

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economic Theories



Diploma Thesis

Financial analysis of National Company KazMunayGas

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DIPLOMA THESIS ASSIGNMENT

Bc. Anastassiya Borovikova

Economics and Management

Economics and Management

Thesis title

Financial analysis of National Company KazMunayGas

Objectives of thesis

The main goal of this thesis is to describe the methodology of financial analysis and apply the theoretical concept to the selected company KazMunayGas. These findings are used to characterize and evaluate financial position of the firm. The aim of this paper is to evaluate financial health of the company within defined time period 2012 – 2019.

Methodology

The Diploma Thesis is divided into two fundamental chapters: theoretical and practical.

Methodology of theoretical part consist of the literature review that describes the purpose of financial analysis. The literature review is based on the analysis of scientific sources, both domestic and foreign. A significant part of the literature review outlines methods of financial analysis, which are absolute (horizontal and vertical analysis) and differential indicators, ratio indicators such as: liquidity, profitability, leverage, activity ratio.

Practical part describes the fundamental information about the National company KazMunayGas. Based on applied methods, the achieved results are compared to recommended values and industry averages. The achieved results are necessary for an assessment of the financial position of the national company KazMunayGas and for formulation of proposals for future development.

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KazMunayGas, differential, absolute indicator, liquidity, profitability, leverage, financial statements

Recommended information sources

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Declaration

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

In Prague on 30.11.2020

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Financial analysis of National Company KazMunayGas

Abstract

The presented thesis is devoted to the financial analysis of the National Company KazMunayGas for the period from 2012-2019. KazMunayGas is a leading vertically integrated oil and gas company located in the Republic of Kazakhstan. KMG manages oil and gas exploration, production, processing, and transportation assets. The diploma thesis includes a practical and theoretical part. Theoretical part consists of the literature review that describes the purpose of financial analysis. The literature review is based on the analysis of scientific sources, both domestic and foreign. A significant part of the literature review outlines methods of financial analysis, which are absolute (horizontal and vertical analysis) and differential indicators, ratio indicators such as: liquidity, profitability, leverage, activity ratio. Practical part describes the fundamental information about the National company KazMunayGas. Based on applied methods, the achieved results are compared to recommended values and industry averages. The achieved results are necessary for an assessment of the financial position of the national company KazMunayGas and for formulation of proposals for future development.

Keywords: KazMunayGas, differential, absolute indicator, liquidity, profitability, leverage, financial statements, Gazprom, industry average

Finanční analýza národní společnosti KazMunayGas

Abstrakt

Předkládaná práce je věnována finanční analýze národní společnosti KazMunayGas za období 2012-2019. KazMunayGas je přední vertikálně integrovaná ropná a plynárenská společnost se sídlem v Kazašské republice. KMG spravuje aktiva z průzkumu, těžby, zpracování a přepravy ropy a zemního plynu. Diplomová práce obsahuje praktickou a teoretickou část. Teoretickou část tvoří literární rešerše, která popisuje účel finanční analýzy. Přehled literatury je založen na analýze vědeckých zdrojů, domácích i zahraničních. Významná část přehledu literatury nastiňuje metody finanční analýzy, kterými jsou absolutní (horizontální a vertikální analýza) a diferenciální ukazatele, poměrové ukazatele jako: likvidita, ziskovost, pákový efekt, poměr aktivity. Praktická část popisuje základní informace o národní společnosti KazMunayGas. Na základě aplikovaných metod jsou dosažené výsledky porovnány s doporučenými hodnotami a průmyslovými průměry. Dosažené výsledky jsou nezbytné pro posouzení finanční situace národní společnosti KazMunayGas a pro formulaci návrhů budoucího vývoje.

Klíčová slova: KazMunayGas, diferenciál, absolutní ukazatel, likvidita, ziskovost, pákový efekt, finanční výkazy, Gazprom, průmyslový průměr

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List of abbreviations

BS- Balance Sheet
CA-Current Assets
CCC-Cash Conversion Cycle
EBIT- Earnings before interests and taxes
IS-Income Statement
ITR-Inventory Turnover Ratio
KMG- National Company KazMunayGas
NCA- Non-Current Assets
NWC- Net Working Capital
PTR- Payable Turnover Ratio
RTR-Receivable Turnover Ratio
ROA- Return on Assets
ROS-Return on Sales
ROE-Return on Equity
ROCE- Return on Capital Employed

1 Introduction

Economic growth and prosperity in many countries largely depend on the level of development of the oil industry. Problems of the development of processes affecting the efficiency of the activities of oil producing enterprises are the most urgent for stabilizing the economies of oil-producing countries.

For decades, companies and corporations have faced various financial and management problems. In a highly competitive environment, owners need to have a clear understanding of the financial position of their company to prevent threats in order to be competitive and successful in the marketplace. The financial picture allows a company to determine how a business – unit is profitable, stable, competitive, and evolving over time.

Today, modern market relations require a detailed study of the financial condition of the enterprise by its users. The analysis of financial activities is necessary both for internal users of the enterprise to control and make the right financial decisions, and for external users, such as investors, potential partners, credit institutions, in order to determine the profitability and solvency of the entity.

Financial stability is one of the important economic factors through which it is possible to assess the financial condition of an enterprise. Financial results coming from financial analysis are fundamental for corporations because they reflect the current and future situation of the company.

Using financial analysis as a tool, the company determines its strengths and weaknesses based on the results obtained. By relying on financial statements, the company can build the optimal combination of solutions to improve its financial position. A financial analysis of a corporation from more different point of view is a very essential component for making a competitive advantage and it is often applied across many industries.

All the above points explain why financial analysis is one of the most important management tools.

All method and concepts were combined in the topic of Diploma Thesis: «Financial analysis of KazMunayGas Company», in years 2012-2019. The Diploma Thesis contains two fundamental parts with sub-chapters.

Theoretical part defines the aim of the thesis and explains the methods of analysis. Practical chapter represents calculations and analyses of theoretical data, that are consolidated with financial analysis, ratio indicators and qualitative analysis of KMG.

2 Objectives and Methodology

The Theoretical part of Diploma Thesis describes main objectives and methodology.

2.1 Objectives

The main goal of this thesis is to describe the methodology of financial analysis and apply the described theory to the selected company KazMunayGas to obtain a certain number of basic parameters that give an objective and reasonable characterization of the financial position of the company. The aim of this paper is to evaluate financial health of the company within defined time period 2012 – 2019. Based on the results obtained, propose several recommendations to improve the future position of the company.

To achieve the general goal of this thesis, it is crucial to set the following sub-objectives:

- To select and explain terms used in the theory of Financial Analysis
- To collect available data from official open source
- To apply “Vertical” and “Horizontal” analysis of the financial statement.
- Apply the calculations of chosen financial Indicators with intention of evaluating the current financial position of the company

Research questions?

- Is the KMG company positioning itself as profitable and financially healthy entity?
- If not, what solutions can be proposed to improve the company's position?

2.2 Methodology

For reaching the aim it's necessary to use mainly quantitative methods with financial statements of the company, which were taken from official open source (www.ir.kmg.kz). All the necessary data were taken from the financial reports, such as Balance Sheet, Profit and Loss Statement/ Income Statement, Cash-Flow Statement, and other supplementary information for several years of selected company. To analyze given data was used time period from 2012 to 2019 years. Obtained information from financial statements is commonly used for analyzing and subsequent reporting of the conclusions of the past and present of KazMunayGas company, allows to reach clear conclusions about the overall management and financial situation of the company. The presented work is divided into two main chapters: **theoretical** and **practical**.

Speaking of theoretical part, it contains the literature review that describes the purpose of financial analysis. In addition to the above, some of the work goes to external and internal users of accounting information. The literature review is based on the analysis of scientific sources, both domestic and foreign. A significant part of the literature review outlines methods of financial analysis, which are absolute (horizontal and vertical analysis) and differential indicators, ratio indicators such as: liquidity, profitability, leverage, activity ratio.

The Practical part describes the fundamental information about the National company KazMunayGas. Based on the presented methods and indicators of financial analysis described in the literature review, the achieved results are compared to recommended values and industry averages. In addition, the values obtained are compared with competing company Public Joint Stock Company Gazprom. Based on the results obtained, strengths and weaknesses were identified. Summarizing all the provisions of the company, it is necessary to provide a number of recommendations for the company.

3 Literature Review

This chapter is a source describing the fundamental theoretical data that are required for a dissertation. In other words, a literature review creates a “landscape” for the reader of this work, giving a complete picture of developments in this area. The main goal is to combine all the necessary data to provide the basis for a clear financial analysis and valuation. The theoretical part lists the methods of financial analysis, indicators. A thoroughly selected and described literature is the core for the qualitative analysis presented in the practical chapter.

3.1 Financial Analysis

In modern conditions of economic development, the activity of each business entity has become the subject of interest of a significant number of participants in market relations. Using the accounting information available to them, these persons assess the financial position of the organization. The main tool for this is financial analysis. For a complete understanding of what financial analysis is, the following definitions were presented.

According to ELDER (2005), Financial Analysis is the study of the current and future financial condition of an economic entity to assess its financial stability and the effectiveness of decisions made based on its financial statements.

DAMODARAN (2006) defines Financial Analysis as process of identifying the systematization and analytical processing of available information of a financial nature, the result of which is the provision of a potential user, which may subsequently be the main form for making managerial decisions regarding a particular object of analysis.

BERNSTEIN (2003) The essence of Financial Analysis is the application of analytical tools and methods to the indicators of financial documents in order to identify significant relationships and characteristics necessary for making any decision Analytical procedures and assessments are carried out according to the data of financial (accounting) statements and accounting registers, on the basis of which the statements are prepared.

On the other hand, ATRILL&McLANEY (2015) suggests that Financial Analysis is analytical procedures and assessments are carried out according to the data of financial (accounting) statements and accounting registers, on the basis of which the statements are prepared.

HELFERT (2001) thinks that Financial Analysis is a process of researching the financial condition and the main results of the financial activities of an enterprise in order to identify reserves for increasing its market value and ensuring further effective development.

3.2 The Purpose of Accounting

By accounting for all organizations, regardless of ownership imposed the same requirements, regulated by different regulations. Accounting can be described as an orderly system for collecting, registering, and summarizing information in monetary terms about property, obligations of the organization and their movement through continuous, and documentary accounting of all business transactions. The main task of accounting is the formation of complete and reliable information (financial statements) about the activities of the organization and its property status, which is necessary for internal and external users of financial statements EPSTEIN & JERMAKOWICZ (2007). The accounting system includes three interconnected subsystems. Tax accounting is conducted in parallel with financial accounting and is necessary for accounting for tax purposes.

Financial and management accounting is necessary to obtain information about the financial position of the enterprise and make management decisions. Financial accounting considers the quantitative aspect of all accounting objects of the organization of activity, and management - their qualitative characteristic. The goals of **financial accounting** and analysis are the reflection and analysis of information about financial resources, operations and financial results of the organization. The prerogative of **management accounting** and analysis is the determination of the actual costs of production and sale of products, expenses and income of the enterprise, as well as their planning to identify the planned financial results. The goals of management accounting and analysis are to address the issues of formation of costs for production and sale of products, as well as to determine their impact on the efficiency of use ATRILL&McLANEY (2015).

3.3 Users of Financial Information

According to ATRILL&McLANEY (2015) accounting information in accounting is formed in order to provide interested parties with complete and reliable information about the activities of the organization and its property status. In addition, such information can be used by them to monitor compliance with the law, the availability and movement of

property and obligations of the organization, as well as the use of resources. By receiving relevant information, users can help prevent negative business results and identify internal reserves of financial stability.

Users of financial accounting information are generally divided into 2 groups: **external** users and **internal** users.

External Users
Investors and potential investors
Lenders and suppliers
Shareholders
Taxation Authorities
Government and other regulations
Competitors
Customers

Source: ATRILL&McLANEY 2015; modified by author, 2020

3.3.1 Types of External Users

External users operate outside the organization and should be broken down into the following subgroups:

1. Direct financial interest

Users with direct financial interest - members (owners) of the organization, current and potential investors and lenders (including suppliers), as well as lending banks, which, on the basis of reporting information, develop options for providing loans, determine the likelihood and timing of their return. Direct interest is manifested in the user's interest in the results of the organization's activities. The subject of analysis of this subgroup is the financial position of the company, the results of its work, the liquidity of the balance sheet EPSTEIN & JERMAKOWICZ (2007).

Investors and potential investors.

This group of users studies the financial condition of the company to make a decision on investing in this organization ATRILL&McLANEY (2015).

Lenders and suppliers.

Lenders without fail studies the financial statements of the company for the possibility of issuing a loan. Lenders analyze the financial condition of the organization

and decide whether to issue loans. *Suppliers* are interested in the financial condition of the enterprise in terms of its solvency in cases where the delivery of goods and other values is not carried out on a prepayment basis ATRILL&McLANEY (2015).

Shareholders.

Speaking of shareholders, they are directly interested in information from the financial statements, since the profit from the acquired shares directly depends on the financial results of the enterprise ATRILL&McLANEY (2015).

2. Indirect financial interest

External users with an indirect interest - third-party consumers of information who do not directly participate in the work of the organization, but have an indirect financial interest - the tax service, government authorities, various financial institutions and stock market participants (insurance companies, exchanges, dealers, brokers, etc. ATRILL&McLANEY (2015).

Taxation Authorities.

Authorities of taxation as external user is interested in information from the company's financial statements to control the correctness of the calculation of tax liabilities. Also, whether the company evades paying the required taxes and does not underestimate their amount ATRILL&McLANEY (2015).

Government and other regulations.

Government bodies, on the basis of financial statements, determine progress on the development of various sectors of the economy and assess the level of business activity in the country. Based on information received determine the amount of financial support ATRILL&McLANEY (2015).

Competitors.

Businesses study and analyze the financial statements of other businesses to determine the strengths and weaknesses of their competitors. In addition, credit policy and debt collection procedures are assessed ATRILL&McLANEY (2015).

Customers.

As suppliers customers focused on the financial condition of the company to understand how profitable it will be to cooperate with such a company. If the company has a critical financial situation, then buyers are unlikely to agree to an advance payment for goods, works or services ATRILL&McLANEY (2015).

3.3.2 Types of Internal (primary) Users

Any employee can be an internal user of financial statements, if he has the right to access the relevant documents. Internal users use accounting information at all stages of management decision making. The information should contain information about production and investment activities, financial, sales and organizational activities of the organization (ELDER, 2005; ATRILL&McLANEY ,2015).

Following are the internal (primary) users of accounting information:

Internal Users
Owners
Managers
Employees

Source: ELDER, 2005; ATRILL&McLANEY 2015; modified by author, 2020

Owners.

This group of users monitors how much their invested capital fluctuates up or down, and how profitable the investment is. Based on the results obtained, the overall welfare of the business is assessed. Management is interested in the business's ability to generate profit afterwards (ELDER, 2005; ATRILL&McLANEY ,2015).

Managers.

A group of people who are fully responsible for the functioning of the business and achieving the goals of profitability and liquidity. In small companies, management may include the owners, while in large companies, they are people hired to run the business. Managers must decide what to do, how to do it and then determine if the result is in line with the original plans. In order to make the right decisions, they must be based on timely and reliable information. And this information is mainly provided by accounting. Management is responsible for the preparation and preparation of financial statements ELDER (2005).

Employees.

The welfare of an employee directly depends on the financial condition of the company. Based on this, employees carry out an audit of the general financial condition of the company, because this determines the stability of their wages, as well as the safety of their work. Checking whether the employer makes all the necessary payments to tax agency, the social and pension fund (ELDER, 2005; ATRILL&McLANEY, 2015).

3.4 The Financial Statements

ELDER (2005) suggested that the Financial statements are the most significant sources in financial analysis used by companies and business entities. The Financial Statements are a set of accounting indicators reflected in the form of certain tables and characterizing the movement of property, liabilities and the financial position of the company for the reporting period. Financial statements are a system of data on the financial position of a company, financial results of its activities and changes in its financial position and is compiled using accounting data FLOWER (2018).

3.4.1 Consolidated Financial Statements

FLOWER (2018) says that development of market relations between states contributes to the entry into the international arena of groups of related companies to attract new investors. As a result, it becomes necessary to provide interested parties with information on the financial position of large organizations in the form of a **consolidated report**, it rather than giving information about each company separately.

Consolidated - to combine several things, especially businesses, so that they become more effective (CAMBRIDGE DICTIONARY, 2020).

