position and used for the calculation of leverage ratios are listed in Table 26. The calculated leverage ratios, including debt ratio, equity ratio, and debt-to-equity ratio, are summarized in Table 27 and graphically presented in Figure 19.

Table 26 - Data used for calculation of the leverage ratios (2017-2021)

ŠKODA AUTO a.s. (CZK million)					
Total assets	250,859	219,318	241,635	227,983	231,463
Total liabilities	133,375	107,644	132,009	133,063	129,935
Equity	117,484	111,674	109,626	94,920	101,528
SEAT/CUPRA (€ million)					
Total assets	5,044	5,064	5,843	5,501	5,562
Total liabilities	3,528	3,400	3,852	3,989	4,355
Equity	1,516	1,664	1,991	1,512	1,208

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Table 27 - Leverage ratios (2017-2021)

Company	Leverage ratios	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	Debt ratio	53.17%	49.08%	54.63%	58.37%	56.14%
	Equity ratio	46.83%	50.92%	45.37%	41.63%	43.86%
	Debt-to-equity ratio	113.53%	96.39%	120.42%	140.18%	127.98%
SEAT/CUPRA	Debt ratio	69.95%	67.14%	65.92%	72.52%	78.29%
	Equity ratio	30.05%	32.86%	34.08%	27.48%	21.71%
	Debt-to-equity ratio	232.75%	204.34%	193.41%	263.84%	360.58%

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

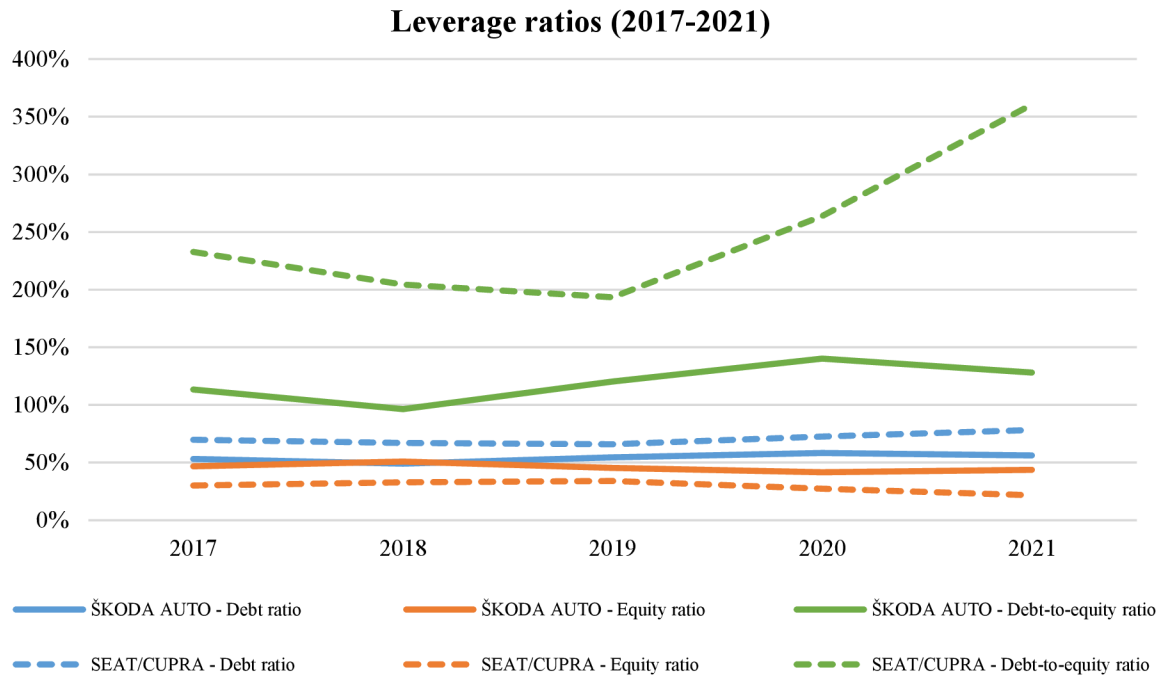


Figure 19 - Leverage ratios (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The debt ratio of ŠKODA AUTO a.s. stood at 53.17% in 2017 but then slightly declined to 49.08% in 2018, which is preferred for debt ratio, mainly as a result of lower total assets. In 2018 and 2019, the debt ratio rose again to 58.37% but was improved again in 2021 to 56.14%. The company's debt ratio thus met the recommended values of 30-60% during the whole period, which indicates the sufficient solvency of the company. However, the ratio is very close to the upper limit, and therefore the company should implement measures, for example, to reduce liabilities or increase assets in order to lower this ratio. The SEAT/CUPRA debt ratio, on the other hand, exceeded the recommended values during the five-year period, which indicates that the company is facing leverage issues.

The equity ratio of ŠKODA AUTO a.s. reached a peak of 50.92% in 2018 as a consequence of the significant decrease in total assets. Although, it declined in 2019 and 2020 to 41.63% as a result of decreased equity. At the end of the period, the equity ratio rose to 43.86%. The company's equity ratio met the recommended values of 70-40% during the period but, conversely to the debt ratio, is very close to the lower level, and thus the company should focus on increasing the equity or reducing the total assets. The SEAT/CUPRA equity ratio repeatedly did not reach the preferred values.

The debt-to-equity ratio of ŠKODA AUTO a.s. was 113.53% in 2017 but experienced growth to 127.98% in 2021. The ideal value should not be higher than 200%, which was

successfully fulfilled by the company. On the other hand, the SEAT/CUPRA debt-to-equity ratio achieved worrying values often much higher than 200%, except in 2019. In 2021, the debt-to-equity ratio was almost twice higher (360.58%) than the risk value, which indicates a certain financial risk for creditors as the company finances its growth with debt.

4.7 Analysis of cumulative indicators of ŠKODA AUTO a.s.

This chapter deals with the impact of individual ratios on the company's overall financial health using bankruptcy and credibility models. Firstly, the Altman Z-score, derived for companies publicly traded on a stock exchange market, is calculated. Secondly, the Index IN05, which focuses on the Czech companies, is determined. Finally, the well-known Kralicek Quick Test reveals the financial health of the companies. The indicators are calculated based on the annual reports of the companies as they are considered a primary source of information.

4.7.1 Altman Z-score

Table 28 includes data obtained from companies' annual reports from 2017 to 2021, which are further used for the calculation of the Altman Z-score. Afterwards, Table 29 illustrates the calculated Z-scores of the companies ŠKODA AUTO a.s. and SEAT/CUPRA, which are also shown graphically in Figure 20.

