

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Trade and Finance



Bachelor Thesis

**Assessment of the Financial Position and
Performance of a Chosen Russian Company Operating
in the Aviation Industry**

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BACHELOR THESIS ASSIGNMENT

Daria Orlova

Business Administration

Thesis title

Assessment of the Financial Position and Performance of a Chosen Russian Company Operating in the Aviation Industry

Objectives of thesis

The aim of this bachelor thesis is to assess the financial position and performance of a chosen Russian company operating in the aviation industry by analyzing the company's financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues, profit and cash-flow for a chosen period and to identify the potential financial problems and the most significant factors influencing the profit from the company and industry point of view.

Methodology

Methodology for the literature overview is based on data collection from the relevant legal framework, specialized publications and other written or online sources. The practical part of the thesis will be based on the information gained from the published annual reports of the chosen company. Vertical and horizontal analysis and ratio analysis of the financial statements will be used to assess the financial position and performance of the company and to prepare the practical part of the thesis. The methods of analysis, synthesis, comparison and deduction will be used to formulate the conclusions of the thesis.

The proposed extent of the thesis

40-50

Keywords

financial statements, financial analysis, financial position, balance sheet, assets, liabilities, equity, financial performance, Income statement, expenses, revenues, profit, cash-flow, aviation industry

Recommended information sources

- ALEXANDER, J. Financial Planning & Analysis and Performance Management. USA : John Wiley & Sons, Inc. Hoboken, 2018, 640 p., ISBN-13: 978-1119491484
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- YOUNG, David S. et al. Corporate Financial Reporting and Analysis: A Global Perspective. Hoboken: Wiley, 2019. 368 s. ISBN 978-1-119-49457-7
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Declaration

I declare that I have worked on my bachelor thesis titled "Assessment of the Financial Position and Performance of a Chosen Russian Company Operating in the Aviation Industry" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2023

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Assessment of the Financial Position and Performance of a Chosen Russian Company Operating in the Aviation Industry

Abstract

The aim of this bachelor thesis is to assess the financial position and performance of a chosen Russian company operating in the aviation industry by analyzing the company's financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues, profit and cash-flow for a chosen period and to identify the potential financial problems and the most significant factors influencing the profit from the company and industry point of view.

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The author comes to the conclusion that the financial position of the company is favorable, while the financial performance is highly volatile and the company is not really profitable even under the condition of no coronavirus, which is quite surprising for a natural monopoly. In addition to that, the author concludes that the biggest problem related to Aeroflot's operations is the fact that the main owner of the company is the Russian Federation, so the company's market position and success are significantly connected to the success of the country itself.

Keywords: financial statements, financial analysis, financial position, balance sheet, assets, liabilities, equity, financial performance, income statement, expenses, revenues, profit, cash-flow, aviation industry

Posouzení finanční situace a výkonnosti vybrané ruské společnosti působící v leteckém průmyslu

Abstrakt

Cílem této bakalářské práce je zhodnotit finanční situaci a výkonnost vybrané ruské společnosti působící v leteckém průmyslu analýzou účetní závěrky společnosti se zaměřením na reprezentaci a změny vykazovaných aktiv, závazků, výdajů, výnosů, zisku a cash-flow za zvolené období a identifikovat potenciální finanční problémy a nejvýznamnější faktory ovlivňující zisk z pohledu společnosti a průmyslu.

Metodika přehledu literatury je založena na datech shromážděných z příslušného právního rámce, odborných publikací a dalších písemných nebo online zdrojů. Praktická část práce bude vycházet z informací získaných ze zveřejněných výročních zpráv vybrané společnosti. Vertikální a horizontální analýza a poměrová analýza účetní závěrky budou použity k posouzení finanční situace a výkonnosti společnosti a k přípravě praktické části práce. K formulování závěrů práce budou použity metody analýzy, syntézy, srovnání a dedukce.

Autor dochází k závěru, že finanční situace společnosti je příznivá, zatímco finanční výkonnost je vysoce volatilní a společnost není skutečně zisková ani za podmínky žádného koronaviru, což je pro přirozený monopol docela překvapivé. Kromě toho autor dochází k závěru, že největším problémem souvisejícím s provozem společnosti Aeroflot je skutečnost, že hlavním vlastníkem společnosti je Ruská federace, takže tržní postavení a úspěch společnosti jsou významně spojeny s úspěchem samotné země

Klíčová slova: finanční výkazy, finanční analýza, finanční situace, rozvaha, aktiva, pasiva, vlastní kapitál, finanční výkonnost, výkaz zisku a ztráty, výdaje, výnosy, zisk, cash-flow, letecký průmysl

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1 Introduction

Aviation industry is something that all of us interact with almost on an annual or even more frequent basis. Clearly, in the 21st century, it is fair to say that people prefer mostly plane-based travels between different destinations due to their convenience, safety and also efficiency in terms of time. However, there is another side to the aviation industry and this side is related to the recent pandemic of the coronavirus, when numerous industries, including the aviation were badly hit by the secondary consequences of the ongoing crisis, such as the government restrictions that forbid all travels and free movement of people.

Inevitably, this had a negative effect not only on people's plans, but also on the financial position, performance and operations of companies operating in the aviation industry. The author, who has herself witnessed the development of the pandemic from the very beginning is tempted to understand the degree to which the aviation industry was hit by the pandemic of COVID-19 in 2020-2022 and for this purpose, she selects a company, who is the most important domestic carrier in her home country of Russia – Aeroflot.

The following bachelor thesis is a product of her meticulous work and analysis, which try to reflect the ongoing situation from an independent point of view of just an observer and not a person somehow affiliated with the company

2 Objectives and Methodology

2.1 Objectives

The aim of this bachelor thesis is to assess the financial position and performance of a chosen Russian company operating in the aviation industry by analyzing the company's financial statements with focus on the representation and changes of the reported assets, liabilities, expenses, revenues, profit and cash-flow for a chosen period and to identify the potential financial problems and the most significant factors influencing the profit from the company and industry point of view.