Consolidated financial statements defines as financial statements of interconnected groups of organizations, considered as a single economic entity, or in other words, as a consolidated group. It describes the property and financial position at the reporting date, as well as the financial results of its activities for the reporting period. A significant feature of the group's consolidated statements is that the assets, income and expenses of two or more independent legal entities are combined into a separate system of financial statements. Consolidated financial statements include (BURLAKOVA, 2008; BRITTON&JORISSEN, 2005):

Consolidated Balance Sheet/Consolidated Statement of Financial Position,
Consolidated Income statement/ Consolidated Statement of Comprehensive Income,
Consolidated Statement of Cash Flows

3.4.2 Consolidated Balance Sheet

The Balance Sheet is one of three mandatory reports that is used in financial modeling. A company's Statement of Financial Position consolidates information about the assets, liabilities, and stockholders' equity of a company. The balance sheet reflects assets and how they are funded with equity and liabilities. The balance sheet shows the situation in the company on the last day of the report period, as a rule, this is the last day of the year, that is, December 31st. The balance is compiled in the form of a table, which is divided into two parts - right and left. On the left side all assets of the company are recorded, and on the right side - all its liabilities and stockholders' equity. The main feature of the balance sheet is that total assets are always equal to the sum of liabilities and equity. If the amount was not equal, then the company would have unaccounted funds, which should not be (BURLAKOVA, 2008; ELDER,2005; HELFERT,2001).

According to (BRITTON & JORISSEN, 2005) "Balance equation" is represented below:

$$\text{Total Assets} = \text{Total Liabilities} + \text{Total Equity}$$

Assets

Assets are what the company possesses, that is, the total value of the company's cash, buildings, goods, etc. With its own funds or funds raised from various sources and authorized capital, the company begins to develop and buy various assets (perhaps it keeps money "in money" without having time to use it, but in any case it starts its development path, acquiring any assets (company assets) for borrowed funds (liabilities of the company). The accounting department is strictly controlled, and if the money "entered" the company, then it is easy to trace where it came from and what was purchased with it (KLINE,2007).

Based on (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017) assets classified into non-current assets (long-term assets, fixed assets) and current assets.

Non-current assets (long-term assets, fixed assets)

Non – current assets are acquired for the purpose of expanding the business; the assets must be held directly for use and not for sale. Directly, these are the assets acquired by the company that will be beneficial for several years. Non-current assets are long-term assets with a maturity of more than 12 months after the reporting date KLINE (2007).

Sub-categories of non-current assets:

I. Intangible assets

Intangible Assets is an asset don't physically exist. The accounting for intangible assets depends on the type of assets and they can either be amortized or be unprofitable every year (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017).

II. Tangible assets

KLINE (2007) defines tangible assets as assets which are physically owned by a company. All tangible assets used by business entity with the aim to produce its product or service.

III. Long- term Financial assets

ASSETS
Non-current assets (<i>long-term assets, fixed assets</i>)
<u>1.Intangible assets:</u> <ul style="list-style-type: none">✓ Research and development✓ Valuable rights (an intellectual property)-trademarks, copyrights, exclusive rights, patents✓ Software✓ Goodwill✓ Formation expenses-notary fees, rent✓ Long term assets under construction and advance payments
<u>2.Tangible assets:</u> <ul style="list-style-type: none">✓ Land✓ Buildings- factories, constructions✓ Machinery and equipment (instruments, vehicles, computers)✓ Other tangible assets
<u>3.Long-term financial assets:</u> <ul style="list-style-type: none">✓ Investments – shares, participating interest, ownership interest-controlling influence, shares in affiliated undertakings- investment in associated and subsidiary companies✓ Long term securities

Source: (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017); modified by author, 2020

Current assets

HARTWICH (2014) defines that Current assets can be converted into cash during one production cycle or one year. Unlike long-term assets of a company, current assets are not intended for long-term use. Assets are considered short-term if their circulation period is not more than 12 months after the reporting date or the duration of the operating cycle if it exceeds 12 months.

ASSETS
Current Assets (<i>short-term Assets</i>)
<u>1.Inventory (stocks)</u> – <ul style="list-style-type: none">✓ Material – purchased with the intention to of consumption – raw material, cans, barrels, fuel, work clothing, office supplies✓ Work – in – progress – unfinished production✓ Products✓ Merchandise
<u>2.Receivables (long- term, short- term)</u> <ul style="list-style-type: none">✓ Customers✓ Tax receivables✓ Estimated receivables✓ Receivables to employees✓ VAT✓ Deferred tax receivables
<u>3.Current financial assets</u> <ul style="list-style-type: none">✓ Cash, Bank accounts✓ Short-term securities

Source: (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017); modified by author, 2020

Equity

According to IFRS, Equity and Liabilities are recorded on the right side In Balance sheet. WEINSTEIN (2017) says that equity represents the amount of money that must be returned, in case of all the debts of the company have been paid off. The equity part is divided into four categories:

- I. **Capital.** This is the amount of money that is contributed by the owners or investors of a business to purchase the assets needed to run the business WEINSTEIN (2017).
- II. **Capital funds.** Capital fund could be represented as share premium, that is a capital surplus, difference between the amount for which issued shares were sold and par values of a company's newly issued shares WEINSTEIN (2017).
- III. **Reserves.** Reserves created from profit, obligatory, required by state.
- IV. Profit and Loss from previous and current accounting year.

Liabilities

WEINSTEIN (2017) suggests that liability also appears on the right side of the table as the opposite of assets. Liabilities represent the debt of an entity to another enterprise arising from past events, the settlement of which would result in an outflow of resources from the entity. It is also important to note that liabilities can be both long-term and current. Liabilities are also defined according to purpose:

- I. Provisions. Provisions take into account an expected expense in the future, and company create a provision in the current period.
- II. Liabilities – debts- obligatory to pay suppliers, tax liabilities, employees, bank loan, VAT, deferred tax.

EQUITY/ LIABILITIES
<p><u>EQUITY</u></p> <p>capital: registered capital, own shares held</p> <p>capital funds: share premium, other capital fund (received gifts)</p> <p>reserves: legal reserves</p> <p>P/L: retained earnings, accumulated losses</p>
<p><u>LIABILITIES</u></p> <p>provisions: take into account expected expense</p> <p>liability-debts: suppliers, bank loan, VAT, tax</p> <p><u>accruals and deferrals:</u> accrued expenses, deferred income</p>

Source: (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017); modified by author, 2020

3.4.3 Consolidated Income Statement

"Statement of income and expenses (profit and loss)" is an integral part of financial management accounting, reporting and analysis of the enterprise.

According to HELFERT (2001) Income Statement shows whether the organization earns enough and whether it can afford the current level of costs for a certain period. It shows what income the company received during this period, what expenses were incurred to obtain these incomes, what profit (or loss) was obtained as a result. HELFERT (2001), Income Statement also referred to:

- Statement of profit and loss (P/L)
- Statement of financial performance
- Operating Statement
- Statement of Earnings

Income statement or the so-called the profit and loss statement is considered one of the most useful methods of accounting reporting within any enterprise. This report describes in detail the result of the financial work of the company in the reporting period. Reporting attracts interest not only to the owner of the organization, but also to the tax authorities BRITTON & JORISSEN (2005).

KLINE (2007) explains the difference between liabilities and expenses. Liabilities and expenses represent a certain outflow of funds from the company, they are the key elements of the financial statements. This outflow of funds is made in the current period or in the future. Based on this, the main difference between them is determined - time, namely, in terms of implementation. Liabilities are not immediate obligations, they are created for future payments, firstly liability is accrued and then paid off. Liabilities focused to generate the assets of the company represented in Balance Sheet. Expenses are paid off immediately, with the aim to generate revenues of the company which are reported in the Income Statement.

Expenses in Income Statement could be classified into two groups: by function and by nature. Differs occurs only in operating part of Income statement, the financial part is the same, also Profit and Loss (P/L) is the same in both (by function/ by nature). In Income Statement by nature is used the account «changes in own inventory», in Income statement by function it is not used at all BRITTON & JORISSEN (2005).

Based on (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017) Income statement could be divided into two main parts such as operating and non- operating revenues and expenses. Operating income refers to any financing activity related to the company's core business. Non-operating income includes revenues and expenses that are not part of the core business of the company.

3.4.4 Consolidated Cash-flow Statement

Cash flow is a tabular form of financial statements containing data on cash flow in the context of items of their receipt in the organization and payments. This report is one of the 4 main forms of financial statements (three: Balance Sheet, Profit and Loss Statement and Statement of Changes in Equity) HELFERT (2001).

KLIN (2007) explains that the cash flow statement is a valuable source of information for analyzing actual cash flows. Unlike “accounting” indicators, such as revenues or profits, which are highly dependent on accounting rules, cash flow allows investors to more accurately determine what the company spends money on and what returns can be expected from investments in it.

EPSTEIN & JERMAKOWICZ (2007) explain that for the preparation of the statement of cash flows, it is necessary to use the direct and indirect method.

Indirect method

The main feature of the indirect method is the direct relationship with the statement of financial results and balance sheet. Cash flow from operating activities is collected on a bottom-up basis. The basis is the profit received in the income statement, after which it is adjusted for non-monetary items (depreciation), as well as items not related to the company's operating profit (exchange rate differences). It is important to note, however, that profitable non-monetary items are deducted, and non-monetary losses are added EPSTEIN & JERMAKOWICZ (2007).

Direct method

The direct method consists in moving "from top to bottom" and involves grouping by company accounts. This implies consistent accounting of cash flows by line item, with the same breakdown by three components: operating, investing and financing activities EPSTEIN & JERMAKOWICZ (2007).

The structure of the report, regardless of accounting standards, is represented by three main components:

- I. **Cash flow from operating activities** defines as an amount that remains after deducting working capital and depreciation expenses. In essence, this cash flow is the net profit for a certain period of time. It is usually calculated for a standard reporting year. Cash flow from operating activities is formed exclusively from income associated with the main, official activities of the organization TIMOFEEVA (2010).
- II. **Cash flow from investment activities** represents receipts and expenditures of funds associated with the acquisition or sale of long-term assets of the enterprise, as well as income from previous investments TIMOFEEVA (2010).
- III. **Cash flow from financial activities** defines as receipts and payments of funds related to attracting additional share capital or share capital, obtaining long-term and short-term loans and borrowings, paying dividends and interest in cash on deposits of owners and some other cash flows associated with the implementation of external financing of the economic activities of the organization TIMOFEEVA (2010).

3.5 Methods of Financial Analysis

The key goal of financial analysis is to obtain a certain number of the main most informative indicators that give an objective picture of the financial condition of the enterprise FRIDSON (2011).

The practice has developed the main methods of financial analysis, among which the following can be distinguished as analysis of absolute, differential, ratio indicators.

3.6 Absolute Indicators

3.6.1 Horizontal Analysis

AGRESTI (2002) suggests that Horizontal analysis of financial statements is a comparative analysis of financial data for several periods. This method is also known as *trend analysis*. In a horizontal analysis of reporting, an indicator is taken, and its change is traced over two or more periods. Any identical time intervals can be taken as periods, but usually quarterly analysis or analysis of data by years is used for financial statements. FRIDSON (2011) The number of analyzed periods may vary depending on the specific task, however, a qualitative analysis, as a rule, is possible when there are more than 3 periods in the analyzed series.

Formula 1:

Horizontal Analysis (absolute) = Amount in comparison year- Amount in base year

$$\text{Horizontal Analysis (\%)} = \frac{\text{Amount in comparison year} - \text{Amount in base year}}{\text{Amount in base year}} * 100$$

3.6.2 Vertical Analysis

Vertical analysis of financial statements is a technique for analyzing financial statements, in which the ratio of the selected indicator with other homogeneous indicators is studied within one reporting period. Vertical analysis is aimed at studying the structure of property, liabilities, income, expenses of the organization. In addition, it is used to identify those items of expenditure that are growing faster or slower FRIDSON (2011).

Formula 2:

$$\text{Vertical Analysis (Income Statement)} = \frac{\text{Income Statement item}}{\text{total sales}} * 100$$

$$\text{Vertical Analysis (Balance Sheet)} = \frac{\text{Balance Sheet item}}{\text{total assets(liabilities)}} * 100$$

3.7 Differential Indicators**3.7.1 Net Working Capital**

According to FRIDSON (2011) Net working capital (NWC) is the difference between current assets and current liabilities of an enterprise or organization. The amount of working capital reflects the amount of funds that belong to the company in current assets and is an important characteristic of financial stability. The components of the working capital meet the liquidity criterion. Liquidity allows the company to quickly convert funds into cash and finance ongoing operations HELFERT (2001).

Formula 3:

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

3.7.2 Cash Conversion Cycle

The Cash Conversion Cycle (CCC) is a metric that expresses the time, over several days, it takes companies to convert resources into cash flows. The cash conversion cycle tries to measure the time it takes for every net dollar to be put into production and sales before it is converted into cash through sales to customers. This metric looks at the amount of time it takes to sell inventory, the time it takes to collect accounts receivable, and the

length of time a company can pay its invoices. The CCC calculation includes several items from the financial statements for a certain period of time, usually 365 days in a year or 90 days in a quarter, but it is the most efficient when it is done without delay BRAGG (2006).

Formula 4:

$$I. \text{ CCC} = \text{DIO} + \text{DSO} - \text{DPO}$$

Where:

CCC- Cash Conversion Cycle

DIO – Days of Inventory Outstanding. The average number of days needed to clear the inventory.

DSO -Days of Sales Outstanding. The average number of days needed to collect payment after a sale.

DPO -Days Payables Outstanding. The average number of days it takes a company to pay its bills.

3.8 Ratio Indicators

Financial ratios are relative indicators of the financial performance of an enterprise that express the relationship between two or more parameters. To assess the current financial condition of an enterprise, a set of coefficients is used that are compared with the standards or with the average performance of other enterprises in the industry. Coefficients that go beyond the normative values signal the company's “weak points” BRAGG, 2006; CARCELLO&HAKA&BETTNER, 2008).

To analyze the financial condition of a company, financial ratios are grouped into the following categories:

- **Liquidity Ratios-** The liquidity ratio allows to assess the ability of an organization to pay off its obligations using current assets transformed into cash.
- **Activity Ratios** - are indicators of financial analysis reflecting the efficiency of asset management of an enterprise and characterizing the activity and intensity of their use. In contrast to profitability indicators, turnover ratios use not net profit, but proceeds from the sale of products. Therefore, turnover indicators characterize the level of business activity, while profitability is the level of profitability for various types of assets.
- **Profitability Ratios** - indicators reflecting the degree of efficiency of the enterprise. These indicators are relative and measure the profitability of

various enterprise systems. The higher the profitability ratios, the more efficiently the enterprise resources are used.

- **Leverage Ratios** - it is the ratio of own assets in relation to borrowed funds. In fact, it expresses the ability of the enterprise to pay the debt on time and in full.

3.8.1 Liquidity Ratio

HOUSTON & BRIGHAM & EUGENE (2009) define liquidity as the ability of an asset to transform into money with a greater or lesser speed. The faster an asset can be sold, the more liquid it is considered to be. Cash is considered the most liquid, while industrial equipment and buildings are difficult to sell. As applied to an organization, its liquidity is the ability to pay off its obligations on time by selling its existing assets. To reflect this ability in numerical terms, the liquidity ratio is used. It means a group of coefficients, each of which evaluates a certain aspect of the organization's activities, and in the aggregate, they give an overall holistic picture of its effectiveness. The essence of the liquidity ratio in comparing the amount of debts and current assets of the organization, and assessing their volume required to repay the debt.

Current Ratio

Current Ratio is a liquidity ratio that assesses a company's ability to pay off short-term liabilities. Basically, the ratio is used to get a general idea of the company's solvency, that is, its ability to pay current liabilities (debt liabilities and accounts payable) at the expense of current assets (cash, inventory, receivables). The higher the value of the coefficient, the higher the level of solvency the company has (CARCELLO&HAKA&BETTNER, 2008; WEINSTEIN,2017).

Formula 5:

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

Notes: Commonly acceptable current ratio is 1,5-2, if values less than 1 it indicates that a firm meets difficulties with current obligations DAMODARAN (2006).

Quick Ratio

Quick ratio shows the company's ability to meet its short-term obligations using the most liquid assets. These assets include cash and cash equivalents, short-term receivables

and short-term investments up to 12 months BRAGG (2006). It should be remembered that liquidity ratios have a rate of values.

DAMODARAN (2006) explain that the normal value of the quick ratio is 1 - this means that the company is fully equipped with a sufficient number of current assets for immediate liquidation to pay off its current liabilities. In the case when a company has an indicator less than 1, it may not be able to fully pay off its current obligations in the short term, and this is a bad signal for an investor. While a company with a quick ratio above 1 can instantly get rid of its current liabilities, there is a catch here. If the quick ratio is too high, the company's profitability decreases, as liquidity is inversely proportional to profitability. In this regard, need to look for a compromise between profitability and liquidity of the company.