Table 28 - Data used for calculation of the Altman Z-score (2017-2021)

ŠKODA AUTO a.s. (CZK million)					
Net working capital	1,126	506	-287	-952	-706
Total assets	250,859	219,318	241,635	227,983	231,463
Retained earnings	88,177	85,078	87,877	71,372	78,612
EBIT	40,531	33,840	37,220	17,316	26,216
Equity	117,484	111,674	109,626	94,920	101,528
Total sales	407,400	416,695	459,122	424,292	422,607
Total liabilities	133,375	107,644	132,009	133,063	129,935
SEAT/CUPRA (€ million)					
Net working capital	-1,139	-1,288	-1,486	-2,182	-2,559
Total assets	5,044	5,064	5,843	5,501	5,562
Retained earnings	0	0	0	0	0
EBIT	116	223	352	-418	-371
Equity	1,516	1,664	1,991	1,512	1,208
Total liabilities	3,528	3,400	3,852	3,989	4,355
Sales	8,487	9,991	11,157	8,784	9,257

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Table 29 - Altman Z-score (2017-2021)

Company	Altman Z-score	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	X1	0.004	0.002	-0.001	-0.004	-0.003
	X2	0.352	0.388	0.364	0.313	0.340
	X3	0.162	0.154	0.154	0.076	0.113
	X4	0.881	1.037	0.830	0.713	0.781
	X5	1.624	1.900	1.900	1.861	1.826
	Z	3.183	3.577	3.414	2.973	3.140
SEAT/CUPRA	X1	-0.226	-0.254	-0.254	-0.397	-0.460
	X2	0.000	0.000	0.000	0.000	0.000
	X3	0.023	0.044	0.060	-0.076	-0.067
	X4	0.430	0.489	0.517	0.379	0.277
	X5	1.683	1.973	1.910	1.597	1.664
	Z	1.745	2.107	2.113	1.098	1.059

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

Altman Z-score (2017-2021)

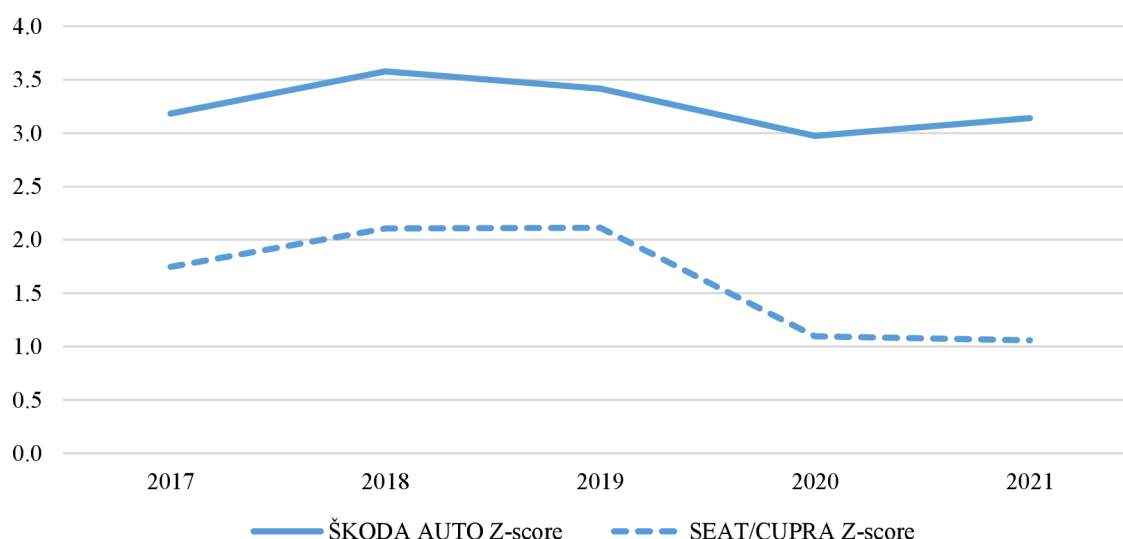


Figure 20 - Altman Z-score (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The Altman Z-score of both companies was calculated using the formula suitable for publicly traded companies: $Z = 1,2X_1 + 1,4X_2 + 3,3X_3 + 0,6X_4 + 1X_5$. The Altman Z-score of ŠKODA AUTO a.s. reached 3.183 in 2017 and increased to 3.577 in 2018. A year later, the Altman Z-score experienced a slight decline to 3.414. The critical year 2020 caused another drop to 2.973, however, the company improved the Altman Z-score to 3.140 at the end of the five-year period. Based on the recommended values, the company is considered financially stable when the Altman Z-score is higher than 2.99. ŠKODA AUTO a.s. exceeded recommended values, except in 2020.

SEAT/CUPRA's Z-score was growing until 2019 to 2.113 but then dipped considerably to 1.098 in 2020 as a result of the Covid-19 pandemic issues. Nevertheless, the company's Z-score even worsened in 2021 to 1.059. The values of the Z-score in the range of 1,81-2,98, called a grey area, indicate that the financial stability of the company cannot be defined precisely. The company's Z-score got maximally into the grey area in 2018 and 2019. In the other years, the company's values even fell under 1,81, signaling significant financial issues and thus a high possibility of bankruptcy.

4.7.2 Index IN05

Index IN05, created by Inka and Ivan Neumaier, is specially modified for the Czech conditions as well as other IN Indexes. For this reason, the Index IN05 will be applied only to the Czech car manufacturer ŠKODA AUTO a.s. since the results of SEAT/CUPRA could be distorted. The annual reports' data used for the calculation of IN05 are listed in Table 30. Then, the company's IN05 indexes from 2017 to 2021 are calculated in Table 31 and graphically represented in Figure 21.

Table 30 - Data used for calculation of the Index IN05 (2017-2021)

ŠKODA AUTO a.s. (CZK million)

Total assets	250,859	219,318	241,635	227,983	231,463
Total liabilities	133,375	107,644	132,009	133,063	129,935
EBIT	40,531	33,840	37,220	17,316	26,216
Interest expenses	4,779	502	681	2,295	1,356
Total revenues	424,170	427,178	469,224	439,642	438,943
Current assets	144,184	100,447	100,111	83,332	86,561
Current liabilities	116,623	88,058	107,139	106,634	103,839

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

Table 31 - Index IN05 (2017-2021)

Company	Index IN05	Year				
		2017	2018	2019	2020	2021
ŠKODA AUTO a.s.	X1	1.881	2.037	1.830	1.713	1.781
	X2	8.481	67.410	54.655	7.545	19.333
	X3	0.162	0.154	0.154	0.076	0.113
	X4	1.691	1.948	1.942	1.928	1.896
	X5	1.236	1.141	0.934	0.781	0.834
	Index IN05	1.69	4.09	3.53	1.30	1.93

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

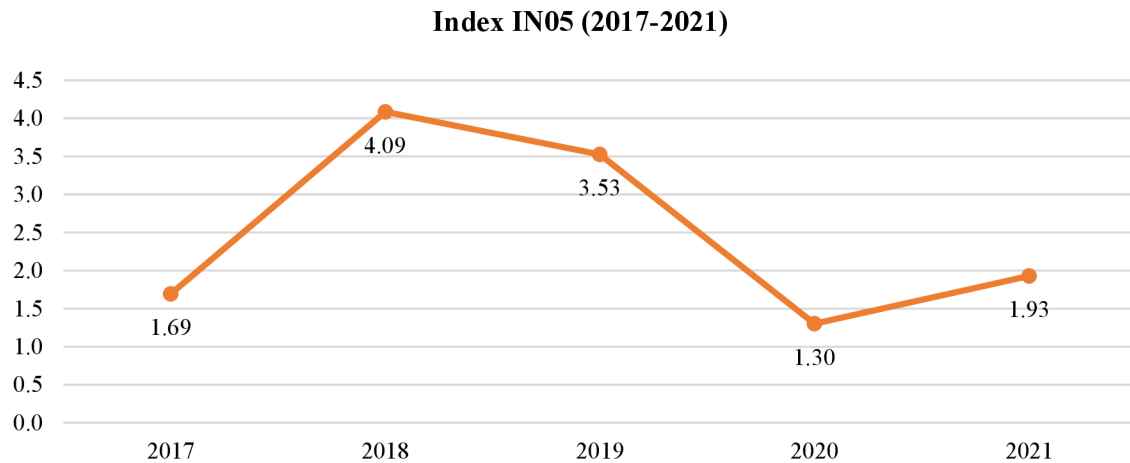


Figure 21 - Index IN05 (2017-2021)