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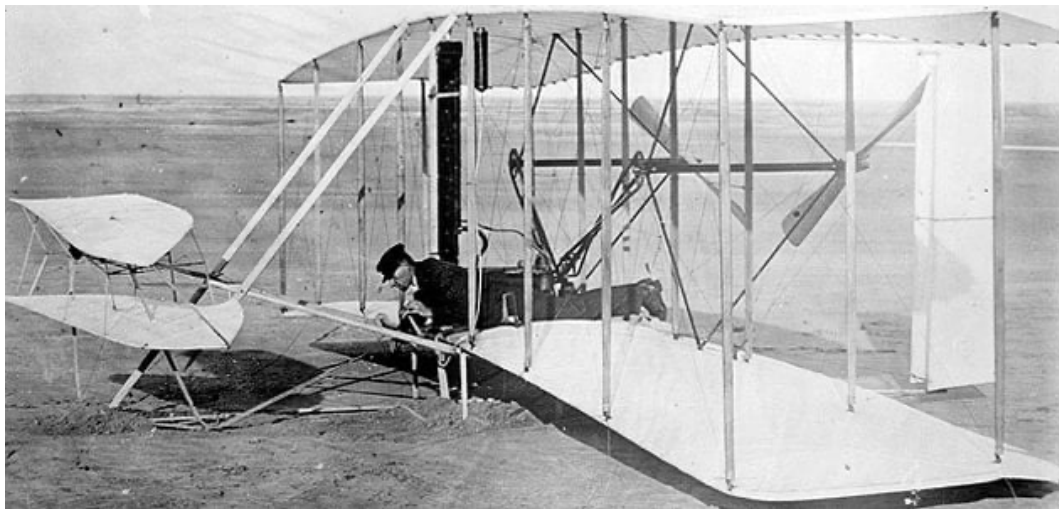
3 Literature Review

3.1 Aviation Industry

3.1.1 History

Aviation, as almost any other kind of industry significantly dependent on the level of innovation and technology, is a relatively young industry who saw the daylight in the 20th century, when the first planes were created. To be more specific, the very first controlled flight of a plane controlled by a human being took place in December of 1903, when Wright Brothers were able to create the very first airplane somewhat resembling an air-glider, since its main principle was its lightweight (McCullough, 2015).

Figure 1, Wright flyer



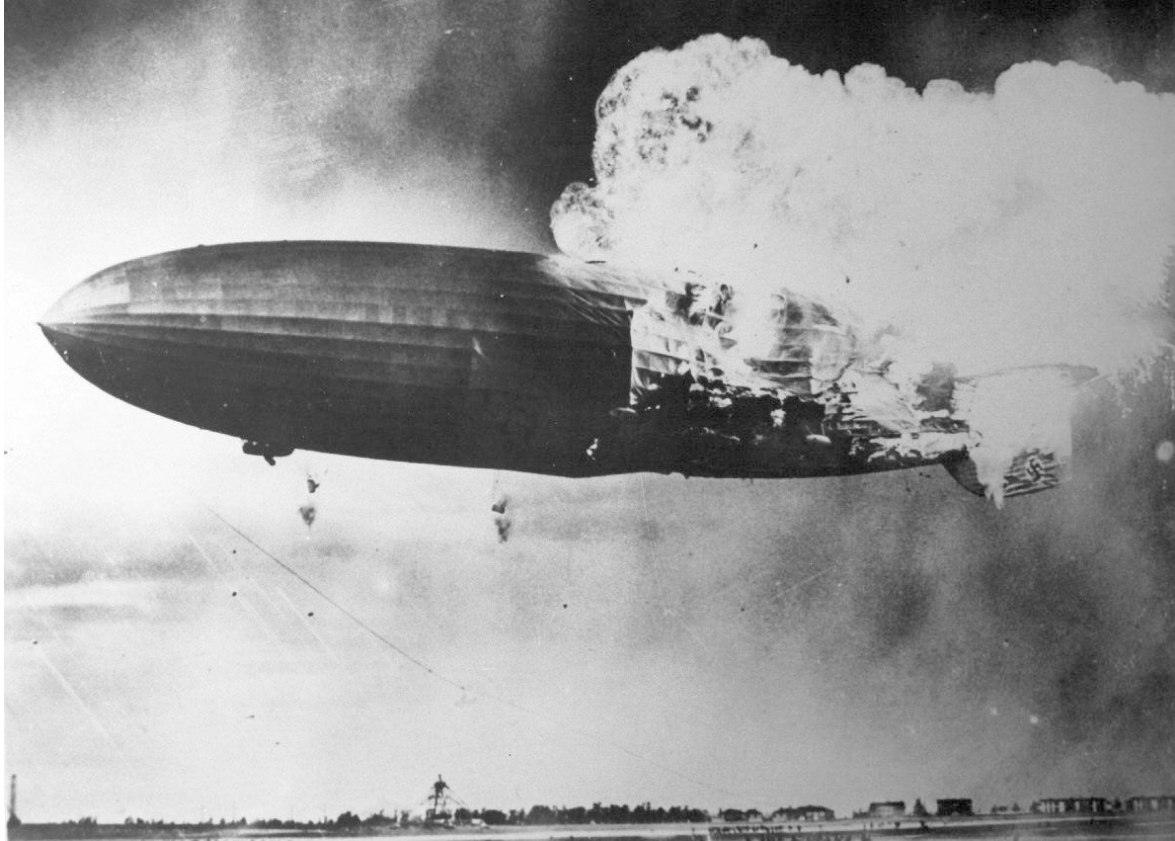
Source: Magazine, 2003

As it usually happens, the success of Wright Brothers was noticed by relevant institutions, both American and international ones who used their blueprints to create a completely new industry. Unfortunately, in the beginning of the 20th century, the ideas of pacifism were not really widespread, and all those institutions and research agencies saw a great opportunity in turning those machines into tools of war, since having an air domination would almost automatically mean a defeat for the side that would not have this advanced new weapon. Aircraftmen ship was developing until the first World War, when the first

planes were used not to carry people and help them to break all physical boundaries separating countries and societies, but to destroy those societies and entire cities with those planes (Dobson, 2017).

What is quite interesting is the fact that planes were not really regarded as a mean of civil traveling, because they were too small to fit more than just 2 or 3 people at maximum. People saw a great opportunity in constructing an absolutely different kind of glider that would be able to travel big distances and also carry a lot of people at the same time. In a short period of time, people were able to construct something that would later on be called an airship or Zeppelin, which is highly dependent on easily flammable hydrogen. Zeppelins indeed were also used in wars, especially in the First World War, but when the war has finally ended and a relatively peaceful times came, Zeppelins were the main type of aircraft used for civil aviation. The tendency remained the same until the Hindenburg disaster that happened in 1936 that entailed the death of 35 passengers and 22 crew members. After the tragedy, engineers finally saw a real solution in focusing on planes instead of airships due to safer conditions for passengers (Dilisi, 2017).

Figure 2, Hindenburg after the disaster



Source: Britannica, 2022

However, ambitious plans of engineers and air carriers had to be postponed until the end of the Second World War, when the real rise of civil aviation took place with hundreds of companies opening worldwide and connecting primarily metropolises with their either current or former colonies, such as the United Kingdom with Hindustan and France with the West Africa. Yet, the rise of new world powers such as the Soviet Union and USA prompted those two countries to develop their own aviation and over the course of the last 40 years of the 20th century, i.e., during the Cold War, these two countries were the main driving forces behind both civil and military aviation (Svik, 2020).

3.1.2 Current Status

The modern face of civil aviation has changed significantly after the collapse of the Soviet Union and decolonisation of Africa – new destinations and routes were opened to people who could have never imagined to be traveling in Africa and Russia some 20 or 30 years ago. What is even more, with the help of the trade liberalization and globalization, civil

aviation became one of the most important industries in the world, because it was the main catalyser of promoting liberal trade relations and cooperation between countries (Vasigh, 2022).