Formula 6:

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

Cash Ratio

Cash ratio shows the ratio of the most liquid assets of the organization - cash and cash equivalents to short-term liabilities. The ratio reflects the sufficiency of the most liquid assets for quick calculation of current liabilities, characterizes the "instant" solvency of the organization BRAGG (2006).

The absolute liquidity ratio is not as popular as the current and quick ratios and does not have a well-established norm. Most often, a value of 0.2 or more is used as a reference point for the normal value of the indicator. If the ratio of the company's cash resources is more than 0.5, this indicates that the company has an irrational structure of current assets, a large share of cash that could be directed to business development DAMODARAN (2006).

Formula 7:

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

Notes: 0,1 to 0,2 is normal value, more than 0,5 irrational of current assets

3.8.2 Profitability Ratio

According to HOUSTON & BRIGHAM & EUGENE (2009) profitability ratios are financial indicators that characterize the profitability of a company. When using

profitability indicators, you should pay attention to the fact that the same term is often used to refer to indicators based on the analysis of net profit and indicators in the calculation of which profit before tax is used.

Return on Sales (ROS)

Return on sales (ROS) is a financial ratio that reflects how effectively an enterprise is able to generate operating income from revenue. This ratio is used to measure a company's performance by analyzing what percentage of income ultimately results in profit for the company, rather than spent on paying the company's operating expenses BRAAG (2006).

To increase profitability, a company can either increase revenues while maintaining the same cost and tax rate or optimize and cut costs if sales fail. Return on sales can be either positive or negative. If the company has a negative ROS, it is unprofitable, respectively, the company needs to resort to the above methods to increase efficiency KLINE (2007).

Formula 8:

$$\text{ROS} = \frac{\text{EBIT}}{\text{Revenue}} * 100$$

Return on Equity (ROE)

Return on equity is an indicator of net profit in comparison with the equity of the organization. This is the most important financial indicator of return for any investor, business owner, showing how effectively the capital invested in the business was used. Unlike the similar indicator "return on assets", this indicator characterizes the efficiency of using not all the capital (or assets) of the organization, but only that part of it that belongs to the owners of the enterprise BRAGG (2006).

Formula 9:

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}} * 100$$

Notes: According to averaged statistics, the return on equity is approximately 10-12%. The higher the return on equity, the better DAMODARAN (2006).

Return on Assets (ROA)

Return on assets is a financial ratio that characterizes the return on the use of all assets of an organization. The coefficient shows the organization's ability to generate profit without considering the structure of its capital (financial leverage), the quality of asset

management. Unlike the "return on equity" indicator, this indicator considers all the assets of the organization, and not just its own funds BRAGG (2006).

Formula 10:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} * 100$$

Return on Capital Employed (ROCE)

According to KLINE (2007) ROCE used to analyze the investment attractiveness of a company and compare profitability among competitors. This indicator is also important for assessing the interest rate on loans that is affordable for the company. And although it has no regulations, investors and banks prefer companies with a steadily growing ROCE from year to year. BRAGG (2007) defines ROCE as is a financial ratio that determines the profitability and efficiency of a company in relation to the company's capital employed.

The indicator has no normative value. But its importance lies in the fact that it acts as a benchmark for assessing the feasibility of attracting an organization borrowed funds at a certain percentage. If the interest on the loan is higher than the return on capital employed, this means that the organization will not be able to use the loan so efficiently as to work out the interest on it. Therefore, it makes sense to take only those loans, the interest on which is lower than the return on the capital involved DAMODARAN (2006).

Formula 11:

$$ROCE = \frac{\text{EBIT}}{\text{Total Assets} - \text{Current Liabilities}}$$

3.8.3 Leverage Ratio

Leverage Ratio is the ratio of borrowed capital to equity capital in other words, the ratio between debt and equity capital. Also, the financial leverage or the effect of financial leverage is called the effect of using borrowed funds in order to increase the size of transactions and profits without having sufficient capital for this. The size of the ratio of borrowed capital to equity characterizes the degree of risk, financial stability HOUSTON & BRIGHAM & EUGENE (2009).

Debt-to-equity ratio

Debt- to – equity ratio is an indicator of the ratio of debt and equity capital of the organization. It belongs to the group of the most important indicators of the financial position of the enterprise, which includes coefficients of autonomy and financial

dependence, which are similar in meaning, and also reflect the proportion between the organization's own and borrowed funds BRAGG (2006).

The optimal ratio is considered to be an equal ratio of liabilities and equity (net assets), a coefficient equal to 1. A value of up to 2 for large public companies, this ratio may be even higher. With large values of the coefficient, the organization loses its financial independence, and its financial position becomes extremely unstable. It is more difficult for such organizations to attract additional loans. The most common ratio in developed economies is 1.5 (i.e. 60% of borrowed capital and 40% of equity) DAMODARAN (2006).

Formula 12:

$$\text{Debt – to – equity} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Dept Ratio

According to BRAGG (2006) Debt Ratio shows the company's dependence on external funding sources. The coefficient of financial dependence of an enterprise is defined as the ratio of borrowed capital to the company's assets. Thus, the dept ratio characterizes the financial stability of the company.

DAMODARAN (2006) define the optimal value of the financial dependence ratio is considered to be 0.5, which means that the company's liabilities make up only 50% of its total assets. The financial dependence ratio is no more than 0.6-0.7. If the dept ratio shows a value of 1, then the company is too dependent on external financing, with an increase in interest rates, it may have problems with servicing obligations. But a too low value of the coefficient of financial dependence suggests that the company is cautious in attracting external capital and does not use the effect of financial leverage, thereby missing the opportunity to receive extra profits.

Formula 13:

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

Notes: optimal value “0.5-0.7”, “1” -company is fully financing depended

Equity Ratio

The Equity ratio is an indicator of solvency characterizes the ratio of equity to the total capital (assets) of the organization. The ratio shows the share of the organization's assets that are provided with its own funds KLINE (2007).

The generally accepted normal value of the autonomy coefficient is 0.5 or more (optimal 0.6-0.7). In world practice, it is considered the minimum acceptable up to 30-40% of equity capital. The higher the value of this coefficient, the more financially stable the company is, the more stable it is, and the more independent it is from external creditors) DAMODARAN (2006).

Formula 14:

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

Notes: 0.5-0.7 – optimal value. The up to 0,7 better for company stability

Capitalization Ratio

The Capitalization ratio is a significant indicator of a company's financial leverage, reflecting the structure of long-term financing sources (also known as financial leverage ratio). According to this fact, the capitalization of the company is viewed as a combination of the two most stable liabilities - long-term liabilities and equity. The capitalization ratio makes it possible to assess the adequacy of the organization's source of financing its activities in the form of shareholder's equity WEINSTAIN (2017).

This ratio allows you to assess the entrepreneurial risk. The higher the value of the ratio, the more the organization is dependent in its development on borrowed capital, the lower the financial stability. At the same time, a higher level of the ratio indicates a greater possible return on equity. KLINE (2007).

Formula 15:

$$\text{Capitalization Ratio} = \frac{\text{non – current liabilities}}{\text{non – current liabilities} + \text{equity}}$$

3.8.4 Activity Ratio

BRIGHAM & EHRHARDT (2007) define activity ratios as indicators of efficiency based on these indicators, it can be analyzed and estimated how efficiently and fully the assets which are presented in Balance Sheet used by the company with the aim to generate cash and revenue. In order to detect significant changes over time, several periods are compared, and activity ratios are used to track how the company is progressing.

Total Asset Turnover

Asset turnover is a financial indicator of the intensity of the organization's use of the entire set of available assets. The coefficient is defined as ratio between the sales proceeds and the total assets. The value of the indicator indicates how many goods and services were sold during the study period BRIGHAM & EHRHARDT (2007).

There is no specific standard for turnover indicators since they depend on the industry characteristics of the organization of production. A higher asset turnover is desirable, the value should not fall below 1 DAMODARAN (2006). Low turnover may indicate insufficient efficiency in the use of assets. In addition, the turnover depends on the rate of return on sales. With a high profitability, the asset turnover is usually lower, and with a low rate of return, it is higher BRIGHAM & EHRHARDT (2007).

Formula 16:

$$\text{Asset Turnover Ratio} = \frac{\text{Revenue}}{\text{Average Assets}}$$

Notes: optimal values are higher than 1, <1 indicates about insufficient use of assets

Inventory Turnover Ratio

According to DAMODARAN (2006) inventory turnover shows how many times during the analyzed period the organization has used the average available inventory balance. This indicator characterizes the quality of reserves and the efficiency of their management, allows to identify the remains of unused, obsolete, or substandard reserves. The importance of the indicator relates to the fact that profit arises at each “turnover” of stocks, in other words, use in production, operating cycle.

A decline in inventory turnover may reflect an accumulation of surplus inventory, ineffective warehouse management, and an accumulation of unusable materials. But high turnover is not always a positive indicator, since it can talk about the depletion of warehouse stocks, which can lead to interruptions in the production process. Speaking of appropriate value, it depends on the industry of the company performed. KLINE (2006). In addition, inventory turnover depends on the marketing policy of the organization. Organizations with high profit margins tend to have lower turnover rates than firms with low profit margins BRIGHAM & EHRHARDT (2007). Restock items is well balanced with your sales.

Formula 17:

$$\text{Inventory Turnover Ratio} = \frac{\text{Sales}}{\text{Average Inventory}}$$

Where: Average Inventory = (Beginning Inventory + Ending Inventory) / 2

Along with the turnover ratio, turnover in days (Inventory Turnover Period) is often calculated. In this case, this means how many days of operation of the enterprise the existing stock will last (BRIGHAM & EHRHARDT, 2007).

Formula 18:

$$\text{Inventory Turnover Period} = \frac{365 \text{ (days in year)}}{\text{Inventory Turnover Ratio}}$$

Payables Turnover Ratio

Payable turnover Ratio also known as “accounts payable turnover ratio” is an indicator of the rate at which an organization can repay its debts to suppliers and creditors. This ratio shows how many times usually per year the firm has repaid the average of its accounts payable (BRIGHAM & EHRHARDT, 2007).

Speaking of normal value, it is important to summarize advantages for each side. For creditors, a higher turnover ratio is preferable, while the organization itself is more profitable with a low ratio, which allows it to have the remainder of unpaid accounts payable as a free source of financing for its current activities DAMODARAN (2006).

Formula 19:

$$\text{Payables Turnover Ratio} = \frac{\text{Net Sales}}{\text{Average Accounts Payable}}$$

Besides, the turnover ratio, turnover in days (Accounts Payable Turnover Period) is often calculated. In this case, this means how many days enterprise need to cover its debts.

Formula 20:

$$\text{Payable Turnover Period} = \frac{365}{\text{Payable Turnover Ratio}}$$

Receivable Turnover Ratio

According to DAMODARAN (2006) receivable turnover ratio measures the rate at which an organization’s accounts receivable are settled, how quickly the organization receives payment for goods sold from its customers.

From other hand BRIGHAM & EHRHARDT (2007) explain that accounts receivable turnover ratio shows how many times a year the organization received payment from buyers in the amount of the average balance of unpaid debt. The indicator measures the

efficiency of work with customers in terms of collection of receivables and reflects the organization's policy regarding sales on credit.

The sooner buyers pay off their debts, the better for the organization. At the same time, effective activity is not always accompanied by high turnover. For example, when selling on credit, the balance of accounts receivable will be high, and the ratio of its turnover is correspondingly low DAMODARAN (2006)

Formula 23:

$$\text{Receivable Turnover Ratio} = \frac{\text{Net Sales}}{\text{Average Accounts Receivable}}$$

It is also common to calculate the indicator not only in the form of a coefficient, but also in the form of the number of days during which the receivables remain unpaid:

Formula 22:

$$\text{Receivables Turnover Period} = \frac{365}{\text{Receivables Turnover Ratio}}$$

4 Practical Part

The practical chapter includes a description of the structure and general provisions of the KazMunayGas company in the period from 2012 to 2019. This is the second fundamental part, which includes the application in practice of all methods of financial analysis, as well as indicators of the ratios, detailed in the literature review. All companies' values presented in national currency in Consolidated Financial Statements will be converted in accordance with the exchange rate belonging to each year separately and expressed in the international currency—United States dollar (USD). The received outcomes are compared with the competitor Gazprom Company, as well as recommended values and industry averages. In accordance with the results obtained, the true position of the company is assessed. The identified changes will be analyzed by using the Financial Statements as the basis for the company's financial performance. A number of recommendations will be offered to improve the financial situation after all the necessary calculations, if the situation requires it.

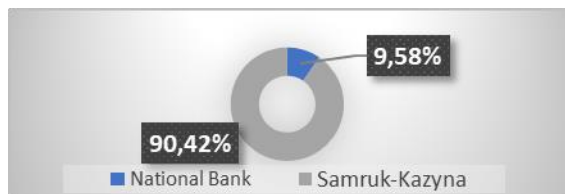
4.1 Introduction to KazMunayGas Company

Kazakhstan one of the largest holders of gas and oil resources. National Company KazMunayGas (KMG) is the leading vertically integrated oil and gas company in the Republic of Kazakhstan. KMG manages assets for exploration, production, processing and transportation of hydrocarbons, representing the interests of the state in the oil and gas industry of Kazakhstan.

National Company KazMunayGas is wholly owned by the Republic of Kazakhstan. KMG was founded in 2002 by the merger of two companies Kazakhoil and Oil and Gas Transportby. Significant company's shares are managed by JSC “Kazakhstan holding for state assets management” Samruk-Kazyna” -90,42 %. 9,58 % of KMG shares are owned by the National Bank of the Republic of Kazakhstan.

JSC “Samruk-Kazyna” – Foundation, whose sole shareholder is the Government of the Republic of Kazakhstan. The mission of “Samruk-Kazyna” to improve the national welfare of the Republic of Kazakhstan and to ensure long-term sustainability for future generations. The Fund's portfolio includes companies from the oil and gas and transport and logistics sectors, the chemical and nuclear industries, the mining and metallurgical complex, energy and real estate.

Picture 1: KMG Shareholders



Source: National Company KazMunayGas ,2020; modified by author, 2020

The share of oil and gas, according to the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan (CC MNE RK), accounts for about 36% of the republican budget revenues (or 10.6% of GDP) and almost 62% of exports. It is worth recalling that the export of hydrocarbons in 2013 and 2014 reached record levels of 70% of the country's total exports, in 2016 - the share of black gold accounted for 52% of foreign sales of Kazakhstan, in 2017 - it grew again, already to 54 %, and at the beginning of 2018 - immediately up to 62%. Consequently, almost two-thirds of all sales that generate the largest inflow of foreign exchange are still provided by the country's main raw materials - oil and gas.

Area: 2,724,902 km² (9th largest in the world)

Registered office-The Republic of Kazakhstan, Astana, Kabanbay Batur avenue, 19
National Company KazMunayGas has an interest in 37 operating companies.

Kazakhstan's position in the world

12th place in the world in terms of proven oil and condensate reserves

27th place in the world in terms of proven natural gas reserves

13th largest oil production in the world

32nd largest natural gas producer in the world

Reserves:

production of oil – 43 years

production of gas – 41 years

KMG's share in the Republic of Kazakhstan

26% share of oil and condensate production in Kazakhstan;

15% share of gas production in Kazakhstan;

81% share of the volume of oil refining at refineries in Kazakhstan;

57% of the volume of oil transportation in Kazakhstan;

79% of the volume of gas transportation in Kazakhstan;

4.2 Absolute Indicators

This part of the practical part includes the analysis of absolute indicators such as the vertical and horizontal method. These methods of analysis are based on Consolidated Statement of Financial Position/ Balance Sheet, Consolidated Statement of Profit & Loss/ Income Statement.

4.2.1 Vertical Analysis of Consolidated Statement of Financial Position (Consolidated Balance Sheet)

Following table and bar chart represent the analysis of assets of Consolidated Statement of Financial Position in percentage share. Consolidated Statement of financial position of KazMunayGas Company for the entire period could be found in the Appendix.