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

The Index IN05, a modified complex variant of Neumaier's IN Indexes, was calculated using the formula applicable for Czech companies: $IN05 = 0,13X1 + 0,04X2 + 3,97X3 + 0,21X4 + 0,09X5$. The Index IN05 of ŠKODA AUTO a.s. reached 1.69 in 2017 but then jumped to 4.09 in 2018. In 2019, it decreased slightly to 3.53. Afterwards, the value dropped significantly to 1.30 as a result of the pandemic crisis, shortage of components, and thus affected financial figures. However, an improvement in financial figures is noticeable as the IN05 climbed to 1.93 in 2021. Overall, the IN05 exceeded value 1.6 four times during the five-year period, which indicates that the company creates value and thus is financially stable, except for the challenging year 2020, when the company got into the grey area. A grey area is a zone between values 0.9 to 1.6 where the company does not create value, but it is not going bankrupt.

4.7.3 Kralicek Quick Test

Kralicek Quick Test is a well-known credibility model examining the financial stability and profit situation of the company. The annual reports' data used for the calculation of Quick Test are listed in Table 32. Afterwards, the Kralicek Quick Test of ŠKODA AUTO a.s. and SEAT/CUPRA from 2017 to 2021 are calculated based on the evaluation scale of the Kralicek Quick Test and compared in Table 33 and Table 34.

Table 32 - Data used for calculation of the Kralicek Quick Test (2017-2021)

ŠKODA AUTO a.s. (CZK million)

Equity	117,484	111,674	109,626	94,920	101,528
Total assets	250,859	219,318	241,635	227,983	231,463
Total liabilities	133,375	107,644	132,009	133,063	129,935
Cash and cash equivalents	97,201	45,846	45,753	18,669	22,422
Operating CF	60,811	44,763	66,151	36,833	51,964
Total sales	407,400	416,695	459,122	424,292	422,607
EBIT	40,531	33,840	37,220	17,316	26,216
SEAT/CUPRA (€ million)					
Equity	1,516	1,664	1,991	1,512	1,208
Total assets	5,044	5,064	5,843	5,501	5,562
Total liabilities	3,528	3,400	3,852	3,989	4,355
Cash and cash equivalents	0	1	1	0	0
Operating CF	947	699	1092	466	378
Total sales	8,487	9,991	11,157	8,784	9,257
EBIT	116	223	352	-418	-371

Source: Own processing according to ŠKODA AUTO a.s. and SEAT/CUPRA (2017-2021)

The individual ratios, which the Kralicek Quick Test comprises, are the equity ratio (R1), the debt repayment period from CF (R2), the cash flow in % of sales (R3), and the return on assets (R4). Their calculation is captured below:

- $R1 = (\text{Equity}/\text{total assets}) \times 100 (\%)$
- $R2 = (\text{Liabilities} - \text{cash})/\text{operating CF (years)}$
- $R3 = (\text{Operating CF}/\text{sales}) \times 100 (\%)$
- $R4 = (\text{EBIT}/\text{total assets}) \times 100 (\%)$

Table 33 - Kralicek Quick Test of ŠKODA AUTO a.s. (2017-2021)

Kralicek Quick Test 2017		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 46.83%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 0.59 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 14.93%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 16.16%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2017)	1					
Kralicek Quick Test 2018		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 50.92%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 1.38 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 10.74%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 15.43%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2018)	1					
Kralicek Quick Test 2019		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 45.37%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 1.30 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 14.41%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 15.40%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2019)	1					
Kralicek Quick Test 2020		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 41.63%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 3.11 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 8.68%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 7.60%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2020)	2.25					
Kralicek Quick Test 2021		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 43.86%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 2.07 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 12.30%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 11.33%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2021)	1.5					

Source: Own processing according to ŠKODA AUTO a.s. (2017-2021)

According to the Kralicek Quick Test scale, the company gained the best possible rating in 2017, 2018, and 2019. A company is considered financially stable if the final value is in the range of 1 to 2, and thus the financial stability and profit situation of the company were excellent. The rating worsened in 2020 to the final rate of 2.25 mainly as a result of low return on assets, longer debt repayment period from cash flow, and declined cash flow in the percentage of sales. The rating of 2.25 belongs to the interval from 2 to 3, which is defined as a grey zone. Nevertheless, the company improved the return on assets and debt repayment period from cash flow as well as cash flow in the percentage of sales in 2021, and therefore the final rating was 1.5, indicating satisfactory financial stability of the company.

Table 34- Kralicek Quick Test of SEAT/CUPRA (2017-2021)

Kralicek Quick Test 2017		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 30.05%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 3.73 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 11.16%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 2.29%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2017)	2					
Kralicek Quick Test 2018		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 32.86%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 4.86 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 7.00%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 4.41%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2018)	2.5					
Kralicek Quick Test 2019		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 34.08%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 3.53 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 9.79%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = 6.02%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2019)	2.25					
Kralicek Quick Test 2020		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 27.48%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 8.56 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 5.31%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = -7.59%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2020)	3.25					
Kralicek Quick Test 2021		Rating scale				
Evaluation	An indicator	1	2	3	4	5
		Very good	Good	Middle	Poor	Insolvency
Financial stability	R1 = 21.71%	> 30 %	> 20 %	> 10 %	> 0 %	Negative
	R2 = 11.51 y	< 3 years	< 5 years	< 12 years	< 30 years	> 30 years
Profit situation	R3 = 4.09%	> 10 %	> 8 %	> 5 %	> 0 %	Negative
	R4 = -6.66%	>15 %	>12 %	> 8 %	> 0 %	Negative
Total (2021)	3.5					

Source: Own processing according to SEAT/CUPRA (2017-2021)

The ratings of SEAT/CUPRA underline results that were calculated in the previous chapter, where some individual ratios signalized financial issues. SEAT/CUPRA gained the 2 rating in 2017, which was the most successful year for the company as it was considered financially stable based on the Kralicek Quick Test. In 2018 and 2019, the company's results worsened a little bit to 2.5 and 2.25, and thus occurred in the grey area, indicating that the company probably started to have some financial issues. In the critical year 2020, the company's rating fell to 3.25, however, it even worsened in 2021 to 3.5. Companies with a score worse than 3 have serious financial issues, which is the case of SEAT/CUPRA mainly because of the negative return on assets caused by the negative economic result.