Globalization effectively led to incredible revenues for those companies and it also put them in the spotlight, since with no big and significant domestic carrier, country could not be competitive, as it will always rely on foreigners supplying their service to one's market. As of 2019, almost every prominent and independent country on Earth had its own domestic carriers that were opening doors to foreigners from all over the world.

However, there is always a limit to growth and after each white line there will always be a black one. The year 2020 is believed to be the worst year in the whole history of civil aviation since all companies operating in the segment were experiencing a net loss under the force of restrictions put by governments in order to tackle the ongoing pandemic of the coronavirus, which emerged in China in the beginning of 2020 (Elias, 2020).

Figure 3, biggest airlines



Source: Wallach, 2021

The year 2021 cannot anyhow be considered as a favorable one, which was still darkened by the presence of the pandemic and partial restrictions. The situation was more or less the same until 2022, when companies were finally able to start their recovery. All in all, the situation is likely to get better in 2023 and 2024 compared to 2020 and 2021, but it is still wise to understand that the world has finished its stage of growing globalization with the movement of deglobalization with supply chains being disrupted due to the pandemic.

Apart from the most obvious reason represented by the pandemic of the coronavirus, there is still a lot of political instability primarily coming from China, Brazil, Russia and a bunch of other developing countries, which are believed to cause a global disorder leading to the ultimate deglobalization and regionalisation of communities, where principles of multilateralism are being replaced by bilateralism and active cooperation between particular political or economic blocks (Owen, 2021).

3.2 Financial Statements

Financial statements are useful tools for both external and internal users of big organizations because those statements actually reflect the real situation behind the company as it presents raw data in numbers about financial position and performance of a given entity without any regard to their marketing or any other position. For this purpose, potential investors and analysts always use those statements in order to independently evaluate the financial performance and come to the conclusion of whether a given company is doing good or not (Friedlob, 2003).

The information about the performance and position is used both by investors and also by the strategic management, whose main responsibility lies in setting broader goals and objectives for organizations. By properly identifying ongoing issues, management can turn the tide and lead companies to the ultimate prosperity, if a good solution had been selected. For this purpose, board of directors tend to hire highly professional and experienced people who are able to make proper decisions based on insights available from the company's financial statements.

However, there are also cases when companies try to alter those financial statements in order to become more attractive for foreign investors, which is usually forbidden from the legal point of view. Yet, there are still some ways of how companies can make a given situation more beneficial to them by using particular tricks allowed from the legislative point of view, such as decreasing cashflow using depreciation and classifying cost of inventory according to either FIFO, LIFO or average valuation of inventory (Kraus, 1972).

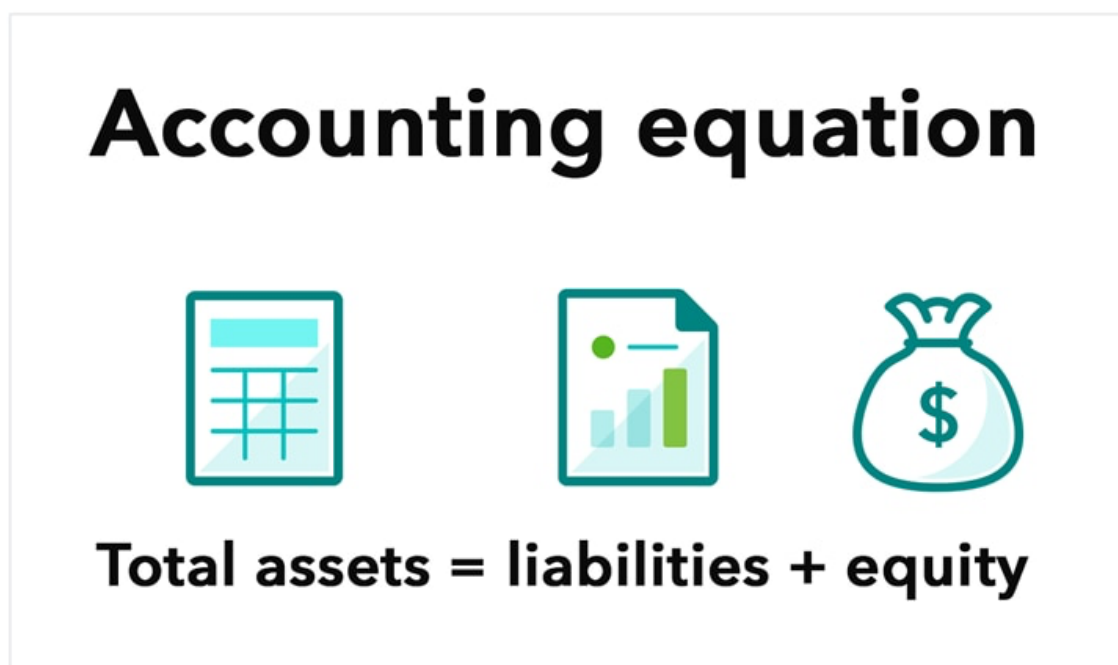
Clearly, accounting is a highly standardized discipline and every organization being subject to annual reporting has to comply with the national framework of the country where it is based. Some companies do also publish international versions of their reports in order to be more investor-friendly and also to show willingness to cooperate with foreign business partners. In that case, the most obvious type of accounting framework used for international purposes is IFRS, standing for “international financial reporting standards” and the reason for using them is quite apparent – by harmonizing financial framework in different countries, it facilitates the economic integration of individual countries into the world economy, thus leading to the eventual growth and prosperity of those entities (Barth, 1999).

When it comes to those statements, the ones traditionally published by business entities regardless of their location and national accounting framework are:

- 1) Balance Sheet
- 2) Income Statement
- 3) Cash-flow statement
- 4) Statement of changes in equity
- 5) Notes to financial statements

Balance sheet is a financial statement operating under the fundamental accounting rule, where the amount of assets is bound to be equal to the sum of liabilities in equities. This accounting equation practically means that assets (elements or practically things owned by company) are financed either by equity or by liability. Financing by equity is also often called equity financing, while financing by liabilities is called debt-financing (Gompers, 2003).

Figure 4, accounting equation



Source: O'Bryan, 2000

Assets themselves are split into 2 equally important categories – current assets and long-term assets. Current assets are assets which are expected to be used in a short period of time, usually in one year, while long-term assets are regarded as the ones kept by companies for a longer period of time and selling them is not that easy, so they are not liquid compared to current assets. Some notable examples of current assets are cash, inventories (material, products and merchandise), short-term investments, securities, receivables (amounts due from customers). Examples of long-term assets are property, machinery, buildings, land, valuable rights, etc. An importance notice here is that those assets are usually subject to depreciation, except for land, which can never depreciate since it cannot deteriorate (Richardson, 2006).

The same logic is applied to liabilities, that are split into current liabilities (the ones expected to be paid soon) and long-term liabilities. Short-term liabilities are usually represented by payables (amounts due to suppliers) and short-term debt. Long-term liabilities are usually represented by mortgages and other kinds of long-term obligations.