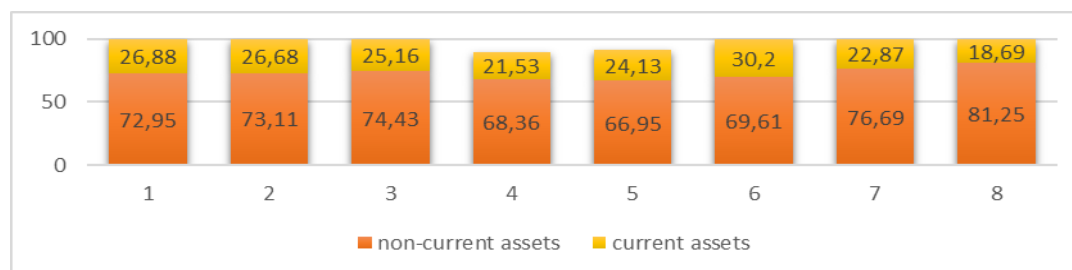
Table 1: Vertical Analysis of Assets (%)

	2012	2013	2014	2015	2016	2017	2018	2019
Non-Current assets	72,95	73,11	74,43	68,36	66,95	69,61	76,69	81,25
Property, plant, equipment	50,09	49,47	48,91	24,76	24,85	30,11	32,22	31,84
Right- of use assets	0	0	0	0	0	0	0	0,27
Exploration and evaluation	2,72	2,94	2,58	1,95	1,95	1,87	1,35	1,28
Investment property	0	0,38	0,32	0,27	0,25	0,2	0,17	0,07
Intangible assets	2,94	2,65	2,08	1,09	0,98	1,37	1,23	1,21
Long term financial assets	15,71	16,35	19,24	40,05	38,75	35,9	41,56	46,44
Other financial assets	1,05	0,95	0,91	0	0	0,03	0,03	0,02
Other non-current assets	0,44	0,37	0,39	0,24	0,17	0,13	0,13	0,12
Current assets	26,88	26,68	25,16	21,53	24,13	30,2	22,87	18,69
Inventories	2,97	2,7	2,21	1,17	0,83	1,85	2,23	1,99.
Receivables	5,63	6,46	4,05	2,28	3,55	4,23	4,38	3,74
Short term bank deposits	9,65	10,78	8,29	8,85	9,96	12,09	2,76	2,56
Loans and receivables due from related parties	0,63	0,37	0,11	1,18	1,14	1,25	1,06	0,98
Other current assets	1,92	0,98	1,13	0,87	1,26	1,45	1,46	1,86
Cash and cash equivalents	6,08	5,39	9,37	7,18	7,39	9,33	10,98	7,56
Assets classified as held for sales	0,16	0,2	0,4	10,1	8,91	0,18	0,44	0,05
Total assets								
100%								

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Vertical analysis provides information about the percentage share of each position (item) in relation to total assets in Consolidated Statement of Financial position for a given year. Based on the results of vertical analysis of assets received from table above, it can be seen that proportion between non-current assets and current assets almost unchanged thorough the entire period of time. The highest value of non-current assets was recorded in 2019 and this share is 81.25%. This increase in non-current assets is due to the acquisition of fixed assets such as equipment, property, plants and intangible assets, as well as long-term financial investments. Long-term financial assets in 2019 amounted to 46.44%, which is the highest value in the analyzed series. On contrary, the minimum value reaches 66.95% in 2016. The reason for this decline is a decrease in investments in fixed assets of the company due to an increase in assets held for sale by KazMunayGas Company (8.91%). 2015 was also the year of minimum purchases of fixed assets, 24.76% being the lowest value in the analyzed series. On the other hand, investments in long-term financial assets are higher compared to 2016 (40.05%). There's been a 10,10 % jump in the value of held-for-sale assets. The chart below best reflects the proportionality of current and non-current assets in the Balance Sheet.

Graph 1: Proportion of Non-current/Current assets



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Summing up all the above, it could be concluded that KazMunayGas is actively acquiring property, and long-term financial investments can be clearly traced from the data proposed above. The decline in 2015-2016 is driven by an increase in assets held for sale.

Table 2: Vertical Analysis of Liabilities (%)

Year	2012	2013	2014	2015	2016	2017	2018	2019
Equity	52,59	53,4	49,97	56,87	52,83	50,06	50,97	58,21
Share capital	7,72	7,23	6,3	6,5	11,09	5,24	6,54	6,51
Additional paid in capital	0,28	0,26	2,57	2,28	2,05	3,6	0,29	0,29
Other equity								
Currency translation reserve	3,25	3,57	5,08	13,12	11,55	9,56	12,59	12,3
Non-controlling interest	8,5	7,76	6,28	7,03	6,75	6,42	0,57	0,27

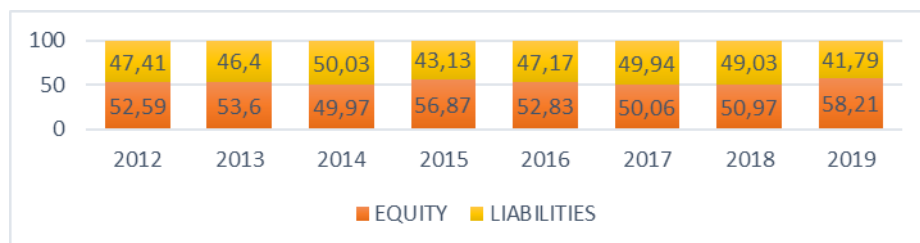
Retained earnings	32,8	34,55	29,72	27,91	26,62	27,05	30,97	38,84
Total liabilities	47,41	46,6	50,03	43,13	47,17	49,94	49,03	41,79
Non-Current liabilities	30,96	33,17	36,47	31,1	32,93	34,25	36,13	31,58
Borrowing	23,32	26,53	27,46	27,38	22,77	25,22	27,27	25,45
Provisions	1,68	1,52	2,08	1,4	1,17	1,5	1,64	1,94
Deferred income tax liabilities	2,26	2,09	2,2	2,04	2,23	2,81	3,42	3,62
Financial guarantee			0,1	0,08	0,1			
Lease liabilities						0,04	0,05	0,26
Acquisition payment of additional stake in North Caspian Project	3,31	2,84	4,48					
Prepayment on oil supply agreement					6,22	4,29	3,43	
Other non-current liabilities	0,38	0,18	0,15	0,2	0,44	0,38	0,32	0,31
Current Liabilities	16,4	13,39	13,42	7,25	9,49	15,68	12,87	10,21
Borrowings	6,88	3,99	7,59	2,77	3,08	6,53	2,36	1,8
Provisions	0,51	0,95	0,57	1,09	0,79	0,58	0,7	0,74
Income tax payable	0,7	0,73	0,03	0,04	0,02	0,07	0,09	0,09
Trade accounts payable	3,32	3,26	2,64	1,62	2,19	3,79	4,51	4,74
Other taxes payable	1,6	1,45	0,91	0,037	0,29	0,75	0,75	0,62
Financial guarantee			0,01	0,01	0,01			
Lease liabilities						0,01	0,02	0,08
Payable for the acquisition of additional interest in North Caspian Project	1,66	1,42						
Derivative financial instruments	0,01	0,01						
Prepayment on oil supply agreement					2,1	2,45	2,74	
Other current liabilities	1,72	1,58	1,67	1,35	1	1,49	1,69	2,15
TOTAL EQUITY& LIABILITIES	100%							

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Vertical analysis of liabilities compares accounts with total liabilities and equity. In accordance with the proposed data in Table 2, it is clearly seen that capital is the fundamental source for financing the company throughout the entire time. The share capital as a whole did not change in its value, with the exception of 2016 (the maximum level reached 11.09%). It is important to note that retained earnings have a growing trend, with a maximum share of 38.84% in 2019. On contrary, National company KazMunayGas suffered losses in 2016, the total percentage of retained earnings was 26.62%. Total liabilities also play a significant role in the financing of the company. Their share has been decreasing throughout the entire time (minimum 41.79% in 2019, maximum 50.03% in 2014). Based on the analysis of Consolidated Statement of Financial Position data, the proportion between long-term and short-term was determined. Long-term liabilities occupy a large part of the total share of liabilities, short-term liabilities are extremely small in relation to long-term liabilities. The minimum level of short-term liabilities was recorded in 2015 and amounted to 7.25% of the total amount of liabilities. The maximum level of

long-term liabilities was recorded in 2014 (36.47%). The graph 2 below shows the relationship between liabilities and equity in form of proportion from 2012 to 2019.

Graph 2: Proportion of Equity to Liabilities (%)



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Based on this proportion, the following conclusions can be drawn that total liabilities have approximately equal proportion in relation to equity capital. On the other hand, it is clear that in 2014 total liabilities became the main source of financing for KazMunayGas.

4.2.2 Vertical Analysis of Consolidated Statement of Profit & Loss (Consolidated Income Statement)

Table 3: Vertical Analysis of Consolidated Statement of Profit & Loss (% share)

Year	2012	2013	2014	2015	2016	2017	2018	2019
REVENUE	100%							
Cost of Sales	-70,63	-72,37	-105,26	-99,69	-84,08	-77,28	-76,60	-79,13
Gross profit	29,37	27,63	-5,26	0,31	15,92	22,72	23,40	20,87
General and administrative expenses	-5,51	-5,00	-14,45	-19,31	-6,34	-4,18	-3,54	-3,12
Transportation and selling expenses	-12,18	-10,21	-29,35	-17,86	-10,69	-9,19	-9,44	-6,13
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets, other than goodwill	-2,78	-1,92	-26,25	-6,14	-0,18	-0,51	-2,37	-3,03
Impairment of goodwill			-0,15	-1,09				
Loss on disposal of property, plant and equipment, intangible assets and investment property, net	-0,13	-0,15	0,04	-0,33	-0,30	-0,08	-0,05	
income from sale of interests in subsidiaries	0,33							
Other operating income	0,93	0,95	1,74	1,98	1,05	0,42	0,33	0,36
Other operating expenses	-0,57	-0,53	-1,59	-1,79	-0,80	-0,70	-0,35	-0,11
Operating profit/(loss)	9,46	10,75	-75,26	-44,21	-1,33	8,48	7,99	8,85

Net foreign exchange loss	-0,61	-0,68	7,24	42,92	-0,69	1,40	-0,55	0,12
Finance income	0,98	1,30	5,13	15,81	9,04	2,56	2,30	3,51
Finance costs	-5,71	-5,28	-16,76	-18,13	-12,40	-6,39	-6,12	-4,63
Reversal/(impairment) of investments in joint ventures	-0,10		-0,10	-0,85	-0,30	0,31		
Impairment of assets, classified as held for sale			-0,47	-0,01	0,00	0	0,00	
Impairment of loans given			-0,01	-1,00	-0,07			
Gain on disposal of subsidiaries							0,26	0,25
Share in profit of joint ventures and associates, net	15,91	14,87	40,68	10,31	14,55	8,66	9,98	12,07
Profit before income tax	19,93	20,96	-39,55	4,84	8,78	15,01	13,87	20,19
Income tax expense	-5,98	-5,95	-12,65	-21,17	-8,82	-3,97	-4,00	-3,30
Profit/(loss) for the period from continuing operations	13,94	15,01	-52,21	-16,32	-0,04	11,04	9,87	16,89
Profit/(loss) after income tax for the period from discontinued operations	0,02	0,01	71,16	61,55	19,43	-0,08	0,05	
Net profit for the period	13,97	15,02	18,95	45,23	19,39	10,96	9,92	16,89

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Table 3 reflects the results obtained during the vertical analysis of Consolidated Statement of Profit/Loss for the period from 2012-2019. Based on Consolidated Income Statement, revenues and expenses are compared with sales revenue and expressed as a percentage. Consolidated Statement of Profit/Loss of KazMunayGas Company for the entire period could be found in the Appendix. The results obtained reflect the instability of the company. The table 3 clearly shows that 2014 and 2015 are unprofitable for National Company KazMunayGas. In 2014, the gross profit of the company was -5.26%, in 2015 it also reached a minimum level of 0.31%. Negative gross profit means that there are not enough sales to cover the costs of producing goods or providing services. When gross profit is negative, this directly affects cash flow, as a result the business will not be able to pay for the suppliers and workers who work in this enterprise. An important fact that should be noted is that in the period from 2014 to 2016, the company incurred large losses in the section of the financial report “operating profit/ losses”, the largest negative value - 75.26% in 2014. KMG had insufficient sales to cover its fixed costs. In contrast, Profit /

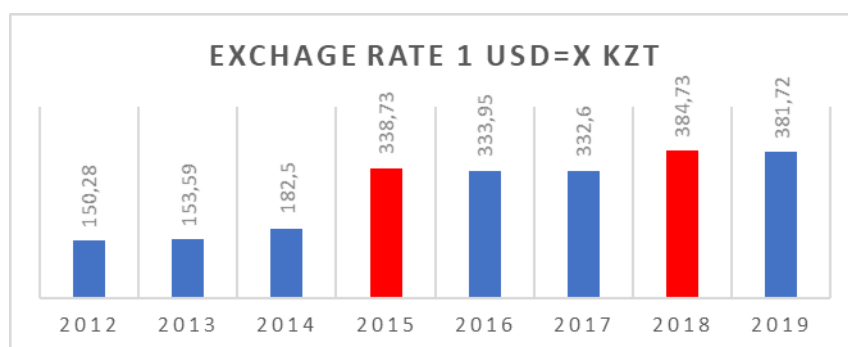
(loss) after tax for the period from discontinued operations sharply increased over the period 2014-2016, high value is in 2014 (71.16%) and in 2015 (61.55%). On the other hand, profit before tax since 2012 -2019 is going in a positive direction, apart from 2014 (-39.55%). Speaking of net profit for the entire period, in the above period, there is a growth trend in indicators, the maximum in 2015 (45.23%) of total sales revenue. Despite the fact that position “Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets” always has a negative result according to this it demonstrates the normal negative direction, in 2014 the maximum negative value was -26,25%. The reasons for such losses for KazMunayGas Company are the global financial and economic crisis of 2014, the sanctions policy of the leading powers. In addition, the drop in world oil prices almost in two times brought significant losses to the world oil and gas sector. The Picture 2 below clearly reflects the fluctuations in oil prices. An important point is that the fall in oil prices triggered the devaluation of the Kazakh national currency in 2015 and 2018 hat directly impacted on KMG's performance. The graph 3 reflects the rise and fall of the national currency against the US dollar. Further, these values were used for conversion.

Picture 2: Oil price for the period 2012-2020

Crude Oil Prices - Historical Annual Data						
Year	Average Closing Price	Year Open	Year High	Year Low	Year Close	Annual % Change
2020	\$38.77	\$61.17	\$63.27	\$11.26	\$41.12	-32.74%
2019	\$56.99	\$46.31	\$66.24	\$46.31	\$61.14	35.42%
2018	\$65.23	\$60.37	\$77.41	\$44.48	\$45.15	-25.32%
2017	\$50.80	\$52.36	\$60.46	\$42.48	\$60.46	12.48%
2016	\$43.29	\$36.81	\$54.01	\$26.19	\$53.75	44.76%
2015	\$48.66	\$52.72	\$61.36	\$34.55	\$37.13	-30.53%
2014	\$93.17	\$95.14	\$107.95	\$53.45	\$53.45	-45.55%
2013	\$97.98	\$93.14	\$110.62	\$86.65	\$98.17	6.90%
2012	\$94.05	\$102.96	\$109.39	\$77.72	\$91.83	-7.08%

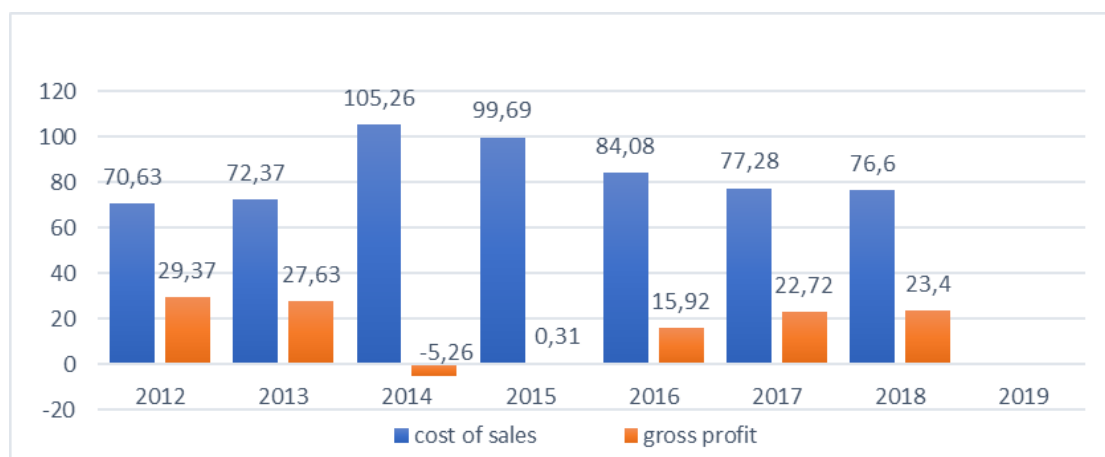
Source: Macrotrend, WTI CRUDE OIL PRICES, 2012-2020

Graph 3: USD/KZT (United States dollar/Kazakhstani tenge) exchange rate history 2012-2019



Source: The Central Bank Of The Russian Federation (CBR), modified by author, 2020

Graph 4: Proportion of Gross Profit to Cost of Sales



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.2.3 Horizontal Analysis of Consolidated Statement of Financial Position

The second step of analysis of absolute indicators is the application of horizontal analysis of the Balance Sheet to determine significant changes in the financial position of the company. This analysis is necessary to diagnose the financial condition of the enterprise and track critical changes in the values obtained. This table 4 reflects the results in terms of assets for the period from 2013-2019. In addition, 2012 is excluded from the table as there is no data for 2011. Horizontal analysis of assets determines absolute changes of detailed items in time. All results obtained are expressed in absolute values (MLN'USD). Consolidated Statement of financial position of KazMunayGas Company for the entire period could be found in the Appendix.