5 Company's evaluation and suggestions for improvement

The financial health of the company ŠKODA AUTO a.s. was monitored within the reference period from 2017 to 2021. During the reference period, the company experienced difficult situations, especially in the challenging year 2020. The Covid-19 pandemic, the associated economic downturn, and the lack of components had a significant impact on the financial health of the company. Nevertheless, a distinct effort to improve the company's financial performance was recorded in 2021.

Firstly, the financial analysis started with the horizontal and vertical analysis of the company's financial statements. During the reference period, the total value of assets decreased by 7.7%. The gradual reduction of current assets contributed to the asset decline, whose main reason was the development of net liquidity. Non-current assets increased in value, but the rate of increase slowed down. Total equity and liabilities decreased by 7.7%. The drop in equity was caused mainly by the sole shareholder's decision to pay dividends with retained earnings and a drop in the economic result. Non-current liabilities increased by 55.6% resulting from the inclusion of liabilities from future leasing payments, increase in provisions, advances received, liabilities to employees, and contract liabilities arising from extended guarantees. The current liabilities dipped by almost 11% caused by paying out the dividend from retained earnings related to the previous accounting periods. The total revenues increased by 3.7%, mainly because of higher sales. The cost of sales recorded a gradual growth until 2020, and since then, the company has decided to reduce the cost to improve its financial situation affected by the Covid-19 pandemic. Despite the cost reduction, the cost of sales increased by 9.5%. Furthermore, the distribution expenses, including material costs, advertising, sales promotion, market research, customer service, and costs of shipping, decreased to CZK 10,287 million. The administrative expenses, including personnel costs and overheads increased, except for the year 2021. The administrative expenses, especially wages, climbed because of an increased number of employees, of which a relatively large portion had to remain at home with 80% of their wages, as the production of cars was limited after the pandemic. The company must be more attentive to the growth of cost, which reduces the economic result. The economic result was positive each year but experienced a considerable decline of 29.6% as a result of the issues related to the Covid-19 pandemic, lack of components, and production limitations. Based on the vertical analysis of financial statements, the structure of total assets changed slightly.

Property, plant, and equipment accounted for two-thirds of non-current assets, followed by intangible assets, non-current receivables, and financial assets, which accounted for one-third of total assets. Because of the work in progress, inventories increased significantly, contributing significantly to the total amount of current assets. Except for the year 2018, liabilities made up a larger portion of total equity and liabilities than equity. Retained earnings contributed the most to equity, followed by share capital and reserves. The decrease in equity was primarily due to dividend payments and a lower economic result. Oppositely, the current and non-current liabilities portions were the largest in 2020 as a result of the pandemic crisis. Since then, ŠKODA AUTO a.s. strives to ensure that the equity and liabilities portions are balanced. Trade liabilities accounted for the largest portion of current liabilities, which increased from 37.17% in 2017 to 56.08% in 2021. Non-current liabilities were steadily increasing, with their portion of total equity and liabilities nearly doubling from 6.68% in 2017 to 11.59% in 2020. They decreased slightly in 2021 but remained above 11%. The sales represented around 96-97% of total revenues during the five-year period and were gradually increasing as a result of increased deliveries to customers and product prices. The pandemic crisis and supply chain issues had a significant, negative impact on sales. The cost of sales portion of total expenses increased from 88.58% to 91.39% during the five-year period. Generally, the expenses were increasing mainly because of the increased prices of raw materials and the pandemic crisis. As a result of the strict cost reduction, distribution expenses decreased from 3.83% in 2017 to 2.47% in 2021. According to the vertical analysis, the profit before tax was primarily made up of operating profit. However, the net financial result turned out to be negative. The company thus must reduce the financial expenses or raise financial revenues.

Secondly, the analysis of differential indicators was performed. The net working capital of ŠKODA AUTO a.s. deepened to negative values signaling potential concerns for creditors that the company may not have sufficient financial strength to cover its current liabilities. Because only positive values are desirable, the company should either increase current assets or reduce current liabilities, such as trade liabilities, which account for the majority of current liabilities.

Thirdly, the analysis of ratio indicators, including activity, profitability, liquidity, and leverage ratios, was performed. In terms of activity ratios, the total assets turnover, inventory turnover, days of inventory on hand, receivables turnover, days of sales outstanding,

payables turnover, and the number of days of payables were calculated. The total assets turnover of ŠKODA AUTO a.s. was higher than the industry average and the comparator's result at the end of the reference period, and thus there is no need to improve it. The inventory turnover of ŠKODA AUTO a.s. had a declining trend during the five-year period, and days of inventory on hand were gradually increasing, however, the higher the inventory turnover and shorter days of inventory on hand, the better situation is the company facing. For this reason, the company should raise the inventory turnover by lowering inventories or boosting sales. However, as sales are mainly generated from cars, which are still facing a shortage of components, and the inventories are growing precisely due to the incomplete production of these cars, the recommendation to reduce inventories can only be implemented only to the excess inventories or once the problem with lack of components will be resolved. Receivables turnover of ŠKODA AUTO a.s. experienced ups and downs during the five-year period, starting with 22.08 in 2017 and ending with 18.55 in 2021. Days of sales outstanding were 16.53 in 2017 and increased to 19.68 in 2021. The recommended situation occurs when the receivables turnover is increasing while days of sales payables are decreasing, and therefore the company should set measures to decline its trade receivables. Payables turnover of ŠKODA AUTO a.s. was falling from 9.40 in 2017 to 7.26 in 2021. Generally, the optimal situation occurs when the payables turnover ratio increases and the number of days of payables decreases, and thus ŠKODA AUTO a.s. should improve the payables ratio and the number of days of payables by diminishing trade payables.

In terms of liquidity ratios, the company's current, quick, and cash ratios were calculated. The analysis of liquidity ratios pointed out the below-average and below-recommended values. The current ratio of ŠKODA AUTO a.s. dropped from 1.24 in 2017 to 0.83 in 2021. The slump was caused by significantly lower cash and cash equivalents. As a result, the values were below the recommended interval of 1.5-2.5. In order to improve the current ratio, the company should increase its current assets. Lower values of current liquidity testify to the use of liabilities to pay for operating activities. It is important to take into account that the company is part of VW Group, and thus lower ratios do not have as much of an impact on performance because the parent company can intervene and financially support its subsidiary. The quick ratio of ŠKODA AUTO a.s. experienced a declining trend from 1.09 in 2017 to twice less 0.53 in 2021 as a result of lower cash and cash equivalents. Moreover, the inventories grew as a result of work in progress. For this reason, the quick ratios of ŠKODA AUTO a.s. were below the recommended interval of 1-1.5.

The recommended values could be reached by increasing current assets, decreasing inventories, or decreasing current liabilities. The cash ratios reached higher values than the industry average and occurred in the recommended interval of 0.2-0.5 at the end of the reference period. Therefore, no suggestions for improvement are needed.

Moving to the profitability ratios, the return on capital employed of ŠKODA AUTO a.s. ranged around 13.14% at the end of the reference period, reached much higher values than its comparator, and generated profit from its capital employed. The return on assets deepened from 16.16% to 7.60% in 2020 as a result of decreased EAT. At the end of the period, the ROE increased to 11.33%, which means that the company survived the challenging year and improved its ability to generate profit from assets. The return of sales of ŠKODA AUTO a.s. is relatively low and could be improved in the future by boosting sales. Despite all the bottlenecks with production, lack of components, and thus the limited possibility of sales, the ROS is positive all the time. The return on equity of ŠKODA AUTO a.s. experienced increases caused mainly by paying out the dividend from retained earnings and decreases resulting from significantly lower EAT. Despite the changing development, the ratio reached 22.07% in 2021, which indicates that the company is successful enough in generating profit from its equity, and therefore no suggestions for improvement are recommended.