Apart from liabilities, the second part of the equation does also consist of equity, whose main idea lies in the representation of the owner's capital or amounts owned by the owner or owners of a business entity. Main elements from equity are treasury stock (stocks bought back), paid-in capital (difference of stock value), capital, various reserves and retained earnings (cumulative net income minus dividends) (Margaritis, 2010).

The second fundamental financial statement is income statement and this one is used to evaluate performance of a given company in terms of comparison of its expenses and revenues. Traditionally, the bottom line of those statements is calculation of profit, which is calculated as a subtraction of expenses from the total amount of revenues. This financial statement can be of 2 different kinds – by function and by nature, whereas by function reports operating expenses as costs of goods sold, administrative expenses and distribution, i.e., according to the function of each expense. Contrary to those statements, by nature kind of income statement reports expenses according to their nature, such as wages, energy, depreciation, etc. The bottom line of all statements of income is calculation of net profit – total revenue minus all incurred costs related to financing and operations. In addition to that, EPS value is usually put under the line of net income, representing the amount of money earned per one share. The higher the value of EPS, the better it is for investors (Ohison, 2005).

Cash-flow statement is the third financial statement used for financial analysis and this particular statement is split into 3 equally important parts – operating, investing and financing, usually placed in the same order as the author has just done so. Operating cash-flow indicates a company's ability to supply and maintain their daily operations with the help of revenue generated by sales and other operating activity and the sign for this particular element has always to be positive, otherwise it might mean that the company is in trouble. Investing cash-flow is the one responsible for indicating cash outflows and inflows primarily related to investing activities, such as buying buildings and other kinds of foreign direct investment performed by companies operating in the private sector. There is no general verdict related to the sign of this element, but a negative one might mean that the company is expected to generate future cashflows with the help of active investment. Financing cash flow is the one responsible for indicating cash inflows and outflows related to financing,

such as bank loans and their repayments, dividends, etc. The very final element follows more or less the same logic as the investing cash-flow as there is no universal answer of whether the sign of the element has to be positive or negative (Bradbury, 2011).

The statement of changes in equity is the one that reflects all changes in equity and other financial cash outflows, this one is not traditionally used for analytical purposes as it primarily breaks down the equity section of an organization.

Finally, notes to financial statements serve as a guideline to auditors and other users of financial statements providing insights and basic information about the basis for the preparation of those financial statements, such as methods used for depreciation and inventory valuation, for instance (Fenyves, 2018).

3.3 Ratio Analysis

Ratio analysis is a more complex method related to the analysis of financial statements. Instead of focusing on qualitative analysis based on either horizontal or vertical method for the comparison of elements and their figures between each other, ratio analysis is something that provides a colder approach eventually indicating particular values that will be interpreted in one way or another.

Those financial ratios are primarily related to three domains – liquidity (the company's ability to convert assets into cash and quickly repay the company's ongoing obligations and debts), solvency (the company's ability to stay afloat and avoid going bankrupt) and profitability (the company's ability to make money from either assets or equity).

When it comes to liquidity ratios, those ratios are usually considered to be favorable whenever their value is well above 1 or equal to one. Thus, it would mean that the company has a lot of liquidity to cover all current obligations at once without a further need to convert long-term assets into cash. Some of those ratios and their formulas are presented below:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Cash Ratio} = \frac{\text{Cash and Cash Equivalents}}{\text{Current Liabilities}}$$

These ratios are the ones traditionally used for the liquidity analysis and their value is regarded as favorable when it is greater than one (Ahmed, 2020).

The second domain is solvency and for those ratios, it is desired to have a value usually below one since it indicates that debt is not overlapping either equity or assets. Few examples of those ratios are presented below:

$$\text{Debt – to – assets} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

$$\text{Equity Ratio} = \frac{\text{Total Equity}}{\text{Total Assets}}$$

Equity ratio traditionally indicates if a given company is focused on equity financing or debt financing. Equity financing is regarded as a more preferred option since debt can sometimes be really dangerous and it is something that puts additional pressure on the company from the financial point of view (Russell, 2013).

Profitability ratios are usually the ones that help to understand if a given entity is performing well and earning enough profit for the business owners. Some of those ratios are:

$$\text{Gross Margin} = \frac{\text{Gross Profit}}{\text{Total Revenue}}$$

$$\text{Net Margin} = \frac{\text{Net Income/Loss}}{\text{Total Revenue}}$$

$$\textit{Return on Assets} = \frac{\textit{Net Income/Loss}}{\textit{Total Revenue}}$$

For those ratios, higher values are regarded as a good sign, while small values are regarded as signs of low profitability of a given company (Hofstrand, 2009).

4 Practical Part

4.1 Characteristics of Aeroflot

To begin the practical part of the following thesis, it is wise to start by quickly explaining the current situation of Aeroflot in terms of external forces affecting the company and also mention the most important internal ones, affiliated either with the management of the company or with the main owners of the organization.

Aeroflot is a Russian company, which is also the most important domestic carrier operating both domestically and internationally with numerous destinations available both for Russian citizens and foreigners. The company was established in 1923 in Moscow under the Soviet Regime, which explains the choice of a particular logo reflecting one of the most important symbols for the Soviet Union – hammer and sickle. However, the management of the company decided not to change the original logo in 1991 after the fall of the Soviet Union and kept the old one as a legacy to the company’s original history.

Figure 5, Aeroflot logo



Source: Aeroflot, 2022

Nevertheless, the company is still believed to be highly influenced by the Russian government, for which there is direct evidence available in the ownership of the company – the company is primarily owned by the state of the Russian Federation, which has the controlling share of stocks representing roughly 57.3% of the company with the rest concentrated in the hands of private entrepreneurs (cit). Clearly, the reason for not losing its grip on the company lies in the fear of a given external force that will quickly be able to put the state in an unfavorable situation, given the fact that back then in the 90s, Aeroflot was fairly the only company operating in the given industry.

Over the course of last 30 years, the situation with Aeroflot changed and the company's development has taken a better turn, since the carrier started to have direct connections with countless European and Western cities, which was unimaginable back in the times of the Soviet Union. What is even more, those connections and flights were not just singular events that were taking place once per week – cooperation and flights between different occidental cities and Moscow became regular, as Russia was opening its doors to all kinds of visitors from all parts of the world – investors, travelers, scientists, politicians, etc.

Yet, as it usually happens with state-owned enterprises, their dependency on the country's external policy is something that cannot be avoided and in case of any visible deterioration of relationship with different countries or even blocks, those companies inevitably fall victims of the aggressive external policy of their owners. The same happened with Aeroflot first in 2014, when there was the first wave of international sanctions imposed on Russia and it all continued in 2022, when the conflict in Ukraine broke out. Consequently, these two events have diminished the international positions of Aeroflot significantly, which first led to the reduction of frequency of flights in 2014 until the eventual ban for particular destinations in 2022, when Aeroflot and all Russian carriers were banned from entering the airspace of countries such as the United States of America, the United Kingdom and finally, the European Union, whose airspace stretches for thousands of square kilometers and prevents Aeroflot and other carriers from conducting their ordinary operations to third-countries not affiliated with the conflict, such as African and South American ones. In addition to that, the ongoing problem blocks Russian carriers and Aeroflot in particular from

having a direct connection to Kaliningrad, which is an enclave city located in the center of Europe between Lithuania and Poland.