Table 4: Horizontal analysis of Assets (MLN'USD)

Year		2013	2014	2015	2016	2017	2018	2019
Property, plant and equipment	MLN'USD	2 056	3 053	-4 856	904	3 389	1 131	-81
Right-of-use assets	MLN'USD	0	0	0	0	0	0	101
Exploration and evaluation assets	MLN'USD	237	29	-55	69	65	-165	-26
Investment property	MLN'USD	184	-6	6	1	-6	-8	-38
Intangible assets	MLN'USD	-5	-96	-196	0	207	-32	-5
Long-term bank deposits	MLN'USD	517	85	-144	4	-5	10	1
Investments in joint ventures and associates	MLN'USD	680	1 201	6 510	848	353	2 786	1 821
Deferred income tax asset	MLN'USD	-29	348	42	-107	80	-2	-63
VAT receivable	MLN'USD	67	330	-108	88	74	43	54
Advances for non-current assets	MLN'USD	-217	89	98	16	-43	-254	121
Loans and receivables due from related parties	MLN'USD	39	435	1 278	94	320	-88	-60
Other financial assets	MLN'USD	5	36	-234	0	13	2	-6
Other non-current assets	MLN'USD	-14	35	-25	-17	-10	-1	1
Non-current assets	MLN'USD	3 520	5 539	2 317	1 900	4 437	3 420	1 817
Inventories	MLN'USD	7	-51	-205	-80	456	161	-81
VAT receivable	MLN'USD	184	-227	-63	-60	3	-8	20
Income tax prepaid	MLN'USD	64	-53	52	42	-115	44	4
Trade accounts receivable	MLN'USD	424	-448	-317	553	565	68	-252
Short-term bank deposits	MLN'USD	1 009	-471	648	703	1 372	-3 255	-71
Loans and receivables due from related parties	MLN'USD	-101	-102	346	28	102	-54	-26
Other current assets	MLN'USD	-368	134	-17	168	141	22	173
Cash and cash equivalents	MLN'USD	-51	2 278	-161	329	1 159	716	-1 244
Current Assets	MLN'USD	1 169	1 059	284	1 683	3 683	-2 306	-1 501
Assets classified as held for sale	MLN'USD	28	110	3 089	-69	-3 109	96	-142
Total current assets	MLN'USD	1 197	1 169	3 373	1 613	574	-2 211	-1 643
Total assets	MLN'USD	4 717	6 708	5 690	3 514	5 012	1 209	175

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

In accordance with the results obtained, in the asset table 4, it could be seen a positive trend in the period 2013-2019. On the other hand, it is important to note that the

results over time also have negative values. Total assets reflect constant growth in values from year to year. The maximum increase in total assets was recorded in 2015 (5 690 MLN'USD), the minimum increase in short-term and long-term assets was recorded in 2019 (175 MLN'USD). 2019 also represents a significant decrease in current assets (-1 501 MLN'USD). This was due to a decrease in inventories and cash and cash equivalents, moreover the dramatic decrease of assets classified as held for sale. Negative dynamics at all levels of the balance sheet took place in 2015, due to a sharp decline in inventories and tangible assets. At the level of long-term assets, tangible assets undergo significant changes and reflect a sharp drop in values (-4 856 MLN'USD). It was caused to the need for active stabilization and revaluation of fixed assets for the next years after the national crises that was triggered by devaluation of national currency KZT after the drop of oil and gas price. This is evidenced by a significant increase in assets classified as held for sale (+ 3 089 MLN'USD). All the above facts significantly influenced the financial result. In 2019, there is a decrease in all sub-items of long-term and short-term assets, which led to a slight increase in total assets (+ 175 MLN'USD) compared to the previous analyzed years. The main growth in accounts receivable has an upward trend over three years from 2016-2018. Cash and cash equivalents reflect an upward trend in 2014,2016,2017,2018. The largest and stable increase in non-current assets was observed in the item "Investments in joint ventures and associates" throughout the entire period.

Table 5: Horizontal Analysis of Liabilities (MLN'USD)

year	year	2013	2014	2015	2016	2017	2018	2019
Share capital	MLN'USD	122	58	411	0	39	539	0
Additional paid-in capital	MLN'USD	4	1 135	50	0	1	-528	0
Other equity	MLN'USD	0	0	3	-9	0	0	0
Currency translation reserve	MLN'USD	311	980	2 824	-97	-234	1 219	-85
Retained earnings	MLN'USD	2 410	87	1 067	524	1 508	1 757	2 955
Attributable to equity holders of the Parent Company	MLN'USD	2 847	2 259	4 355	418	1 314	2 987	2 871
Non-controlling interest	MLN'USD	35	-172	585	145	206	-2 052	-111
Total equity	MLN'USD	2 882	2 087	4 939	563	1 519	934	2 760
Liabilities								
Borrowings	MLN'USD	2 681	2 311	1 491	-677	2 138	1 054	-625
Provisions	MLN'USD	-3	378	-98	-33	194	68	115
Deferred income tax liabilities	MLN'USD	22	202	70	138	349	257	78

Financial guarantee	MLN'USD	0	50	-3	13	-37	0	0
Lease liabilities	MLN'USD	0	0	0	0	16	3	77
Acquisition payment of additional stake in North Caspian Project	MLN'USD	-75	994	-1 170	0	0	0	0
Prepayment on oil supply agreements	MLN'USD	0	0	0	2 212	-472	-263	-1 258
Other non-current liabilities	MLN'USD	-80	-5	24	94	-2	-17	-4
Non-current liabilities	MLN'USD	2 545	3 929	314	1 746	2 186	1 101	-1 617
Borrowings	MLN'USD	-1 095	2 021	-1 104	209	1 557	-1 439	-202
Provisions	MLN'USD	244	-119	195	-66	-47	51	13
Income tax payable	MLN'USD	47	-291	6	-5	23	8	-1
Trade accounts payable	MLN'USD	125	-70	-176	258	763	309	92
Other taxes payable	MLN'USD	1	-159	-120	-18	202	10	-48
Financial guarantee	MLN'USD	0	4	1	0	-4	0	0
Lease liabilities	MLN'USD	0	0	0	0	5	3	22
Payable for the acquisition of additional interest in North Caspian Project	MLN'USD	-37	-589	0	0	0	0	0
Derivative financial instruments	MLN'USD	0	-1	-1	0	0	0	0
Prepayment on oil supply agreements	MLN'USD	0	0	1	748	248	135	-1 006
Other current liabilities	MLN'USD	9	157	-10	-76	249	89	175
Current liabilities	MLN'USD	-705	953	-1 208	1 050	2 996	-834	-955
Liabilities directly associated with the assets classified as held for sale	MLN'USD	-5	47	1 478	155	-1 690	8	-13
Total liabilities	MLN'USD	1 835	4 930	584	2 951	3 492	275	-2 586
Total equity and liabilities	MLN'USD	4 717	7 017	5 523	3 514	5 012	1 209	175

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The results show that the total liabilities have mostly upward effect over the period from 2013-2018, except for 2019. On the one hand, the highest growth in liabilities was recorded in 2014 (+ 4 930 MLN'USD), that is not a positive growth because KMG attracted borrowing funds to finance its assets, on the other hand such a significant decline in 2019 (-2 586 MLN'USD) reflects that KMG company is able to finance its assets by using own capital (equity) , this indicates a positive cash effect. From 2015 to 2019, there were an increase in accounts payable, this is due to the fact that the company used borrowed funds to finance its assets. On the contrary, 2013-2014 recorded a decrease in

accounts payable indicating that the company has repaid debts to suppliers. There are no significant fluctuations in values for the entire period in the total equity section. It is worth noting that the currency translation reserve reached its maximum value in 2015 (+2 824 MLN'USD), the gain in this section had a favorable effect on the growth in equity. Such a sharp jump is a result of the devaluation of the national currency in 2015 cause by the drop in oil and gas price. Namely, the company, as an exporter, receives payment in dollars from trading partners, after that the National company KazMunayGas exchanges the received foreign currency into national currency (tenge) in order to pay workers and suppliers.

4.2.4 Horizontal Analysis of Consolidated Statement of Profit/Loss (Income Statement)

Horizontal analysis of the profit and loss statement allows to track changes in individual account items over time (2013-2019), 2012 is excluded because of lack of information for 2011. In this case dynamics are reflected in absolute (numerical) value-MLN'USD. Consolidated Statement of Profit & Loss of National Company KazMunayGas for the entire period could be found in the Appendix.

Table 6: Horizontal Analysis of Income Statement (MLN'USD)

Year	Currency	2 013	2 014	2 015	2 016	2 017	2 018	2 019
Revenue	MLN'USD	1 903	-12 063	126	2 287	8 828	5 706	-341
Cost of sales	MLN'USD	-1 714	6 836	48	-1 411	-6 442	-4 286	-193
Gross profit	MLN'USD	189	-5 227	173	875	2 386	1 420	-534
General and administrative expenses	MLN'USD	2	59	-175	280	-249	-121	87
Transportation and selling expenses	MLN'USD	186	129	334	-9	-728	-569	626
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets, other than goodwill	MLN'USD	130	-1 170	616	191	-64	-366	-111
Impairment of goodwill	MLN'USD	0	-9	-30	36	0	0	0
Loss on disposal of property, plant and equipment, intangible assets and investment property, net	MLN'USD	-7	29	-12	-6	5	1	9
income from sale of interests in subsidiaries	MLN'USD	-63	0	0	0	0	0	0
Other operating income	MLN'USD	21	-68	10	-7	2	7	5
Other operating expenses	MLN'USD	-3	3	-8	14	-56	25	44
Operating profit/(loss)	MLN'USD	454	-6 252	908	1 374	1 296	396	127

Net foreign exchange loss	MLN'USD	-27	539	1 161	-1 445	240	-274	123
Finance income	MLN'USD	87	63	351	-15	-136	100	209
Finance costs	MLN'USD	-17	-25	-65	-96	-228	-315	289
Reversal/(impairment) of investments in joint ventures	MLN'USD	19	-6	-25	11	61	-39	0
Impairment of assets, classified as held for sale	MLN'USD	0	-27	14	0	0	0	0
Impairment of loans given	MLN'USD	0	0	-32	29	4	0	0
Gain on disposal of subsidiaries	MLN'USD	0	0	0	0	0	48	-2
Share in profit of joint ventures and associates, net	MLN'USD	81	-306	-930	471	435	734	342
Profit before income tax	MLN'USD	598	-6 014	1 384	330	1 673	650	1 088
Income tax expense	MLN'USD	-106	331	-291	203	-80	-231	139
Profit/(loss) for the period from continuing operations	MLN'USD	492	-5 683	1 093	533	1 593	418	1 227
Profit/(loss) after income tax for the period from discontinued operations	MLN'USD	-2	4 097	-221	-935	-1 096	19	-9
Net profit for the period	MLN'USD	490	-1 586	872	-403	497	437	1 218

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The data obtained from the analysis show that National company KazMunayGas suffered large losses in revenue as of 2014 (- 12 063 MLN'USD). Thus, the received data on revenue signals that the cost of goods sold greatly exceeds the revenue itself, which entails a loss in gross profit (- 5 227 MLN'KZT). Net income is negative (- 1 586 MLN'USD), which means a loss for the company as expenses exceed sales. A large contribution to the total profit of KMG was made by income from financial activities, as well as a share in the profit of joint ventures and associated companies. The absolute values represent the constant growth. On contrary, 2016,2017 reflects a decline in financial income. From 2015 to 2018, there is an increase in the operating profit section, which is a positive fact for the company, since the increasing operating profit every year means that the company increases sales and controls expenses. On contrary, 2014 reflects an inability to control KMG's sales and expenses (-6 254 MLN'KZT), it is obviously that world crisis in oil and gas sector caused by the drop of oil prices has brought significant damage to KMG's performance. 2017 has the most significant increase in sales over the baseline year (+ 8 828 MLN'USD).

4.3 Differential Indicator Analysis

This part of the practical chapter includes calculating differential indicators such as Cash Conversion Cycle (CCC) and net working capital (NWC) for National Company KazMunayGas and compared to its competitor Public Joint Stock Company Gazprom as well as industry average. Indicators help to analyze a company's liquidity management. All necessary information is received from the Consolidated Statement of Financial Position and Consolidated Statement of Profit and Loss for the period 2012-2019.

4.3.1 Net Working Capital (NWC)

Table 7: NWC – KazMunayGas (MLN'USD)

2012	2013	2014	2015	2016	2017	2018	2019
4 766	6 538	5 608	4 513	5 211	5 918	3 644	3 128

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

NWC is the amount received from the difference between the amount of current assets and current liabilities. This analysis of net working capital is based on official data from the Consolidated Statement of Financial Position. The results show positive values throughout the period, which means that current assets exceed current liabilities. In turn, the results obtained positively characterize the financial position of the company, namely, its own working capital is sufficient for the full implementation of current activities without attracting borrowed resources. KMG reflects lower results in comparison to its competitor Gazprom. From the combination of all the above factors, it is important to note that if the net working capital reaches too high values, then the company is inefficiently using short-term liabilities and attracts long-term liabilities to finance its assets. Whereas negative values indicate that the company is unable to pay for its current assets and could face to the risk of bankruptcy. An increase in the NWC value means an increase in the company's liquidity and an increase in its creditworthiness.

Table 8: NWC –Gazprom (MLN'USD)

2012	2013	2014	2015	2016	2017	2018	2019
30 581	44 950	28 532	25 645	21 638	15 273	25 026	21 009

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Working Capital (NWC) of Public Joint Stock Company Gazprom was higher than KazMunayGas results for the entire period 2012-2019. According to results achieved it

could be seen that industry average results of NWC higher than KMG only in 2018,2019, other years KMG reflected higher results compared to industry average.

Table 9: NWC –industry average (MLN’USD)

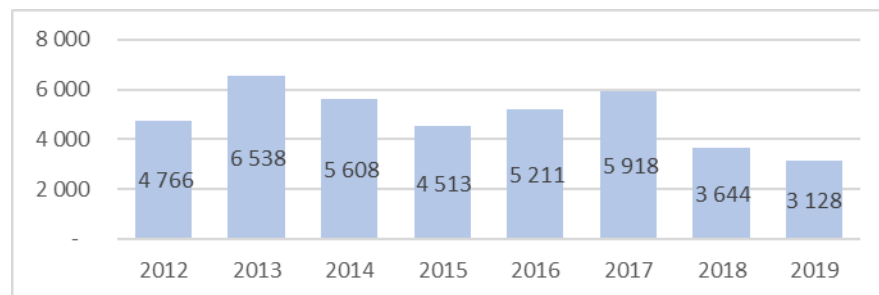
2014	2015	2016	2017	2018	2019
4 872	1 418	1 005	1 942	4 497	3 788

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

The American Securities Commission publishes a financial analysis of the oil and gas sector (GICS) annually. The calculations were performed based on the analysis of the U.S. 492 companies and average industry financial ratios for U.S. companies were provided by Unlimited Consulting and Auditing Partnership "Avdeev & Co."

Graph 5. Net Working Capital for the period (2012-2019)

The graph 5 below clearly demonstrates the obtained results of net working capital for the period from 2012 to 2019.



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.3.2 Cash Conversion Cycle (CCC)

Table 10: Cash Conversion Cycle -KMG

2012	2013	2014	2015	2016	2017	2018	2019
31,20	38,43	83,11	48,03	92,70	61,58	47,65	47,17

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The cash conversion cycle is calculated as the sum of the days in inventory outstanding and the days of sales outstanding minus days of payable outstanding. The results obtained are expressed in days. Calculations were made on the basis of official data obtained from the Statement of Profit/ Loss, as well as from the Statement of financial position of both companies. A cash conversion cycle is necessary to track a company over time and to compare a company to its competitor Gazprom and industry average. 2012,2013,2015,2018 show a short cycle, which is undoubtedly a positive factor for the

KMG company. Since the short money cycle gives a clear understanding of how quickly the company is able to return the money invested in current assets. The shortest cash conversion cycle was observed in 2012 (31 days). But the results obtained also have implications reflecting the company's inability to convert cash in a short time. In contrast, the worst result was recorded in 2016 (92 days). A high cash conversion cycle indicates that the National company KMG must cover its operations in addition to its liabilities from other financial sources.