The leverage ratios, including debt ratio, equity ratio, and debt-to-equity ratio, were calculated. The debt ratio of ŠKODA AUTO a.s. stood at 53.17% in 2017 but experienced a slight increase to 56.14% in 2021. Although the company's debt ratio met the recommended values of 30-60%, the ratio is very close to its upper limit, and therefore the company should implement appropriate measures, for example, to reduce liabilities or increase assets in order to lower this ratio. The equity ratio reached a peak of 50.92% in 2018 as a consequence of the significant decrease in total assets. At the end of the period, the equity ratio stood at 43.86% and met the recommended values of 70-40%. However, it is very close to the lower level, and thus the company should focus on increasing the equity or reducing the total assets. The debt-to-equity ratio stood at 113.53% in 2017 but rose to 127.98% in 2021. The ideal value varies but should not be higher than 200%, which was successfully fulfilled by the company, and hence no suggestions for improvement are needed. Finally, the financial health of the company was assessed using credibility and bankruptcy models. Based on the Altman Z-score, the company exceeded the recommended value of 2.99, except for 2020, and so the company is considered financially stable and is not threatened with bankruptcy.

The company's Index IN05 exceeded value 1.6 four times during the reference period, indicating that the company creates value and is financially stable, except for the challenging year 2020 when it got into the grey area, where the company does not create value, but it is not going bankrupt. According to the Kralicek Quick Test scale, the company gained the best possible rating (1) in 2017, 2018, and 2019. A company is considered financially stable if the final value is in the range of 1 to 2. Based on the calculated values, the financial stability and profit situation of the company was excellent in the above-mentioned years. In 2020, the rating worsened to 2.25 mainly as a result of low return on assets, longer debt repayment period from cash flow, and declined cash flow in the percentage of sales and thus the company got into the grey area. At the end of the reference period, the company improved the debt repayment period from cash flow and the cash flow in the percentage of sales. Consequently, the company gained a satisfying grating of 1.5 and moved to the best possible range of 1-2. The Kralicek Quick Test has also shown the financial stability of the company.

The first hypothesis, which assumes that ŠKODA AUTO a.s. financial indicators are better than the industry average, can be confirmed based on the calculations in the methodology part. The profitability, activity, and leverage ratios of the company are above the industry average, indicating strong financial stability. The only exception represents liquidity ratios, which are below the industry average mainly because of the decrease in cash and cash equivalents. The second hypothesis, which assumes that the companies ŠKODA AUTO a.s. and SEAT/CUPRA achieved similar financial results, cannot be confirmed based on calculated results since ŠKODA AUTO a.s. has strong financial health and SEAT/CUPRA's financial health is significantly threatened with bankruptcy. The third hypothesis, which assumes that the Covid-19 influenced the financial health of ŠKODA AUTO a.s. significantly, must be rebutted because the financial figures of the company did not indicate financial struggles in 2020 and were even improved in 2021.

Despite the above-mentioned recommendations, the financial analysis confirmed that the company ŠKODA AUTO a.s. is financially stable, often showing better financial figures and ratios than the industry and its comparators. The company survived the challenging year 2020 and is gradually restoring its financial health, which was affected by the pandemic crisis, lack of components, and decreased sales in China. Currently, the financial situation of the company can be affected by the Russian-Ukrainian conflict, and therefore the company must monitor the development of all possible threats.

Conclusion

The aim of the master thesis is to assess the financial health of ŠKODA AUTO a.s. during the reference period 2017-2021 using financial analysis and its basic methods, including analysis of absolute indicators, analysis of differential indicators, analysis of ratio indicators, and analysis of cumulative indicators. The financial analysis is performed to assess the company's financial stability and bankruptcy risk and reveals weaknesses, threats, opportunities, and strengths. Subsequently, specific suggestions are recommended for improving the economic situation. Data necessary for conducting the company's financial analysis are obtained from annual reports and financial statements. The literature review of the master thesis firstly defines international business and its developmental stages from a completely domestic company to a transnational company since the financial analysis of an international company is performed. Moreover, financial reporting and individual financial statements are introduced in accordance with International Financial Reporting Standards. Then, financial analysis and its methods are detailly described comprising the horizontal and vertical analysis of financial statements, net working capital, activity ratios, liquidity ratios, profitability ratios, leverage ratios, and credibility and bankruptcy models.

In the methodological part, Volkswagen Group and ŠKODA AUTO a.s. financial characteristics obtained from annual reports are assessed, and subsequently, the analysis of the Czech automobile industry is performed primarily to compare ŠKODA AUTO a.s. financial ratios with the industry average. Since the company is considered a leading Czech car manufacturer, most of its financial ratios are below the industry average. However, the liquidity ratios are below the industry average as a result of an increase in trade payables, a decrease in current assets, especially cash and cash equivalents, and the decision to pay a dividend, which is the reason for the increase in current liabilities. In the following chapters, ŠKODA AUTO a.s. financial ratios are further compared with another VW Group volume brand SEAT/CUPRA to determine whether the calculated values are favourable or not. The horizontal analysis of financial statements shows that the total value of assets declined by 7.7% as a result of the gradual reduction of current assets, mainly because of the development of net liquidity and the fall of cash and cash equivalents due to the uncertain pandemic situation. The total equity and liabilities decreased 7.7% during the five-year period as a result of the significant decline in current liabilities. The equity dipped due to the sole shareholder's decision to use retained earnings to pay out approximately CZK 38,500

million in dividends. Moreover, the equity dropped due to a decrease in the economic result caused by the pandemic crisis. The total revenues increased by 3.7% during the reference period. The horizontal analysis showed a drop in revenues by almost 7.6% in 2020 and 0.4% in 2021 caused by the Covid-19 pandemic, which restricted car sales as a result of closed dealerships and other issues. Furthermore, the lack of components deepened the decline as the vehicles could not be sold, and thus the cars stood in the parking lots. On the other hand, a significant cost reduction to improve the economic result was noticeable when the Covid-19 occurred. Finally, the economic result declined significantly but stood positive each year.

In the following subchapter, the net working capital of ŠKODA AUTO a.s. and SEAT/CUPRA are calculated. Despite the values of ŠKODA AUTO a.s. being considerably better than SEAT/CUPRA values, they need to be improved as they turned out to be negative due to the pandemic and therefore signalize potential concerns for creditors that the company may not have sufficient financial strength to cover its current liabilities. Consequently, the suggestions to increase current assets or decrease current liabilities such as trade liabilities are recommended. Further, the activity ratios of ŠKODA AUTO a.s. are above the industry average, however, they are worse than the comparators' activity ratios, except for total asset turnover. For this reason, the company should raise the inventory turnover by lowering inventories or boosting sales. However, because sales are primarily generated from cars, which are experiencing component shortages, and inventories are growing precisely due to work in progress, the recommendation to reduce inventories can only be implemented to excess inventories or once the component shortage problem is resolved. Moreover, receivables turnover of ŠKODA AUTO a.s. declined during the reference period while days of sales outstanding increased. Therefore, the company should set measures to lessen its trade receivables. Contrary, the payables turnover of ŠKODA AUTO a.s. fell, and the number of days of payables decreased, and thus ŠKODA AUTO a.s. should improve the payables ratio and the number of days of payables by diminishing trade payables.