What is even more, given the fact that Aeroflot is traded on the Moscow Stock Exchange, it is fair to say that the capitalization of the company is highly dependent on the exchange rate of the Russian Federation, Russian ruble which proved itself to be highly volatile under the force of external shocks provoked by the series of sanctions first in 2014 and then in 2022, effectively making Russia as the world's most sanctioned country. Unsurprisingly, Russian ruble was not able to support itself and the currency started to depreciate rapidly until it was stabilized by the Central Bank of Russia. Yet, the stabilization of the exchange rate was not able to override the negative effect of the depreciation on the market capitalization of Russian companies such as Sberbank, Gazprom and Aeroflot, whose stocks went down rapidly as the wave of sanctions flooded the Russian economy. The author provides her own projection of the market capitalization of Aeroflot based on data collected from Yahoo Finance:

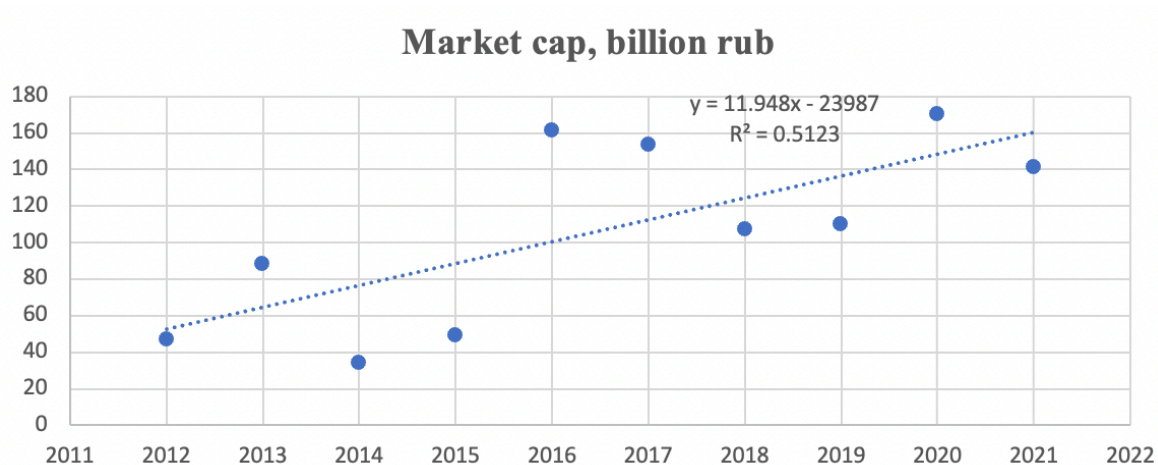
Figure 6, time series of Aeroflot's market capitalization

Year	Market cap, billion rub
2012	46.966
2013	88.335
2014	34.064
2015	49.292
2016	161.5
2017	153.8
2018	107.5
2019	110
2020	170.6
2021	141.3

Source: Yahoo Finance, 2022

Consequently, using the help of MS Excel, the author creates the following projection:

Figure 7, market capitalization trend for Aeroflot



Source: own calculations

Clearly, it is visible that the year 2014 brought a real shock to the market capitalization of Aeroflot, but the company was able to make a recovery until eventually reaching its peak in 2020, when the company faced another serious shock in the form of the coronavirus pandemic. Based on the projection, it is possible to say that the average annual increment of market capitalization of Aeroflot is equal to 11.948 billion RUB. Yet, it is vital to understand that for international investors, the market capitalization might have been diminishing, since the exchange rate of Russian ruble was depreciating rapidly.

4.2 Horizontal Analysis

4.2.1 Balance Sheet

After analysing the company's situation on the surface, the author will finally proceed to the analysis of the financial position of the company using the horizontal approach. The table with the output of analysis is available on the following picture:

Figure 8, horizontal analysis of assets

million RUB

	2019	2020	2021
Cash	15125	88944	74190
Short-term Investments	12990	4836	19571
Receivables	55779	27565	41395
Inventories	27251	26195	29990
Other current assets	35707	37542	25198
Total Current	146852	185082	190344
Property	696951	703537	783526
Depreciation	20348	21031	25469
Total investments	8522	6120	6126
Intangibles	9260	2414	3221
Other assets	64187	64652	40704
Total Long-Term	778920	776723	833577
Total Assets	1069113	1155880	1264708

	2020	2021
Cash	488%	-17%
Short-term Investments	-63%	305%
Receivables	-51%	50%
Inventories	-4%	14%
Other current assets	5%	-33%
Total Current	26%	3%
Property	1%	11%
Depreciation	3%	21%
Total investments	-28%	0%
Intangibles	-74%	33%
Other assets	1%	-37%
Total Long-Term	0%	7%
Total Assets	8%	9%

Source: own calculations based on financial statements

The very first thing that comes to the mind when looking at the output of the horizontal analysis of assets for the selected company is the fact that Aeroflot was increasing its total amount of assets in 2 periods. There was an increase of 8% in 2020 compared to 2019 and an increase of 9% in 2021 compared to 2020. Of course, this might be a signal that the company was increasing its liquidity in order to ensure that they will be able to maintain daily operations and pay creditors in time. For the author's earlier assumption there can be

found a partial piece of evidence – the current assets were the primary element segment that was increasing – 26% in 2020 compared to 2019 and by 3% in 2021 compared to 2020. Henceforth, it is possible to say that the company’s goal was not an expansion, which is usually done by increasing the amount of long-term assets, but the company was rapidly increasing its liquidity in order to be prepared for the worst. Clearly, the element that underwent the biggest increase was cash in 2020 with astonishing 488% increment compared to 2019. Then, the author continues with the horizontal analysis of liabilities and equity:

Figure 9, horizontal analysis of liabilities and equity

million RUB

	2019	2020	2021
ST Debt	12568	34924	17415
Current Portion of LT debt	70814	126761	107689
Payable	38524	30099	39845
Other current	115508	89497	107498
Total Current	237418	281285	272588
LT Debt	489534	589457	672447
Provision for Risks	193065	233660	288088
Deferred Taxes	-27427	-75353	-85446
Other liabilities	10884	27071	22680
Total long term	666056	774835	897769
Total Liabilities	1067163	1271226	1411146
Paid-In Capital	-	78701	86565
Retained Earnings	-24051	-141664	-175770
Treasury Stock	-7040	-7040	-7040
Total Equity	-1692	-107776	-138501

	2020	2021
ST Debt	178%	-50%
Current Portion of LT debt	79%	-15%
Payable	-22%	32%
Other current	-23%	20%
Total Current	18%	-3%
LT Debt	20%	14%
Provision for Risks	21%	23%
Deferred Taxes	175%	13%
Other liabilities	149%	-16%
Total long term	16%	16%
Total Liabilities	19%	11%
Paid-In Capital	-	10%
Retained Earnings	-689%	-224%
Treasury Stock	0%	0%
Total Equity	-6470%	-229%

Source: own calculations based on financial statements

In terms of the other side of the accounting equation, it is also possible to say that the company was increasing their liabilities, which was anticipated – given the fact that the

company increased its amount of assets, it is expected that the company would finance it from either borrowing (liabilities) or capital (equity) financing. When it comes to Aeroflot, it is evident that the company was focused on primary exercise of borrowing with total number of liabilities increased by 20% in 2020 compared to 2019 and by 11% in 2021 compared to 2020. It is fair to conclude that the primary source of financing were long-term liabilities, since the overall increment there is higher. The amount of equity kept diminishing over the course of three selected years.