Table 11: Cash Conversion Cycle -Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
197,54	208,30	173,50	190,53	170,67	175,26	173,02	138,72

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

During the comparison KazMunayGas with Gazprom, it is obviously seen that Cash Conversion Cycle of KMG has better indicators than Gazprom throughout the entire analyzed period 2012-2019. Notably, Gazprom covered its business operations from sources other than liabilities over a longer time than KMG. Thorough the comparison KMG with industry average, it is clear that KMG had faster return than industry average in years 2015,2017-2019, with exception of 2014,2016.

Table 12: Cash Conversion Cycle -industry average

2014	2015	2016	2017	2018	2019
50,68	55,06	66,9	70,25	56,83	71,88

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4 Analysis of Ratio Indicators

This part includes an analysis of the following ratio indicators such as Liquidity Ratio, Profitability Ratio, Leverage Ratio, Activity Ratio. The results are verified with the optimal values described in the theoretical part. All calculations are based on data from KazMunayGas Annual Report 2012-2019. Consolidated Statements of National Company KazMunayGas for the entire period could be found in the Appendix.

4.4.1 Liquidity Ratio

This part of the analysis includes the calculations which fully show how quickly the National Company KazMunayGas is able to pay its current liabilities at the expense of existing short-term assets. All calculations are based on the Consolidated Statement of Financial position for the period 2012-2019.

4.4.1.2 Current Ratio

Table 13: Current Ratio coefficient of KMG

2012	2013	2014	2015	2016	2017	2018	2019
1,639235016	1,9921258	1,8629419	2,9677791	2,5433324	1,9267711	1,7775845	1,8299709

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The current liquidity ratio is calculated as the ratio of current assets to short-term liabilities. All components of the formula are taken from the Consolidated Statement of Financial position. Throughout the entire time, the liquidity ratio reflects approximately the same result, fluctuating at an average value of 1.8, except for 2015-2016 (2.9 / 2.5). A high value of the coefficient in this case is not critical, but on the contrary is a positive factor. Based on the optimal value indicated in the literature, the value of the coefficient 2 or higher is considered normal. On the other hand, in world practice, this indicator can be reduced to 1.5, for accurate result the achieved coefficients are compared to industry average and results of Gazprom. The higher the liquidity ratio, the higher the liquidity of the company's assets. Based on the summarizing of all these factors, it could be concluded that National Company KazMunayGas reflects higher liquidity coefficients than industry average and competitor Gazprom over the entire period. Across the period, the company KMG has no financial problems, and could be determined as a solvent organization capable of repaying its current liabilities.

Table 14: Current Ratio coefficient of Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
1,62	2,06	1,86	1,88	1,68	1,34	1,70	1,51

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 15: Current Ratio coefficient – industry average

2014	2015	2016	2017	2018	2019
1,06	1,05	1,05	0,92	1,1	1,02

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

The American Securities Commission publishes a financial analysis of the oil and gas sector (GICS) annually. The calculations were performed based on the analysis of the U.S. 492 companies and average industry financial ratios for U.S. companies were provided by Unlimited Consulting and Auditing Partnership "Avdeev & Co."

4.4.1.3 Quick Ratio

Table 16: Quick Ratio coefficient- KMG

2012	2013	2014	2015	2016	2017	2018	2019
1,45781325	1,7902401	1,6985727	2,806233	2,455726	1,8088966	1,6043851	1,6344712

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The quick ratio is calculated by dividing liquid assets by short-term liabilities. Liquid assets are current assets minus inventories. All components of the formula are taken from the Consolidated Balance Sheet. The analysis also showed similar coefficient values for the period from 2012-2019, apart from 2015-2016. The average value of the coefficient ranges between 1.6-1.7. In the period from 2015-2016, the highest values of the quick liquidity ratio (2.8 / 2.4) are noted. A value of 1.0 or higher is considered the norm. All the results obtained correspond to the industry average and Gazprom results. In 2015, 2016 the indicators of the ratio indicate that the company covered its short-term liabilities as much as possible by selling liquid assets in this reporting period. Quick ratio coefficients of KazMunayGas are higher in relation to industry average and results of competitor (Gazprom) across the entire period 2012-2019. KazMunayGas characterizes itself as a solvent organization with a high quick liquidity ratio, due to the fact that KMG is able to cover short-term liabilities at the expense of liquid assets.

Table 17: Quick Ratio coefficient- Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
1,31	1,65	1,50	1,50	1,31	1,04	1,34	1,14

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 18: Quick Ratio coefficient- industry average

2014	2015	2016	2017	2018	2019
0,76	0,85	1	0,84	0,92	0,87

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.1.4 Cash Ratio

Table 19: Cash Ratio indicator (%)- KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,370448213	0,4024296	0,6938869	0,9892728	0,7790976	0,5950898	0,8537735	0,7400034

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The cash ratio is calculated as the ratio of cash to cash equivalents to current liabilities. Throughout the analyzed period, the values of the coefficients fluctuate. The highest rates were recorded in 2015, 2016, 2018, 2019 with the ratio reaching approximately 1 (0.99). These values are permissible, but at the same time it suggests that KMG in comparison with sectoral data and rival company Gazprom, had an unreasonably high amount of free cash that could be used for business development for the explained time series. Based on the acceptable norm described in the literature, the normal value of the indicator is 0, 2 or more. KMG Company shows the sufficiency of cash and cash equivalents as the most liquid assets for instant payments on short-term liabilities in 2012-2019. The graph 6 below reflect the trend between Current Ratio, Quick Ratio and Cash Ratio. Current Ratio and Quick Ratio corresponded quit similar trend. This graph demonstrated that company KMG has similar trend.

Table 20: Cash Ratio indicator (%)- Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,10	0,30	0,50	0,32	0,32	0,34	0,04	0,29

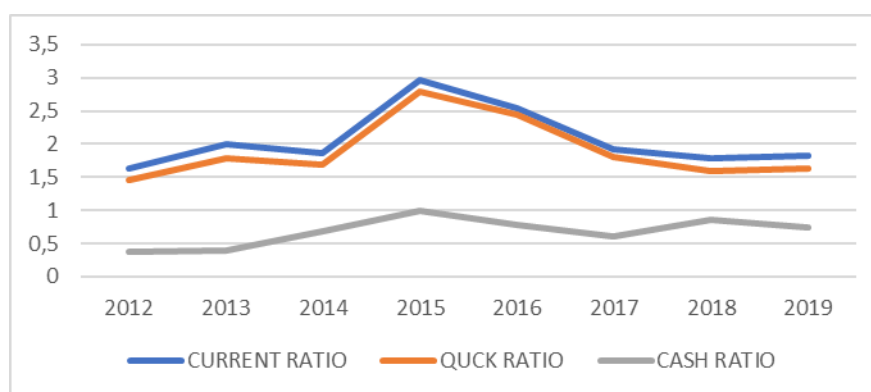
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 21: Cash Ratio indicator (%)- industry average

2014	2015	2016	2017	2018	2019
0,18	0,2	0,29	0,21	0,23	0,18

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 6. Current/Quick/Cash Ratio trend



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.2 Profitability Ratio

This part of the practical chapter was focused on analyzing the profitability of National Company KazMunayGas for the period 2012-2019. All received values are expressed as a percentage %. All the necessary data for the calculation was taken from the Consolidated Statement of Profit & Loss, as well as the Consolidated Statement of Financial Position. Statements for the entire period could be found in the Appendix.

4.4.2.1 Return on Sales (ROS)

Table 22: ROS indicator (%) -KMG

2012	2013	2014	2015	2016	2017	2018	2019
9,46	10,75	-75,26	-44,21	-1,33	8,48	7,99	8,85

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Return on sales is calculated as the ratio between earnings before interest and taxes to revenue for the period 2014 to 2016. Data from the Consolidated Statement of Profit & Loss were used to calculate ROS. Return on sales shows whether the business is profitable or unprofitable. In the period from 2014-2016, KazMunayGas company showed unprofitable activities. This is due to the national crisis, namely the devaluation of the national currency caused by drop in oil and gas price, as well as the global crisis in the oil and gas sector, also sanction policies of the leading powers. According to all listed reasons of significant drop of the period (2014-2016), 2015 was the most stressful year and reflected the most negative ratio (-75.26%). This in turn means that the Company KMG incurred a loss in the amount of 0.7526 USD per 1 USD of the total net turnover. The best indicator was noted in 2013 (10.75%) during this period the company had the highest level of profitability. Profit 0.1075 USD per 1 USD from the total net turnover. ROS of KazMunayGas represented the worth performance than its competitor Gazprom across the entire period 2012-2019. Gazprom depicted the constant profitable performance. On contrary, ROS of KMG represented results above the industry average, except for 2014.

Table 23: ROS indicator (%) - GAZPROM

2012	2013	2014	2015	2016	2017	2018	2019
28	30	23	20	12	13	23	15

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 24: ROS indicator (%) - industry average

2014	2015	2016	2017	2018	2019
-5,1	-147,2	-52,4	-7,6	5,5	5,4

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.2.2 Return on Equity (ROE)

Table 25: ROE indicator (%) - KMG

2012	2013	2014	2015	2016	2017	2018	2019
11,50	12,11	4,51	8,12	5,74	7,75	9,71	14,18

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The return on equity is calculated as the division of net income by the organization's equity. Calculations are made based on the Consolidated Statement of Profit and Loss and the Consolidated Statement of Financial Position of KMG for the period 2012-2019. The higher the return on equity, the better. The normal value is considered to be 10-12%, for inflationary countries the value may be higher. Based on the data obtained above, it can be concluded that only 2012,2013,2019 the obtained values met with the norm. This suggests that during these years the National Company KMG effectively used the shareholder's equity invested in the business and had a great financial return. In 2019, the highest percentage of return was recorded, 1 USD brought 0.1418 USD of profit. The worst results were from 2014-2017. This means that the company used capital inefficiently and met with a low rate of return. Such low ROE coefficient was explained by global crisis in oil and gas sector caused by drop of oil prices, devaluation of national currency. In 2014, there was the smallest percentage, 1 USD accounted for a profit of 0.0451 USD. Such values carry some risks, due to the fact that this significant indicator (ROE) directly affects existing investors and attracting new investors. KMG in comparison with Gazprom had higher results of ROE in 2014, 2015, 2017, 2019, the results below were in 2012,2013,2018. The achieved results of KMG are above industry average, only in 2014 national company KMG had lower return on equity than industry average.

Table 26: ROE indicator (%) - GAZPROM

2012	2013	2014	2015	2016	2017	2018	2019
15	13	2	8	9	7	12	9

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 27: ROE indicator (%)- industry average

2014	2015	2016	2017	2018	2019
9,3	4,79	2,37	5,65	6,01	3,95

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.2.3 Return on Assets (ROA)

Table 28: ROA indicator (%)-KMG

2012	2013	2014	2015	2016	2017	2018	2019
6,05	6,47	2,27	4,62	3,03	3,88	4,95	8,23

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Return on assets is calculated by dividing net income by total assets. The result of the calculation is the amount of net profit from each US dollar invested in the asset to the National Company KMG. The whole period has a positive trend, no negative values. Throughout the entire time, the company generated profit from each invested USD. The highest profit was recorded in 2019 + 0.083 USD for each invested 1 USD. On the contrary, the lowest indicator was in 2012 + 0.027 USD of profit for each invested 1 USD. ROA of KazMunayGas had higher result than Gazprom results in 2014 and 2019. Moreover, KMG had ROE higher in all analyzed time series than industry average. Return on Assets and Return on Equity reflects to each other with almost similar trend and presented on the graph 7 below.

Table 29: ROA indicator (%) - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
11	9	1	5	6	4	8	6

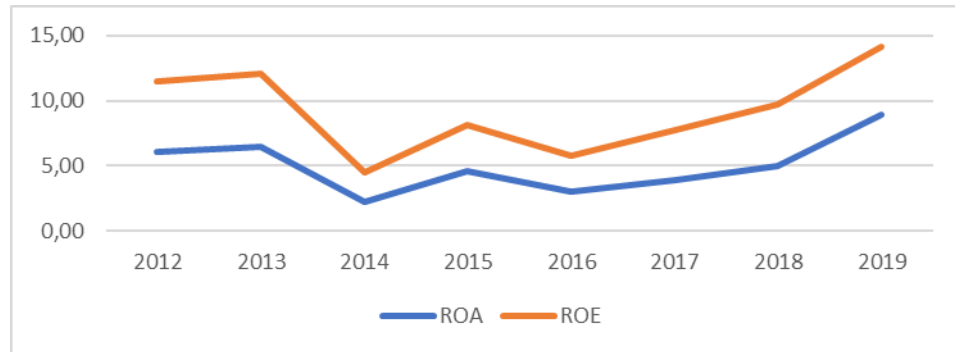
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 30: ROA indicator (%) – industry average

2014	2015	2016	2017	2018	2019
-9,6	-40,1	-16,8	-5,3	-0,2	2,4

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 7. ROA to ROE trend



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.2.4 Return on Capital Employed (ROCE)

Table 31: ROCE (%) - KMG

2012	2013	2014	2015	2016	2017	2018	2019
4,90	4,60	-7,97	-4,87	-0,23	3,56	4,58	4,80

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The return on capital employed (ROCE) is calculated as earnings before interest and taxes (EBIT) divided by the difference between total assets and current liabilities. This is an indicator of the return on the equity capital of KMG involved in commercial activities and long-term funds raised. The analyzed data shows almost the same negative trend for the period from 2014 to 2016. During this period, the company incurs losses for every 1 USD invested. It is also important to note that the indicator for 2014 retains a negative position, for 1 invested US dollar of equity capital and long-term liabilities brought significant losses -0.0797 USD. Such drop in ROCE in 2014 is due to the global crisis in oil and gas sector caused by drop in oil and gas price, such drop led to devaluation of national currency -tenge (KZT). Because of drop in oil price KMG had insufficient revenue to cover KMG's fixed costs. On the other hand, there are also positive values in 2012,2013,2017-2019, per 1 USD invested of equity and long-term liabilities, the approximate income was + 0.070 USD. KMG represented higher ROCE in 2017, 2019 than Gazprom ROCE results. Compared to ROCE of industry average KMG reached a higher gain only in 2019. It makes sense to show the trend on the graph 8 between both ratios ROCE and ROS because of the ratio to earnings before interest and taxes (EBIT).

Table 32: ROCE (%) - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
9,49	7,99	6,91	5,44	2,22	2,40	5,59	3,25

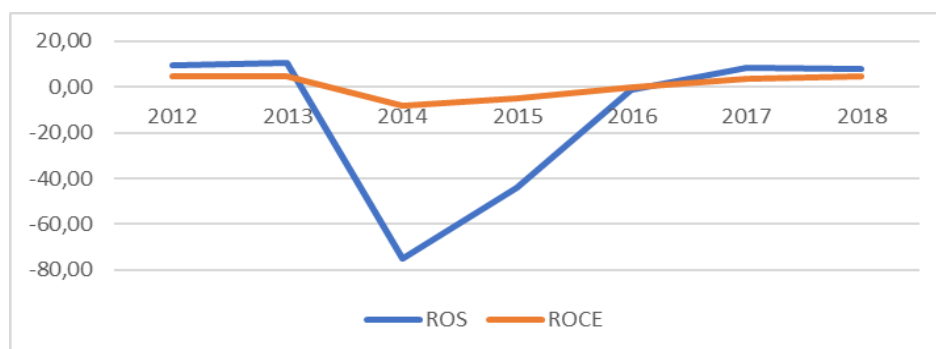
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 33: ROCE (%) - industry average

2014	2015	2016	2017	2018	2019
13,55	5,2	3,1	7,1	8,7	4,25

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 8. ROCE to ROS trend



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.2 Leverage Ratio

All the following ratios are included in the group of financial leverage indicators – indicators characterizing the ratio of the organization’s own and borrowed funds for the period 2012-2019. The required values were obtained from the consolidated statement of financial position (the report can be found in the appendix). For better interpretation and understanding, the values could be multiplied by 100%.

4.4.2.1 Debt to Equity Ratio

Table 34: Debt to Equity Coefficient -KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,901670917	0,8726039	1,0010459	0,7585131	0,8927309	0,9974567	0,962081	0,7180073

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The financial leverage ratio is calculated as the ratio of the borrowed capital to equity. An equal ratio of liabilities and equity capital is considered optimal, i.e. ratio equal to 1. Based on the Statement of financial position, the following results are generated.

Speaking about the principled approach to business financing, it can be noted that throughout the entire period from 2012-2019 the National Company KazMunayGas uses its equity and borrowed capital almost equally. On the other hand, the ratios reflect that business financing is largely realized from equity, apart from 2014. This year's results show that the company financed its activities through liabilities from third parties (banks, creditors). The maximum level of use of equity is observed in 2015. Based on all the provisions and the results obtained, it can be concluded that the company KMG uses equity in financing the company with a slight advantage in relation to liabilities. But despite the equity advantage, liabilities are undoubtedly an important source of KMG's financing. Results obtained reflects that the main source of financing of Gazprom is equity from 2012-2019. The industry average represented the similar source of financing -equity thorough the entire period 2014-2019. KMG showed higher dependency of liabilities than Gazprom and industry average across the entire period.