Interesting are relatively low values of ŠKODA AUTO a.s. current and quick ratios, which are below the industry average and recommended intervals. The slump is caused by significantly lower cash and cash equivalents. In order to improve the current ratio, the company should increase its current assets. It is important to take into account that the company is part of VW Group, and thus the lower ratios do not necessarily have a huge impact on the financial health because the parent company can intervene and financially

support its subsidiary. The quick ratio of ŠKODA AUTO a.s. experienced a declining trend as a result of lower cash and cash equivalents. Moreover, the inventories grew as a result of work in progress. For this reason, suggestions for improvement, such as increasing current assets, decreasing inventories, or decreasing current liabilities, are recommended. Despite all the bottlenecks with production, lack of components, and the limited possibility of sales, the profitability ratios are above the industry average and comparators ratios during the reference period. The company reached the positive economic result also the challenging year 2020 and thus was able to generate profit from its assets, equity, and sales. The debt ratio of ŠKODA AUTO a.s. experienced a slight increase to 56.14% in 2021. Although the company's debt ratio met the recommended values of 30-60%, indicating the sufficient solvency of the company, the ratio is very close to the upper limit of recommended interval, and therefore the company should reduce liabilities or increase assets in order to lower this ratio. The equity ratio stood at 43.86% in 2021 and met the recommended values of 70-40%. However, it is very close to the lower limit, and therefore the company should focus on increasing the equity or reducing the total assets. The debt-to-equity did not exceed 200%, and hence no suggestions for improvement are needed.

Last but not least, the credibility and bankruptcy models, including the Altman Z-score, Index IN05, and Kralicek Quick Test, are used to disclose the financial health or financial risks of the company. Based on the Altman Z-score, the company exceeded the recommended value of 2.99, except for 2020, and so the company is financially stable and is not threatened with bankruptcy. The company's Index IN05 exceeded value 1.6 four times, indicating that the company creates value and is financially stable. In 2020, the company got into the grey area, saying that the company does not create value but is not in danger of bankruptcy. Kralicek Quick Test perfectly underlines the information obtained from previous models and again shows based on ratings that ŠKODA AUTO a.s. had an excellent financial position and profit situation, which were worsened by the pandemic crisis. The financial analysis confirmed that ŠKODA AUTO a.s. is a high-performance company with a stable financial position that can withstand various crisis periods, such as the Covid-19 crisis. However, there is still space for improvement as the company can be affected by the Russian-Ukrainian conflict and the components shortage issues, which have not been resolved yet. The practical benefit of the master thesis lies in the evaluation of the international company's financial health and the identification of key factors that negatively affect financial performance. These factors are the pandemic crisis, shortage of components,

and decreased sales in China as a result of price wars with competitors and increasing shipping and input prices. The financial analysis revealed the company's weaknesses, such as increased liabilities and work in progress, and strengths, such as the leading position in the Czech automobile industry, satisfactory profitability ratios, and successful cost reduction. Moreover, opportunities in terms of increased deliveries to India and increased product portfolio were identified. From a scientific point of view, the master thesis has proved that financial analysis is an important, accurate tool for determining the company's health as it can predict the financial development in the future, reveal strengths, weaknesses, opportunities, and threats, and discover the items of financial statements that need to be improved. This information is necessary for the company's Board of Management to make quality decisions.

If the master thesis expands, it can include the financial analysis of Volkswagen Group passenger cars in comparison with Volkswagen Group commercial vehicles. The financial results of all Group brands can be further compared with the European automobile industry average. Moreover, it will be interesting to assess the financial situation of ŠKODA AUTO a.s. based on purely electric vehicles, which are considered the future of the automotive industry.

Sources

AJAMI, Riad and Jason GODDARD, 2014. *International Business: A Course on the Essentials*. 3rd ed. New York: M.E. Sharp. ISBN 978-0-7656-3134-3.

ALIBHAI, Salim, et al., 2019. *Interpretation and Application of IFRS Standards*. Chichester: John Wiley & Sons. ISBN 978-1-119-57735-5.

AutoSAP, 2022. *General Basic Overviews* [online]. Praha: Sdružení automobilového průmyslu. [cit. 2022-04-08]. Available from: <https://autosap.cz/en/statistics/general-basic-overviews/>

BIRKEN, Emily, 2021. *How To Calculate Return On Equity (ROE)* [online]. New York: Forbes. [cit. 2022-03-13]. Available from: <https://www.forbes.com/advisor/investing/roe-return-on-equity/>

BOCHENKOVÁ, Ivana, 2011. *Analýza využitelnosti bonitně-bankrotního modelu IN05 v ČR*. Praha. Bakalářská práce (Bc.). Vysoká škola ekonomická v Praze, Podnikohospodářská fakulta. Vedoucí práce: Ing. Patrik Sieber, Ph.D.

BUCKLEY, Peter, Peter ENDERWICK and Adam CROSS, 2018. *International Business*. Oxford: Oxford University Press. ISBN 978-0-19-255811-4.

CFA Institute, 2022. *Economics and Financial Statement Analysis*. Virginia: CFA Institute. ISBN 978-1-950157-43-3.

CHERULINAM, Francis, 2020. *International Business: Text and Cases*. 6th ed. New Delhi: PHI Learning. ISBN 978-9-3893-4748-7.

COLLINGS, Steven, 2013. *Frequently Asked Questions in IFRS*. Chichester: John Wiley & Sons. ISBN 978-1-119-99897-6.

Czech Invest, 2019. *Mobilita* [online]. Praha: Agentura pro podporu podnikání a investic. [cit. 2022-04-05]. Available from: <https://www.czechinvest.org/en/Key-sectors/Mobility?force>

ČIŽINSKÁ, Romana, 2018. *Základy finančního řízení podniku*. Praha: Grada Publishing. ISBN 978-80-271-0194-8.

DANIELS, John, Lee RADEBAUGH and Daniel SULLIVAN, 2018. *International Business: Environments & Operations*. 16th ed. London: Pearson Education. ISBN 978-1-292-21473-3.

EASTON, Peter, Mary Lea MCANALLY, Gregory SOMMERS and Xiao-Jun ZHANG, 2018. *Financial Statement Analysis & Valuation*. 5th ed. Cambridge: Cambridge Business Publishers. ISBN 978-1-61853-233-6.

Eurostat, 2019. *Multinational enterprise* [online]. Luxembourg: European Commission. [cit. 2022-02-10]. Available from: [https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Glossary:Multinational_enterprise_\(MNE\)](https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Glossary:Multinational_enterprise_(MNE))

GŁODOWSKA, Agnieszka, Bożena PERA and Krzysztof WACH, 2016. *The International Environment and Its Influence on the Entrepreneurial Internationalization of Firms: The Case of Polish Business* [online], **14**(3): 107-130. [cit. 2022-02-10]. ISSN 1644-9584. Available from: <https://www.academia.edu/31754869>

GRIFFIN, Michael. 2015. *How to Read and Interpret Financial Statements*. 2nd ed. New York: AMA Self-Study. ISBN 978-07612-1560-8.