4.2.2 Income Statement

Income statement is a financial statement that would help the author to analyze the financial performance of Aeroflot, and the author uses the horizontal approach once more, whose output is available on the following picture:

Figure 10, horizontal analysis of income statement

	million RUB		
	2019	2020	2021
Sales	673077	298631	487028
COGS	563782	359922	457888
Gross Income	109295	-61291	29140
Operating expenses	60455	40775	50195
Other Operating	-7590	-10160	-12573
EBIT	56430	-91906	-8482
Non-operating income	2044	-11789	-3350
Non-operating interest	3711	4377	7026
Interest expense	49983	45230	41407
Pretax income	13643	-153344	-42647
Income Tax	291	-30279	-8034
Net Income	10649	-117613	-34106

	2020	2021
Sales	-56%	63%
COGS	-36%	27%
Gross Income	-156%	148%
Operating expenses	-33%	23%
Other Operating	34%	-24%
EBIT	-263%	91%
Non-operating income	-677%	72%
Non-operating interest	18%	61%
Interest expense	-10%	-8%
Pretax income	-1224%	72%
Income Tax	-10505%	73%
Net Income	-1204%	71%

Source: own calculations

The situation does not look promising either in the second financial statement, because the company experienced a drop in the net income equal to 1204%, bringing the company from a net profitable one to a net losing one. However, the company was able to improve the situation with profitability in 2021 by decreasing the amount of net loss in 2021, thus leading to the increase of 71% in the net income. Yet, the company was still experiencing a net loss. However, there is a beam of hope as the company's gross income became positive in 2021. Presumably, the company would be able to recover from this situation by the year 2023.

4.2.3 Cash-Flow Statement

The final piece of horizontal analysis will be the analysis of the company's cash-flow statement.

Figure 11, horizontal analysis of cash-flow statement

	million RUB		
	2019	2020	2021
Operating	153625	21070	91626
Investing	-48172	-15806	-2770
Financing	-115079	70703	-103853

	2020	2021
Operating	-86%	335%
Investing	-67%	82%
Financing	-161%	-247%

Source: own calculations

The first thing that has to be noticed are the signs of each cashflow. In terms of the operating cashflow, the company is doing good because it is significantly over 0, meaning that Aeroflot is good in sustaining its daily operations. Investing cashflow is minus for all three periods regardless of the pandemic, which is also good as the company might use all those investments to increase future cashflows. Financing one is changing with minus in 2019, plus in 2020 and minus in 2021, but this is mostly related to bank repayments and interest received from other institutions. Overall, the company does not have any significant problems with its cash-flow statement as it has with the income statement.

4.3 Vertical Analysis

4.3.1 Balance Sheet

Now, after inspecting the company's balance sheet and performing horizontal analysis, another kind of analysis should be performed as well, and this would be a vertical analysis. The author starts with the vertical analysis of the company's balance sheet and asset part in particular:

Figure 12, vertical analysis of assets

	million RUB		
	2019	2020	2021
Cash	15125	88944	74190
<i>Portion from total current</i>	10%	48%	39%
Short-term Investments	12990	4836	19571
<i>Portion from total current</i>	9%	3%	10%
Receivables	55779	27565	41395
<i>Portion from total current</i>	38%	15%	22%
Inventories	27251	26195	29990
<i>Portion from total current</i>	19%	14%	16%
Other current assets	35707	37542	25198
Total Current	146852	185082	190344
<i>Portion from total</i>	14%	16%	15%
Property	696951	703537	783526
<i>Portion from long-term</i>	89%	91%	94%
Depreciation	20348	21031	25469
<i>Portion from property</i>	3%	3%	3%
Total investments	8522	6120	6126
<i>Portion from long-term</i>	1%	1%	1%
Intangibles	9260	2414	3221
Other assets	64187	64652	40704
Total Long-Term	778920	776723	833577
<i>Portion from total</i>	86%	84%	85%
Total Assets	1069113	1155880	1264708

Source: own calculations based on financial statements

Unsurprisingly, Aeroflot is keeping almost all their assets in long-term section, which is quite common for aviation companies, since their main assets are represented by storages and planes, that both are classified as property and long-term investments. Thus, the share of long-term assets was 86% in 2019, 84% in 2020 and 85% in 2021. A slight decrease in 2020 is explained by the increase in the liquidity and the increase of the overall share of current assets (from 14% to 16%) and a slight decrease in the volume of long-term assets. As for the depreciation, depreciation is kept on a steady level of 3% compared to the total property, which is good. However, in the future, the situation is likely to get worse because Aeroflot is blocked from renewing their machinery and property due to the international sanctions recently imposed on Russia.

4.3.2 Income Statement

Another important piece of vertical analysis is performed on the income statement of the company, whose output is presented on the following picture.

Figure 13, vertical analysis of income statement

	2019	2020	2021
Sales	673077	298631	487028
COGS	563782	359922	457888
Gross Income	109295	-61291	29140
Gross Margin	16%	-21%	6%
Operating expenses	60455	40775	50195
Other Operating	-7590	-10160	-12573
EBIT	56430	-91906	-8482
EBIT Margin	8%	-31%	-2%
Non-operating income	2044	-11789	-3350
Non-operating interest	3711	4377	7026
Interest expense	49983	45230	41407
Pretax income	13643	-153344	-42647
EBT Margin	2.0%	-51.3%	-8.8%
Income Tax	291	-30279	-8034
Net Income	10649	-117613	-34106
Net Margin	1.6%	-39.4%	-7.0%

Source: own calculations based on financial statements

When talking about a vertical analysis of any company's income statement, it is fair to understand that it is primarily represented by the analysis of profitability ratios based on the calculation of income shared compared to revenue. Thus, the company's gross margin was positive in 2019 and 2021, but it was still relatively low with just 16% and 6%, respectively. In 2020, the gross margin is negative with -21%, which is quite a serious problem. As for the net margin of the company, this indicator was positive in just 2019 with a very low number of 1.6%, meaning that the company was not really profitable. In 2020, the net margin is equal to -40%, indicating a serious problem with the company's profitability back then. In 2021, the situation has slightly improved, but the company was still not making a net profit, which is a crucial point in the whole business operation of any organization.