Table 35: Debt to Equity Coefficient - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,38	0,29	0,34	0,39	0,33	0,42	0,45	0,43

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 36: Debt to Equity Coefficient – industry average

2014	2015	2016	2017	2018	2019
0,63	0,46	0,35	0,57	0,55	0,71

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.2.2 Debt Ratio

Table 37: Debt coefficient – KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,474150339	0,4659846	0,5034759	0,4313378	0,4716629	0,4993633	0,490337	0,4179303

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

The debt ratio is characterized as the ratio of the organization's debt capital (liabilities) to total assets. Moreover, a financial dependence ratio of no more than 0.6-0.7 is considered normal. The optimal coefficient is 0.5. The table 37 shows the coefficients of the obligations of the KMG company for the period 2012-2019. The results obtained reflect the stable nature of the company's obligations. Which depicted about the preferential financing of the company from equity capital. Despite this, 2014 showed a

coefficient indicating that total liabilities were the main source of funding. The minimum value was recorded in 2019 (41,7 %). Speaking of risk, a higher share of equity capital reduces the risk for creditors. Therefore, the debt ratio is very significant indicator for lenders, and they prefer a ratio coefficient below 0.5 (50%). Gazprom reflected results below than KazMunayGas for all analyzed time series. On contrary, industry average depicted that liabilities are the main source of financing from 2014-2015.

Table 38: Debt coefficient - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,28	0,22	0,26	0,28	0,24	0,29	0,30	0,29

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 39: Debt coefficient – industry average

2014	2015	2016	2017	2018	2019
0,54	0,59	0,62	0,56	0,5	0,5

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.2.3 Equity Ratio

Table 40: Equity Ratio coefficient -KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,525857417	0,5340162	0,5029498	0,5686622	0,5283371	0,5006366	0,509663	0,5820697

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

It characterizes the ratio of equity to the total assets of the organization. The coefficient shows how independent the organization is from creditors. The entire time series shows the advantage of equity capital as a source of financing for KMG throughout the entire period from 2012-2019. The generally accepted normal value of the coefficient is 0.5 and more, the optimal value is not more than 0.6-0.7. The highest value for the period in 2019, 0.58 (58%) of equity was used to finance the company's assets. Minimum coefficient value is in 2014. Gazprom reflected higher results than KazMunayGas for all analyzed time series and demonstrated that for Gazprom equity is the main source of assets financing. Industry average depicted that liabilities are the main source of financing.

Table 41: Equity Ratio coefficient - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,72	0,78	0,74	0,72	0,75	0,68	0,67	0,68

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

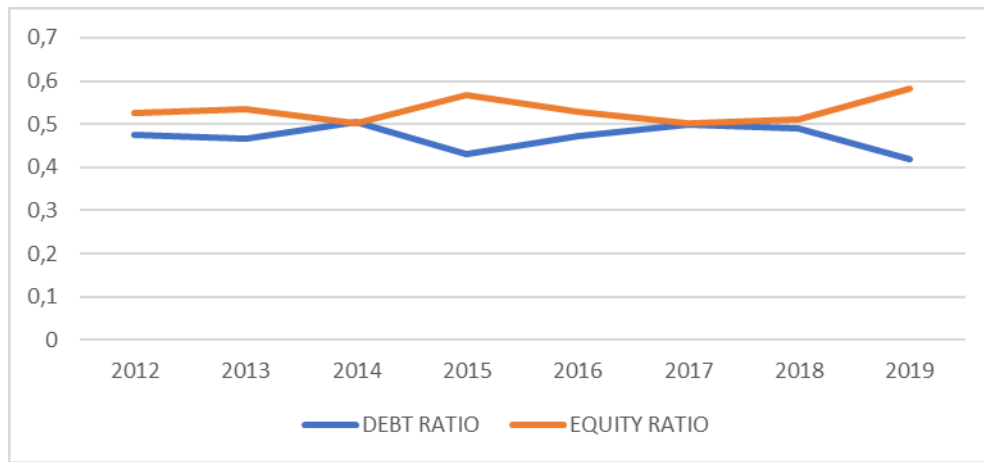
Table 42: Equity Ratio coefficient – industry average

2014	2015	2016	2017	2018	2019
0,46	0,41	0,38	0,44	0,5	0,5

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

The graph 9 below reflects the Equity and Liabilities of KMG trend over the period 2012-2019. According to the graph trend 9 the deviation could be determined in years 2015, 2019.

Graph 9. Proportion of Equity and Liabilities to total Assets



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.2.4 Capitalization Ratio

Table 43: Capitalization Ratio coefficient - KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,370598193	0,3831223	0,4219187	0,3535202	0,3839811	0,4061971	0,4148443	0,3517085

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Based on the statement of the financial position of the company, the following results were obtained, shown in the table 43 for the period 2012-2019. The resulting ratio values reflect the predominant use of equity over long-term liabilities. The low value of the ratio indicates that KazMunayGas company is more dependent on shareholder's equity in its development, which leads to a more stable financial position. The largest coefficient reflecting dependence on long-term liabilities was in 2014 (42.19%). On the contrary, the lowest one in 2019 (35.17%). The national company KMG is attractive for investors as an enterprise with a predominance of equity capital over long-term debt. KMG represented

the lower dependency on equity in comparison to long-term liabilities than Gazprom company thorough the entire period (2012-2019). Capitalization of industry average reflected that KMG is more dependent on long-liabilities than industry average, except 2015.

Table 44: Capitalization Ratio coefficient - Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,11	0,13	0,16	0,18	0,16	0,19	0,22	0,21

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 45: Capitalization Ratio coefficient – industry average

2014	2015	2016	2017	2018	2019
0,36	0,37	0,38	0,33	0,34	0,32

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.3 Activity Ratio

This part of the practical chapter was focused on analyzing of activity ratios of National Company KazMunayGas for the period 2012-2019. All the necessary data for the calculation was taken from the Consolidated Statement of Profit & Loss, as well as the Consolidated Statement of Financial Position. Statements for the entire period could be found in the Appendix.

4.4.3.1 Asset Turnover Ratio

Table 46: Asset turnover coefficient- KMG

2012	2013	2014	2015	2016	2017	2018	2019
0,87	0,86	0,24	0,20	0,31	0,71	1,00	0,97

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Asset turnover is used as a financial indicator of the intensity of the organization's use of the entire set of available assets within the framework of KMG's activities for the period from 2012-2019. High asset turnover is noted only in 2012-2013, 2017-2019. Highest value in 2018 (1), which means high asset utilization efficiency. The optimal value is 1 or more, but the value may be less in the industry. In 2014-2016, there is a large decline in the values of the coefficient, which indicates a critical ineffective use of the company's assets. KMG is unable to generate income at least equal to their asset base. The company's worst position was in 2015 (0,20). Such decreases could be explained by the national crisis because of the devaluation of the national currency caused by drop in oil and

gas price, as well as the global crisis in the oil and gas sector, also sanction policies of the leading powers. Competing company Gazprom indicated stability, namely efficiency use of asset over the entire period 2012-2019. KMG depicted more efficiency use of assets than average industry only in years 2017-2018, from 2014-2016, 2019 reflected lower efficiency of assets than industry average. Trend analysis will more clearly reflect the situation in the chart below.

Table 47: Asset turnover coefficient- Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
0,80	0,78	0,74	0,71	0,72	0,72	0,79	0,70

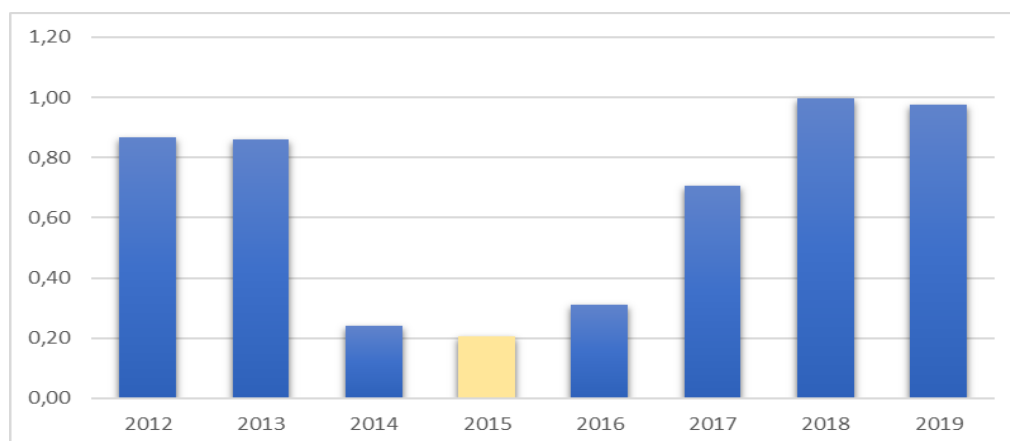
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 48: Asset turnover coefficient- industry average

2014	2015	2016	2017	2018	2019
0,32	0,21	0,22	0,29	0,34	1,33

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 10. Total Asset Turnover



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.3.2 Inventory Turnover Ratio

Table 49: Inventory Turnover Ratio -KMG

2012	2013	2014	2015	2016	2017	2018	2019
29,13	31,84	10,78	17,43	37,61	38,29	44,76	48,78

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

This indicator characterizes the quantity of inventory and the efficiency of their management by the National Company KazMunayGas for the period 2012-2019. It is

important for the company to track the inventory turnover rate since profit directly arises with each inventory turnover. Inventory turnover ratio in the period 2014,2015 has a downward trend. The minimum value in 2014 (10.78). Such a decrease in the inventory turnover ratio means the accumulation of surplus stocks at KMG, ineffective warehouse management, and the accumulation of unusable materials. High value of turnover is a positive signal. On other hand, a too large value of the ratio is not always a positive reflection of the inventory turnover, it may indicate the depletion of reserves. So, the highest value of the coefficient was in 2019 (48.78). From one hand, KazMunayGas reached higher result than its competitor Gazprom for entire period, apart from 2014 it showed lower inventory turnover (10.78). From other hand, Gazprom reflected the stability of inventory turnover across all analyzed time series. KMG represented better results of inventory turnover in comparison to industry average from 2016-2018, lower in 2014,2015,2019.

Table 50: Inventory Turnover Ratio -Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
20,60	18,43	16,64	15,10	17,19	16,95	18,08	16,19

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

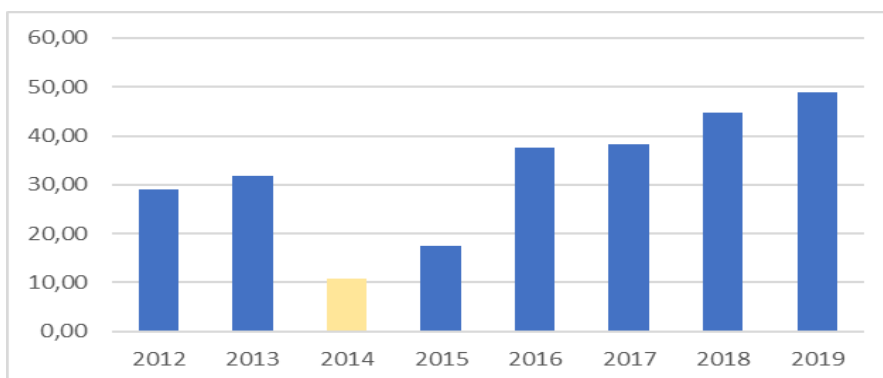
Table 51: Inventory Turnover Ratio -industry average

2014	2015	2016	2017	2018	2019
24,33	19,28	11,77	14,6	19,21	91,25

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

The graph 11 below reflects the inventory turnover for the period 2012-2019.

Graph 11. Inventory Turnover Ratio coefficient



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.3.3 Inventory Turnover Period

Table 52: Inventory Turnover Period (days) – KMG

2012	2013	2014	2015	2016	2017	2018	2019
12,53	11,46	33,84	20,94	9,71	9,53	8,15	7,48

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Along with the turnover ratio, it is also important to calculate the inventory turnover indicator in days (from 365 days). The obtained indicators reflect how many days the existing inventory of the KazMunayGas company last for the period from 2012-2019. The lower the indicator, the better it reflects the speed at which inventory is sold. The longest period of inventory turnover was in 2014, it took 34 days for its turnover, which indicates an excessive accumulation of reserves at KMG. The best inventory turnover was recorded in 2019 (7.48). KMG provided better results of inventory turnover period than Gazprom as well as industry average, excepted 2014,2015,2019 year. The graph 12 below clearly shows a similar trend in inventory turnover, except for 2014 and 2015.

Table 53: Inventory Turnover Period (days) – Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
17,72	19,80	21,94	24,17	21,24	21,53	20,19	22,55

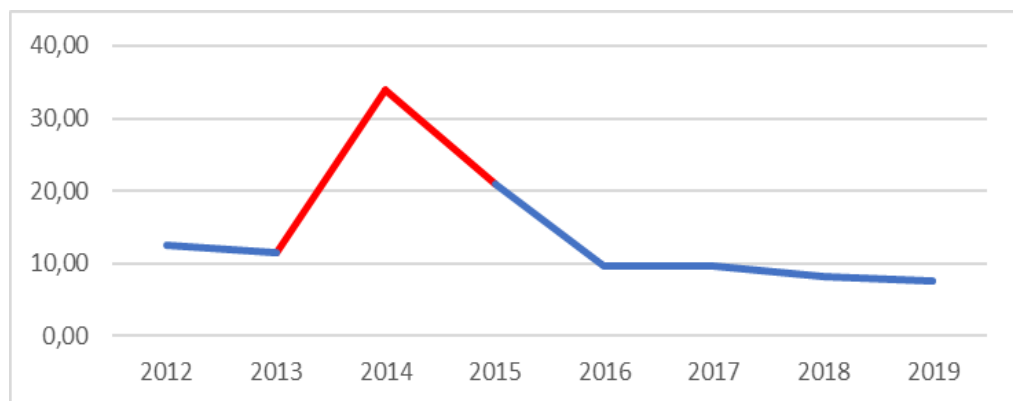
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 54: Inventory Turnover Period (days) – industry average

2014	2015	2016	2017	2018	2019
15	19	31	25	19	4

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 12. Inventory Turnover Period



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.3.4 Payables Turnover Ratio

Table 55: Payable Turnover Ratio Coefficient – KMG

2012	2013	2014	2015	2016	2017	2018	2019
26,07	26,41	9,00	12,57	14,28	18,66	22,09	20,54

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

An indicator of accounts payable turnover is necessary to reflect the ratio of repayment by the organization of its debts to suppliers and contractors. Payables account turnover calculated as the share of revenue and average account payables. The higher ratio is most preferred. Throughout the entire time, the highest turnover of accounts payable was noted in 2013 (26.41). On the contrary, the lowest PTR was 2014 (9.00). This low value is due to the inability of KazMunayGas quickly pay off its debts to suppliers and contractors. But a low ratio is negative only for creditors, while a company prefers a lower ratio to have a source of financing for its current activities as long as possible. KMG had higher payable turnover ratio than Gazprom, but nevertheless Gazprom reached better results of payable turnover from 2014-2016. Payable turnover of KMG showed higher ratio than industry average across the period 2016-2019, but in years 2014,2015 results are below average industry.

Table 56: Payable Turnover Ratio Coefficient – Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
18,58	18,97	17,47	18,07	16,17	13,57	15,25	16,86

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 57: Payable Turnover Ratio Coefficient –industry average

2014	2015	2016	2017	2018	2019
19,51	15,37	13,34	13,28	15,57	12,22

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.3.5 Payables Turnover Period

Table 58: Payable Turnover Period (days) – KMG

2012	2013	2014	2015	2016	2017	2018	2019
14,00	13,82	40,56	29,03	25,56	19,56	16,52	17,77

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

In addition to calculating the turnover ratio of accounts payable, it is customary to calculate the turnover in days (365). A long period of account payables is a negative factor for creditors and suppliers. The highest turnover period was in 2014, 40 days were needed. Throughout the rest of the years, there is no significant fluctuation in the coverage of obligations. The least number of days of turnover was in 2013 (13 days). The graph 13 below visually reflects the fluctuations in the values of accounts payable turnover for the period from 2012-2019. KazMunayGas had higher inventory turnover period than Gazprom, but nevertheless Gazprom reached more attractive results of payable turnover period from 2014-2016. In case of results obtained on industry average, it is obviously that KMG had better turnover period than industry average from 2016-2019, with exception of 2014, 2015.