GUPTA, Abhishek, 2013. *International Business Environment: Challenges and Changes*. Research Journal of Management Sciences. Punjab: International Science Congress Association, [online] **2**(11): 34-38. ISSN 2319-1171. Available from: <http://www.isca.in/IJMS/Archive/v2/i11/5.ISCA-RJMS-2013-072.pdf>

Harvard Business School, 2021. *A Manager's Guide to Finance & Accounting* [online]. Harvard: Harvard Business School. [cit. 2022-02-27]. Available from: <https://online.hbs.edu/Documents/managers-guide-to-finance-and-accounting.pdf>

HAYES, Adam, 2021. *Return on Sales (ROS)* [online]. New York: Dotdash Meredith. [cit. 2022-03-013]. Available from: <https://www.investopedia.com/terms/r/ros.asp>

HILL, Charles, 2021. *International Business: Competing in the Global Marketplace*. 13th ed. New York: McGraw-Hill Education. ISBN 978-1-260-57586-6.

HORVATHOVA, Jarmila, Martina MOKRISOVA, Alžběta SUHANYIOVA and Ladislav SUHANYI, 2015. *Selection Of Key Performance Indicators Of Chosen Slovak Industry With The Application Of Statistical Methods* [online]. Varazdin: Varazdin Development and Entrepreneurship Agency (VADEA) [cit. 2022-03-07]. Available from: <https://www.proquest.com/conference-papers-proceedings/selection-key-performance-indicators-chosen/docview/1722806358/se-2?accountid=17116>

IASB, 2021. *Conceptual Framework* [online]. London: International Accounting Standards Board. [cit. 2022-02-25]. Available from: <https://www.ifrs.org/issued-standards/list-of-standards/conceptual-framework.html/>

IASB, 2021. *IAS 1 – Presentation of Financial Statements* [online]. London: International Accounting Standards Board. [cit. 2022-02-25]. Available from: <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/ias-1-presentation-of-financial-statements.pdf>

IASB, 2021. *IAS 7 – Statements of Cash Flows* [online]. London: International Accounting Standards Board. [cit. 2022-02-25]. Available from: <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/ias-7-statement-of-cash-flows.pdf>

IFRS Foundation, 2021. *Use of IFRS Standards by jurisdiction* [online]. London: International Accounting Standards Board. [cit. 2022-02-23]. <https://www.ifrs.org/use-around-the-world/use-of-ifrs-standards-by-jurisdiction>

KINKOR, Ondřej, 2021. *Auf Wiedersehen, Škoda! Schäfer nově povede vlajkovou loď koncernu Volkswagen* [online]. New York: Forbes. [cit. 2022-03-30]. Available from: <https://forbes.cz/goodbye-skoda-thomas-schafer-nove-povede-vlajkovou-rod-koncernu-volkswagen/>

KISLINGEROVÁ, Eva, 2001. *Oceňování podniku*. 2. akt. vyd. Praha: C. H. Beck. ISBN 80-7179-529-1.

KNÁPKOVÁ, Adriana, Drahomíra PAVELKOVÁ, Daniel REMEŠ and Karel ŠTEKER, 2017. *Finanční analýza: Komplexní průvodce s příklady*. 3. akt. vyd. Praha: Grada Publishing. ISBN 978-80-271-0563-2.

KOPPESCHAAR, Zanne, et al., 2019. *Introduction to IFRS*. 8th ed. Durban: LexisNexis. ISBN 978-0-639-00375-7.

KRALICEK, Peter, 2006. *QuickBreak: User's Manual* [online]. Wien: Betriebswirtschaftliche Unternehmensberatung. [cit. 2022-03-19]. Available from: https://www.kralicek.at/pdf/quickbreak_manual.pdf

KUBĚNKA, Michal, 2015. *Finanční stabilita podniku a její indikátory*. Pardubice: Univerzita Pardubice. ISBN 978-80-7395-890-9.

KUBÍČKOVÁ, Dana and Irena JINDŘICHOVSKÁ, 2015. *Finanční analýza a hodnocení výkonnosti firem*. Praha: C.H. Beck. ISBN 978-80-7400-538-1.

MARTINOVIČOVÁ, Dana, Miloš KONEČNÝ and Jan VAVŘINA, 2019. *Úvod do podnikové ekonomiky*. 2. akt. vyd. Praha: Grada Publishing. ISBN 978-80-271-2034-5.

MAVERICK, Jack, 2022. *How Useful Is ROCE as an Indicator of a Company's Performance?* [online]. New York: Dotdash Meredith. [cit. 2022-03-014]. Available from: <https://www.investopedia.com/ask/answers/011315/how-useful-roce-indicator-companys-performance.asp>

MELLVILE, Alan, 2019. *International Financial Reporting: A Practical Guide*. 7th ed. London: Pearson Education. ISBN 978-1-292-29312-7.

Ministerstvo životního prostředí České republiky, 2021. *Světová obchodní organizace* [online]. Praha: Ministerstvo průmyslu a obchodu České republiky. [cit. 2022-02-12]. Available from: https://www.mzp.cz/cz/svetova_obchodni_organizace

Ministerstvo průmyslu a obchodu České republiky, 2009. *CZ-NACE 29 – Výroba motorových vozidel (kromě motocyklů), přívěsů a návěsů* [online]. Praha: Ministerstvo průmyslu a obchodu České republiky. [cit. 2022-04-02]. Available from: <https://www.mpo.cz/assets/dokumenty/43342/48642/574148/priloha005.pdf>

Ministerstvo průmyslu a obchodu České republiky, 2020. *Interaktivní prohlížeč ekonomických ukazatelů zpracovatelského průmyslu* [online]. Praha: Ministerstvo průmyslu a obchodu České republiky. [cit. 2022-04-09]. Available from: <https://www.mpo.cz/cz/panorama—interaktivni—tabulka.html>

Ministerstvo průmyslu a obchodu České republiky, 2021. *Analyza vývoje ekonomiky ČR - prosinec 2021* [online]. Praha: Ministerstvo průmyslu a obchodu České republiky [cit. 2022-04-05]. Available from: https://www.mpo.cz/assets/cz/rozcestnik/analyticke-materialy-a-statistiky/analyticke-materialy/2022/1/Analyza-vyvoje-ekonomiky-CR_prosinec-2021.pdf

MUNICHIELLO, Katrina, 2022. *What Is Considered a Good Net Debt-to-Equity Ratio?* [online]. New York: Dotdash Meredith. [cit. 2022-03-15]. Available from: <https://www.investopedia.com/ask/answers/040915/what-considered-good-net-debttoequity-ratio.asp>

NEUMAIEROVÁ, Inka and Ivan NEUMAIER, 2008. *Proč se ujal index IN a nikoli pyramidový systém ukazatelů INFA* [online]. Praha: Ekonomika a Management. [cit. 2022-03-17]. Available from: <https://www.vse.cz/eam/51>

PENG, Mike and Klaus MEYER, 2019. *International Business*. 3rd ed. Hampshire: Cengage Learning. ISBN 978-1-4737-5843-8.