4.4 Financial Ratio Analysis

Then, after manually inspecting the changes happening with Aeroflot's financial statements, it is wise to take a look through a different lens by calculation financial ratios related to liquidity, solvency and profitability. The output is presented below.

Figure 14, financial ratios

		2019	2020	2021
Liquidity	<i>Quick Ratio</i>	50.38%	56.49%	58.83%
	<i>Current Ratio</i>	61.85%	65.80%	69.83%
	<i>Cash Ratio</i>	6.37%	31.62%	27.22%
Profitability	<i>Return on Assets</i>	1%	-10%	-3%
	<i>Gross margin</i>	16%	-21%	6%
	<i>Net margin</i>	2%	-39%	-7%
Solvency	<i>Equity Ratio</i>	-0.2%	-9.3%	-11.0%
	<i>Debt to Assets</i>	47%	54%	55%

Source: own calculations

When it comes to the first domain – liquidity, based on the liquidity ratios, it is possible to say that the company does not really have a lot of liquid assets that would help them to cover their short-term obligations in once, since the figures for each ratio selected (quick, current and cash ratios) are lower than 1 meaning that the company does not really have enough of liquidity. Yet, in 2020 and 2021, the company started to consider liquidity as a serious problem as the figures went up significantly. Presumably, the situation with the company's liquidity in 2022 will be even more favorable but in the light of recent circumstances with the international sanctions imposed on Russia and Aeroflot, it is not at all likely to be the case.

Then, continuing to the profitability ratios, the situation is not at all favorable in that domain as well since the company has a very low profitability in favorable years (2019 and 2021) and the toll of the pandemic is so high that it put the company's profitability under question in 2020 leading to the net loss. Also, the return on assets in 2019 is astonishingly low, so the situation with Aeroflot's profitability is far from being favorable.

Finally, continuing to solvency ratios, it is possible so say that the company primarily focuses on debt financing as the figures for the equity ratio are well below 1, meaning that the company primarily exercises debt financing presumably enjoying low interest rates or some kind of benefits since the company is state-owned. As for the solvency and the debt-to-assets ratio, the situation is favorable as the portion of debt is not overlapping the company's assets, primarily because of large amount of long-term assets such as buildings and planes. All in all, the company seems quite solvent.

Finally, the very last ratio analysis that will be performed in this thesis is the analysis of price-to-earnings ratio. Consequently, after calculating this ratio for the year 2022, the author also compares the figure with the same ratio for other companies operating in the same industry, i.e., aviation. The output is available on the following picture.

Figure 15, P/E ratio analysis

	Price of Stock	Earnings per Share	P/E ratio
<i>Aeroflot</i>	0.4	-14.23	-0.028109628
<i>Air France</i>	1.32	-5	-0.264
<i>Lufthansa</i>	7.72	0.18	42.88888889
<i>Ryanair</i>	77.74	0.95	81.83157895

Source: own calculations

According to the P/E ratio, the situation of Aeroflot is quite bad since the shareholders do not really have any earnings per their shares, but they actually have a loss per share, whilst the situation with Air France is quite the same and the figures are even higher for the loss, Lufthansa and Ryanair seem to be quite attractive for investors, since their investors are paying 42.88 USD per 1 share and 81.83 USD per 1 share, respectively. Clearly, some companies from the industry were able to come to grips with the crisis quicker than others, so the situation with Aeroflot does not necessarily mean that the company is in a tragic situation in terms of the attractiveness for investors, but it means that Aeroflot is among many other air carriers who did not fully overcome negative consequences of the pandemic.

5 Results and Discussion

5.1 Assessment of the Financial Position of the Company

In order to understand and finally highlight the financial position of the company, it is wise to make a quick recapitulation of what was achieved and noted in the practical part of this thesis. The company is an example of typical airline company that has the overwhelming portion of their assets allocated in the long-term assets, being planes and storages for those planes; the company does not really have a lot of liquid assets and because of this, the company faces a problem with their liquidity as the amount of short-term obligations significantly exceeds the amount of current assets that might be used for covering those obligations up. All in all, the company was indeed badly hit by the pandemic, but their solvency was not anyhow been put under the question and the company still has a good financial position. Despite a partial restructuration of their assets and to be more particular, an augmentation of the amount of current assets, the company is still doing good and has a solid financial position.

Undoubtedly, the company can be categorized as the one focused on the debt financing, for which there was plenty of evidence including the equity ratio results and the overall patterns and trends in the balance sheet of Aeroflot. Of course, in the long-term perspective, a high amount of debts prompt questions about the company's potential insolvency to arise. Similar kinds of questions and assumptions were mentioned by Faizuloyeva and her colleagues in the paper published in 2021 related to the analysis of the financial condition of Aeroflot, based on which she was able to conclude that the company has a particular risk of becoming a bankrupt. The author of this diploma thesis partially agrees to the conclusions made by that group of authors, but the author effectively disagrees that there is a risk for the bankruptcy of Aeroflot, because it is a state-owned enterprise and it partially represents the face of the Russian Federation, so the government will stick to the strategy of "too big to fail". As another author, B.E. Gup specified it in 2004, the aviation industry is the one where the practice of "too big to fail" is often exercised, so the author really believes that the assumption of Faizuloyeva about the possibility technical bankruptcy of Aeroflot does not take into consideration the fact that the Russian government will simply not allow it to

happen. Hence, the author concludes that the financial position of Aeroflot is itself strong if the role of Russian government is not taken into consideration. If the role is taken into consideration, it becomes even more evident that the company will remain solvent under almost all possible conditions and circumstances due to the role that it plays for the Russian Federation, since the company can always look up to a potential bail out from the government in the form of various subsidies or grants, what could have not been achieved in the case of another air carrier who was based in Russia and active in the 10s – Transaero. A lot of researchers and experts blame Russian government for its reluctant attitude towards financial problems of the company and unwillingness to help them, what eventually led to the bankruptcy of the company and increasing role of Aeroflot, as Yan specified it in 2022. Clearly, the problem of the Russian aviation industry lies in the fact that there are still state-owned enterprises whose success is in the direct interest of the state and the government, so the market mechanism cannot be fully operational and useful in such cases.

5.2 Assessment of the Financial Performance of the Company

Financial performance of the company is another aspect that is crucial to understand the financial situation of a given organization. When it comes to Aeroflot, their situation with the financial performance is much more complicated than it is with the financial position, because in that domain, the company can mostly rely on itself rather than on government bailouts. Actually, the company was doing relatively good from the point of view of the financial performance in 2019, but the profitability was still astonishingly low with just 2% for the net margin and approximately 20% for the gross one. Of course, saying that it is bad will not be correct at all; after all, the company was making net profit and it is a good phenomenon, but the degree to which this profit is made is still dubious, as it is quite low for the company that enjoys almost a monopolistic kind of competition in the Russian market.

Unsurprisingly, the main cause for the deterioration of the financial performance of the company was the coronavirus pandemic which directly hit the aircraft industry. Of course, the company was still fully operational on the domestic level because the restrictions imposed in Russia related to the free movement of people did not really prohibit any movement between cities, but it still did not help the company as a lot of their revenue were

coming from the international destinations. Clearly, the negative net margin in 2020 is not at all a sign of financial problems or a market failure of Aeroflot, but it is just a direct drawback of an ongoing pandemic. The value for the net margin in 2021 suggests that the company is recovering, and it is possible that their net margin will become positive no earlier than the year 2023. Yet, under the condition of no financial sanctions, this prediction might be quite possible. Given the ban of Aeroflot on almost unanimous international level, it is believed that the company's net margin will either be on the same negative level or even lower. As Rutland specified it in 2014, sanctions hit the company quite badly, so more or less the same outcome can be expected in 2022 and the year 2023 if not even worse given the degree of severity of new sanctions imposed on the country.

What is quite interesting is actually not the negative effect of the pandemic or even the effect of international sanctions imposed on the country and all affiliated companies, but it is actually the fact that the company's profitability is low even regardless its classification as a natural monopoly, according to Silvestrov, 2018. Net margin of just 2% for a natural monopoly such as Aeroflot might mean two things – either consumers are fed up with the pricing policy of Aeroflot and they are not anymore willing to support them even for the sake of their own comfort, or the company's operations are not that effective. The author believes that it might be the consequence of both, since the lack of competition and excessive government support might simply lead to the lack of initiative or any willingness to focus on innovations and improvement of the service, since people would have no choice all the same but to buy service from the company.

5.3 Main Factors Influencing Profit

When it comes to Aeroflot and as it was specified multiple times throughout the narrative, the most important factor influencing the profit and also the market position of Aeroflot is the actions of the Russian Federation in the domain of external policy. Relatively bold and unpredictable actions of the Russian government often leave domestic companies in a bad position since they are always the ones bearing consequences of the relatively controversial moves done by the Russian government on the international arena.

Also, another important factor influencing Aeroflot is the presence of restrictions related to the free movement of people, but it is believed that the time of the coronavirus pandemic is far over and there will be no further restrictions imposed either by the Russian government or the government of countries where Aeroflot is still operating. However, it is still fair to say that the situation with the pandemic is not over in those countries, such as China and Thailand, where the pandemic and restrictions are still a big deal, compared to Europe, where Aeroflot is almost non-existent after the 24th of February 2022. Hence, the profit of Aeroflot is highly dependent on the sanitary situation in exotic or countries of the developing world, which are both more or less the only international destinations of Aeroflot after the events of February 2022.

5.4 Risks and Problems

Obviously, the main risk of the company is related to the fact of the state ownership of Aeroflot, which has its own advantages but still brings a serious of fundamental disadvantages for the organization. Indeed, the too big to fail policy helps the company to avoid any problems with the financial position and solvency, but the presence of the state still creates a particular ceiling for the organization where the potential output of the company is almost identical to the potential output of Russian economy and Russia in general on the international level. Given the fact that Aeroflot is too significantly tied to the Russian state, there is no way that the company's success will overlap the country's performance and it is the main problem related to the development of Aeroflot from all perspectives.

To be more specific, there is a series of risks related mostly to:

- 1) Political sanctions and Aeroflot's inability to conduct their operations even in a worse way than it was happening during the pandemic of coronavirus.
- 2) Aeroflot's inability to fight depreciation and replace broken parts of their planes, as well as to insure them due to the international sanctions, so the company would have to simply take spare parts from individual planes or rely on domestic craftsmen,

which might both lead to the risk of potentially catastrophic events such as crashes or emergency situations.

- 3) Exchange rate problems since the company is losing a lot of money due to instable and highly volatile Russian currency, whose direction cannot be predicted by analysts because it might take a grave turn any day, as well as it can get significantly better and appreciate any day.

Clearly, apart from the financial situation of the company, there are much more serious aspects and domains that have to be taken into consideration in order to understand the ultimate situation of the company.

6 Conclusion

To conclude, it is possible to say that the company's financial position is favorable as of annual report from the 2021, yet there might be a possible deterioration caused by the series of recently imposed financial sanctions on the Russian Federation. Also, the fact of state ownership helps the company to conduct their operations without any fear of going under since they can always hope for the Russian government who sticks to the policy of too big to fail.

The company's financial performance is far from being perfect and the performance even in the pre-pandemic era is not favorable with just 2% for the net margin, which is astonishingly low when taking into consideration the market position of Aeroflot, which is often classified as a natural monopoly in the Russian domestic market. The pandemic had had its toll on the company in 2020, but a partial recovery was made possible in 2021, when the company partially compensated a part of their losses, but still was operating under the condition of net loss.

Overall, the company is not worth investing in 2022 as well due to 1) instability related to the political domain; 2) low P/E ratio and 3) unpredictability of the Moscow stock exchange, which was highly volatile during the last 300 days, as of the 21st of December 2022.

All in all, Aeroflot might be a really strong and powerful company for the Russian domestic market, but it is not so powerful for the international one, especially in the context that all of their operations were temporarily or even permanently shut down by the European government and the governments of the majority of the G7 states.

If the company will not be able to break free from the hands of the Russian government and the state ownership, it is still likely that the company's future will remain uncertain and permanently tied to the fate of Russian economic situation.

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8 Appendix

Figure 16, part of Aeroflot's income statement

Неоперационные прибыли и убытки						
<i>Млн руб., если не указано иное</i>	4К 2021	4К 2020	Изм.	12М 2021	12М 2020	Изм.
Операционный убыток	(13 029)	(35 398)	(63,2%)	(5 015)	(92 153)	(94,6%)
Убыток от инвестиций, нетто	(80)	(200)	(60,0%)	(265)	(557)	(52,4%)
Финансовые доходы	3 488	2 062	69,2%	12 331	4 938	2,5x
Финансовые расходы	(10 979)	(11 210)	2,1%	(41 407)	(47 252)	(12,4%)
Реализация результата хеджирования	(3 371)	(2 922)	15,4%	(8 291)	(13 254)	(37,4%)
Доля в финансовых результатах ассоциированных предприятий	87	(43)	–	153	(143)	--
Результат от выбытия дочерней компании	–	(5 066)	–	–	(5 066)	–

Source: Aeroflot, 2022

Figure 17, part of the company's liabilities

Долговая нагрузка			
<i>Млн руб., если не указано иное</i>	31.12.2021	31.12.2020	Изменение
Кредиты и займы	132 268	88 635	49,2%
Обязательства по аренде	665 283	662 507	0,4%
Пенсионные обязательства	733	792	(7,4%)
Общий долг	798 284	751 934	6,2%
Денежные средства и краткосрочные финансовые инвестиции	93 753	93 775	(0,0%)
Чистый долг	704 531	658 159	7,0%

Source: Aeroflot, 2022