POLO, Antoneta and Enkela CACA, 2014. *Kralicek Quick Test – An Analysis Tool for Economic Units Determination in Liability Difficulty*. European Scientific Journal [online], **10**(19): 1-11. [cit. 2021-03-18]. ISSN 1857-7431. Available from: <https://ejournal.org/index.php/esj/article/view/3791>

ROBINSON, Thomas, Elaine HENRY, Wendy PIRIE and Michael BROIHAN, 2015. *International Financial Statement Analysis*. 3rd ed. New Jersey: John Wiley & Sons. ISBN 978-1-1189-9947-9.

RŮČKOVÁ, Petra, 2021. *Finanční analýza: metody, ukazatele a využití v praxi*. 7. akt. vyd. Praha: Grada Publishing. ISBN 978-80-271-4432-7.

SCHOLLEOVÁ, Hana, 2015. *Ekonomické a finanční řízení pro neekonomy*. 3. akt. vyd. Praha: Grada Publishing. ISBN 978-80-271-0413-0.

SEAT, 2017. *SEAT Annual Report 2017* [online]. Martorell: SEAT. [cit. 2021-04-10]. Available from: https://www.seat.com/content/dam/public/seat-website/company/annual-report/overview/pdf/others-annual_report_past_report_2017-info-NA-NA-september-2018.pdf

SEAT, 2018. *SEAT Annual Report 2018* [online]. Martorell: SEAT. [cit. 2021-04-10]. Available from: https://www.seat.com/content/dam/public/seat-website/company/annual-report/overview/pdf/others-annual_report_2019_past_report_2018-NA-NA-NA-march-2020.pdf

SEAT, 2019. *SEAT Annual Report 2019* [online]. Martorell: SEAT. [cit. 2021-04-10]. Available from: https://www.seat.com/content/dam/public/seat-website/company/annual-report/overview/pdf/others-annual_report_2019_full-NA-NA-NA-march-2020.pdf

SEAT, 2020. *SEAT Annual Report 2020* [online]. Martorell: SEAT. [cit. 2021-04-10]. Available from: <https://www.seat.com/content/dam/public/seat-website/company/annual-report/historical-reports/pdf/others-annual-report-2020-march-2021.pdf>

SEAT, 2021. *SEAT Annual Report 2021* [online]. Martorell: SEAT. [cit. 2021-04-10]. Available from: <https://www.seat.com/content/dam/public/seat-website/company/annual-report/historical-reports/pdf/others-annual-report-2021-march-2022.pdf>

SEDLÁČEK, Jaroslav, 2001. *Účetní data v rukou manažera: finanční analýza v řízení firmy*. 2. akt. vyd. Brno: Computer Press. ISBN 80-7226-562-8.

SEDLÁČEK, Jaroslav, 2011. *Finanční analýza podniku*. 2. akt. vyd. Brno: Computer Press. ISBN 978-80-251-3386-6.

SHERMAN, Eliot, 2015. *A Manager's Guide to Financial Analysis: Powerful Tools for Analyzing the Numbers and Making the Best Decisions for Your Business*. 6th ed. New York: American Management Association. ISBN 978-0-7612-1561-5.

SINGH, Rubee and Sangeeta RANI, 2019. *International Business Environment*. New Delhi: Educreation Publishing. ISBN 978-93-89534-11-5.

Svaz dovozců automobilů, 2022. *Vozový park v ČR nadále stárne* [online]. Praha: Svaz dovozců automobilů. [cit. 2022-04-06]. Available from: <https://portal.sda-cia.cz/clanek.php?id=6847&v=m&lang=en>

SYNEK, Miloslav et al., 2011. *Manažerská ekonomika*. Praha: Grada Publishing. ISBN 978-80-247-3494-1.

ŠKODA AUTO a.s., 2015. *ŠKODA Annual Report 2015* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: <https://cdn.skoda-storyboard.com/2016/05/skoda-annual-report-2015.pdf>

ŠKODA AUTO a.s., 2016. *ŠKODA Annual Report 2016* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: <https://cdn.skoda-storyboard.com/2017/04/skoda-annual-report-2016.pdf>

ŠKODA AUTO a.s., 2017. *ŠKODA Annual Report 2017* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: <https://cdn.skoda-storyboard.com/2018/03/skoda-annual-report2017.fd7ef6fce8c2f3d0c8b6fc5d34e0614a.pdf>

ŠKODA AUTO a.s., 2018. *ŠKODA Annual Report 2018* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: https://cdn.skoda-storyboard.com/2019/03/SKODA_2018_ENG.pdf

ŠKODA AUTO a.s., 2019. *ŠKODA Annual Report 2019* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: https://cdn.skoda-storyboard.com/2020/06/SKODA_2019_EN.pdf

ŠKODA AUTO a.s., 2020. *ŠKODA Annual Report 2020* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: https://cdn.skoda-storyboard.com/2021/03/210324-10-00_Annual_Report_2020.pdf

ŠKODA AUTO a.s., 2021. *ŠKODA Annual Report 2021* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-27]. Available from: <https://cdn.skoda-storyboard.com/2022/03/220322-SKODA-AUTO-Annual-Report-2021-1.pdf>

ŠKODA Storyboard, 2020. *All the Places ŠKODA Calls Home* [online]. Mladá Boleslav: ŠKODA AUTO a.s. [cit. 2022-03-29]. Available from: <https://www.skoda-storyboard.com/en/models/everywhere-skoda-is-at-home/>

TAMULEVIČIENĒ, Daiva, 2016. *Methodology of complex analysis of companies' profitability*. Entrepreneurship and Sustainability Issues, [online]. 4(1): 53-63. [cit. 2022-03-09]. ISSN 2345-0282. Available from: <https://www.proquest.com/docview/2468436324/>

Volkswagen AG, 2022. *Group* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-25]. Available from: <https://www.volkswagenag.com/en/group.html>

Volkswagen Group, 2015. *VW Group Annual Report 2015* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/publications/annualreports/2016/volkswagen/englisch/Y_2015_e.pdf

Volkswagen Group, 2016. *VW Group Annual Report 2016* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2017/volkswagen/en/Y_2016_e.pdf

Volkswagen Group, 2017. *VW Group Annual Report 2017* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2018/volkswagen/en/Y_2017_e.pdf

Volkswagen Group, 2018. *VW Group Annual Report 2018* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2019/volkswagen/en/Y_2018_e.pdf

Volkswagen Group, 2019. *VW Group Annual Report 2019* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2020/volkswagen/Y_2019_e.pdf

Volkswagen Group, 2020. *VW Group Annual Report 2020* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2021/volkswagen/Y_2020_e.pdf

Volkswagen Group, 2021. *VW Group Annual Report 2021* [online]. Wolfsburg: Volkswagen AG. [cit. 2022-03-26]. Available from: https://www.volkswagenag.com/presence/investorrelation/publications/annual-reports/2022/volkswagen/Y_2021_e.pdf

WEYGANDT, Jerry, Paul KIMMEL and Donald KIESO, 2010. *Financial Accounting*. Chichester: John Wiley & Sons. ISBN 978-0470-55200-1.