Table 59: Payable Turnover Period (days) – Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
19,65	19,24	20,89	20,20	22,57	26,90	23,94	21,64

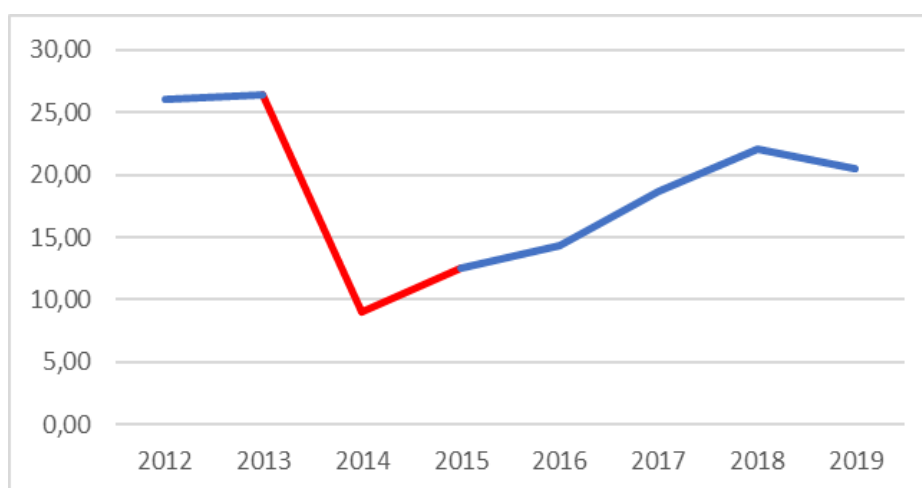
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 60: Payable Turnover Period (days) – industry average

2014	2015	2016	2017	2018	2019
18,7	23,7	27,4	27,5	23,4	29,9

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 13. Payables Turnover Ratio coefficient



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

4.4.3.8 Receivable Turnover Ratio

Table 61: Receivable Turnover Ratio coefficient – KMG

2012	2013	2014	2015	2016	2017	2018	2019
27,00	22,87	10,38	22,96	13,28	20,49	28,30	34,49

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

Accounts receivable turnover ratio reflects how many times per year an organization receives payment for goods and services sold from its customers. The indicator measures the efficiency of work with customers in terms of collection of receivables and reflects the organization's policy regarding sales on credit. The higher the ratio, the faster national company KazMunayGas receives payment from debtors. The calculation is made as the ratio between revenue and average account receivables. Values fluctuate from 10.38-34.49 throughout the entire period. The company met with a large delay in payments from buyers in the periods of 2014 (10.38) and 2016 (13.28). In contrast, the highest payout ratio from buyers was in 2019 (34.49). Gazprom represented the lower turnover of receivables thorough the entire time series. KazMunayGas received payment faster from its customers compared to Gazprom. On contrary, KazMunayGas indicates higher result than industry average for the years from 2014-2019.

Table 62: Receivable Turnover Ratio coefficient – Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
4,74	4,95	5,71	4,83	6,94	7,50	7,76	8,16

Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 63: Receivable Turnover Ratio coefficient – industry average

2014	2015	2016	2017	2018	2019
7,3	5,36	5,2	6,4	7,01	26,07

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

4.4.3.9 Receivable Turnover Period

Table 64: Receivables Turnover period (days) – KMG

2012	2013	2014	2015	2016	2017	2018	2019
13,52	15,96	35,17	15,89	27,49	17,81	12,90	10,58

Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

It is also common to calculate the indicator not only in the form of a coefficient, but also in the form of the number of days during which the receivables remain unpaid. The

period is calculated as the total number of days in a year (365) divided by the account receivables turnover ratio. 2014 and 2016 reflect the worst turnover period to KazMunayGas (35 days) for the entire period. During this period, the KMG company showed ineffectiveness in working with buyers in terms of collection of receivables. The best indicator of account receivable turnover period is observed in 2019 (10.58 days). The graph 14 below visually reflects the fluctuations in the values of accounts receivable turnover for the period from 2012-2019. Gazprom represented the longer period of receivables turnover thorough the entire time series. It is evident that national company KazMunayGas received payment faster from its customers compared to Gazprom. Beside this, KazMunayGas indicates shorter period of receivables turnover than industry average for the years from 2014-2019.

Table 65: Receivables Turnover period (days) – Gazprom

2012	2013	2014	2015	2016	2017	2018	2019
77,07	73,67	63,98	75,59	52,59	48,65	47,06	44,71

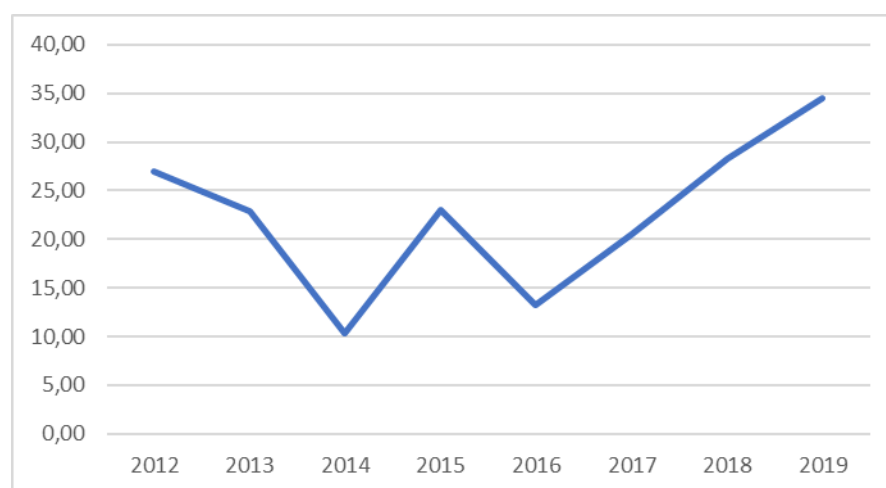
Source: own processing based on data from Gazprom Annual Report 2012-2019, 2020

Table 66: Receivable Turnover period (days) – industry average

2014	2015	2016	2017	2018	2019
50	68	70	57	52	14

Oil and Gas Extraction: industry financial ratios benchmarking, 2020

Graph 14. Receivables Turnover Ratio



Source: own processing based on data from KazMunayGas Annual Report 2012-2019, 2020

5 Results and Discussion

5.1 Results

Absolute Indicators

Vertical Analysis of Balance Sheet. The results of the vertical analysis of the balance sheet report reflect the main changes, so the ratio of non-current and current assets throughout the analyzed period did not have significant fluctuations. 2012 reflected 79.95% of NCA to 28, 88% of CA, in 2019 it showed the ratio of NCA (81.25%) to 18.69 of CA. Long-term financial assets have a constant growth trend from 2012 to 2019. This is a positive factor, since KMG is constantly investing in the future. Intangible assets have almost the same share in all time periods, while tangible assets decreased slightly in 2012 (50.09%) in 2019 (31.84%), in 2015 and 2016 there was a sharp decline in tangible assets due to an increase in assets classified as held for sale. Inventory shows insignificant fluctuations in shares, but also keep at a low level, which is a positive factor. The share of receivables has decreased, which is also a positive factor. Cash and cash equivalents increased slightly in 2012 by 6.08% and in 2019 by 7.56%. Vertical analysis of liabilities and equity showed that the ratio of equity to liabilities did not change throughout the entire time. Capital has been the main source of funding throughout this period. But the author noted that in 2014, aggregate liabilities were a more important source of funding than equity. The share of retained earnings has increased over time. The share of current liabilities has decreased over time, while non-current liabilities have increased over time. The share of accounts payable has an increasing trend.

Vertical Analysis of Income Statement. Vertical analysis results reflect changes in the report. In 2014, the cost of sales exceeded the sales themselves led to a negative gross margin of -5.26% in 2015. In 2015, the gross margin reached a low of 0.31%. The author noted that in the period from 2014 to 2016 the company incurred large losses in the section of the financial report "Operating profit / loss" in 2014-2016, the largest negative value - 75.26% in 2014. KMG had insufficient sales. to cover fixed costs. Financial costs in the period from 2014 to 2016 accounted for a larger share compared to the rest of the years. Profit / (loss) after tax for the period from discontinued operations increased sharply over the period 2014-2016, the highest value is observed in 2014 (71.16%) and 2015 (61.55%). On the other hand, profit before tax from 2012 to 2019, apart from 2014, has a positive

trend (-39.55%). Net profit reflects the upward trend across the entire period, the highest in 2015 (45.23%) of total revenue.

Horizontal Analysis of Balance Sheet. A horizontal analysis of KMG's assets showed that total assets are increasing all the time, the maximum increase in 2014 (6708). Long-term assets are increasing from year to year, maximum in 2014 (5539). Tangible assets reflect a sharp drop in 2014 (-4856). Intangible assets reflect the fall from 2013-2015, the maximum fall (-196). Non-current assets have a growth trend, Current assets decreased in 2018 and 2019. The largest increase in current assets in 2017 (+3683). Assets classified as held for sale increased significantly in 2015 (+3089), a sharp drop in 2017 (-3109). Inventories are an important part of non-current assets, so in 2014 and 2015 inventories decreased, in 2017 there was a sharp increase (456). Accounts receivable fluctuated from 2012-2019, the maximum decline was in 2014, 2015, 2019, and the maximum growth was in 2017. Equity increases all the time, max in 2015 (4939), minimum in 2014. Non-current liabilities decreased in 2019 (-1617), increased significantly in 2014 (3929). Current liabilities decreased in 2013, 2015. Borrowings increased in 2014 and 2017. There are no sharp fluctuations in the provisions, only in 2015 there was an increase. Accounts payable decrease in the period from 2014-2016, 2019. Obviously, in 2014, liabilities were the main source of funding. The author recommends to increase the payment from receivables, by introducing a request to make advance payments led to benefits for customers or introducing the high penalty interest for late payment.

Horizontal Analysis of IS. Significant changes were observed by the author in the income statement. KMG faced a high decrease in profit in 2014 (-12,063), in 2015 and in 2019. Cost of sales in 2014 was higher than sales. Gross profit fell sharply in 2014. Operating profit and loss (EBIT) in 2014 showed the steepest decline. Net income in 2014 and 2016 showed reduction. Transport costs dramatically increased in 2014 and 2015.

Differential Indicators

NWC. The obtained results of net working capital showed positive values throughout the entire time. The author notes that the company KazMunayGas has enough of its own working capital is sufficient for the full implementation of current activities without attracting borrowed resources. Because current assets exceed current liabilities. The lower the results, the better. KMG is performing better than its competitor Gazprom. But on the other hand, KMG values are higher than the industrial average. The author suggests the

best result can be achieved by KMG Company with decreasing delay of accounts receivable.

CCC. CCC of KMG had better indicators than Gazprom from 2012-2019. Notably, Gazprom covered its business operations from sources other than liabilities over a longer time than KMG. Thorough the comparison KMG with industry average, KMG had faster return than industry average in years 2015,2017-2019, with exception of 2014,2016. The author suggests that to avoid the results of 2014 and 2016, the following recommendations should be applied. More closely monitor the timing and amount of cash inflows and outflows. Beside this, to significantly reduce a delay of accounts receivable, by introducing a request to make advance payments led to benefits for costumers or introducing the high penalty interest for late payment.

Analysis of Ratio Indicators

Liquidity ratio

Current Ratio. Current liquidity ratio of the KMG company had a value higher than the recommended value of 1.5. KMG performed better than the industrial average and higher than rival Gazprom for the entire analyzed period from 2012-2019. A high current liquidity ratio characterizes KazMunayGas Company as a solvent organization capable of repaying its current liabilities. The author recommends having the coefficient values for future activities based on past experience. Since the high liquidity ratio reflected the high liquidity of the KMG company's assets throughout the entire period 2012-2019.

Quick Ratio. Quick ratio coefficients of KazMunayGas were higher than industry average and results of competitor (Gazprom) across the entire period 2012-2019. KazMunayGas characterizes itself as a solvent organization with a high quick liquidity coefficient, because KMG is able to cover short-term liabilities at the expense of liquid assets. The author recommends holding the coefficient values for future activities based on past experience 2012-2019.

Cash Ratio. Based on the acceptable norm described in the literature, the normal value of the indicator is 0, 2 or more. KMG showed the sufficiency of cash and cash equivalents as the most liquid assets for instant payments on current liabilities. KMG had higher cash ratios for the entire analyzed period 2012-2019 compared to industry data and competing company Gazprom. But the author determined too high a coefficient in 2015 (0.99). Proceeding from this, the author recommends KMG to control a high amount of free cash that could be used for business development.

Leverage Ratio

Debt to Equity Ratio. Across the entire period the National Company KMG used its equity and borrowed capital almost equally. D/E ratio showed that financing of KMG is largely realized from equity, apart from 2014. This year's results show that the company financed its activities through liabilities from third parties (banks, creditors). The maximum level of equity use was in 2015. KMG used equity in financing the company with a slight advantage in relation to liabilities. But despite the equity advantage, liabilities are undoubtedly an important source of KMG's financing. KMG showed higher dependency of liabilities than Gazprom and industry average across the entire period.

Debt ratio. Debt ratio of no more than 0.6-0.7 is considered normal. The optimal coefficient is 0.5. The results obtained reflect the stable nature of the company's obligations. 2014 showed a coefficient indicating that total liabilities were the main source of funding. The minimum value was recorded in 2019 (41,7 %). Therefore, the debt ratio is very significant indicator for lenders, and they prefer a ratio coefficient below 0.5 (50%). Gazprom's coefficients were below than KazMunayGas for all analyzed time series. On contrary, Debt Ratio of KMG was below than industry average 2014-2019.

Equity Ratio. The entire time series showed the advantage of equity capital as a source of financing for KMG throughout the entire period from 2012-2019. The highest equity of KMG 0.58 (58%) in 2019 was used to finance the company's assets. Minimum coefficient value is in 2014 (50%). Gazprom reflected higher results than KazMunayGas for all analyzed time series and demonstrated that for Gazprom equity is the main source of assets financing. On contrary, Equity Ratio of KMG was higher than industry average from 2014-2019.

Capitalization. Achieved results showed KMG as more dependent on shareholder's equity in its development, which leads to a more stable financial position. The largest coefficient reflecting dependence on long-term liabilities was in 2014 (42.19%). On the contrary, the lowest one in 2019 (35.17%). The national company KMG is attractive for investors as an enterprise with a predominance of equity capital over long-term debt. KMG represented the lower dependency on equity in comparison to long-term liabilities than Gazprom company from 2012-2019. KMG is more dependent on long-liabilities than industry average, except 2015.

Activity Ratio

Asset Turnover Ratio. Highest value of ATR was in 2018 (1), which means high asset utilization efficiency. The optimal value is 1 or more, but the value may be less in the industry. In 2014-2016, there was a large decline in asset turnover. KMG was unable to generate income at least equal to their asset base. The company's worst position was in 2015 (0,20). Such decreases were because of the national crisis because of the devaluation of the national currency caused by drop in oil and gas price. Competing company ATR of Gazprom higher than KMG across the entire period 2012-2019. KMG had better turnover than average industry only in years 2017-2018, from 2014-2016,2019 reflected lower turnover.

Inventory Turnover Ratio/ Inventory Turnover Period. ITR in 2014,2015 had a downward trend. The minimum ratio in 2014 (10.78) it took 34 days for turnover. Such a decrease in the inventory turnover ratio means the accumulation of surplus stocks at KMG caused by drop in oil and gas price and global crises in oil and gas sector. High value of turnover is a positive signal. Highest value of the coefficient was in 2019 (48.78) it took almost 8 days to turnover. From one hand, KazMunayGas reached higher result than its competitor Gazprom for entire period, apart from 2014. KMG had better ITR and ITP than industry average from 2016-2018, lower in 2014,2015,2019.

Payable Turnover Ratio/ Payable Turnover Period. The higher ratio is most preferred. Throughout the entire time, the highest turnover of accounts payable was noted in 2013 (26.41), it took 13,82 days. Lowest ratio, as in the previous values, was 2014 (9.00) it took 41 days for turnover. This low value is due to the inability of KazMunayGas quickly pay off its debts to suppliers and contractors because of low revenue. KMG had higher payable turnover ratio than Gazprom, but nevertheless Gazprom reached better results of payable turnover from 2014-2016. Payable turnover of KMG showed higher ratio than industry average across the period 2016-2019, but in years 2014,2015 results are below average industry.

Receivable Turnover Ratio/Receivable Turnover Period. The company met with a large delay in payments from buyers in the periods of 2014 (10.38) and 2016 (13.28). It took 35 days of receivable turnover in 2014 and 28 days in 2016. Highest payout ratio from buyers was in 2019 (34.49). Gazprom represented lower turnover of receivables thorough the entire time series. On contrary, KazMunayGas indicates higher result than industry average for the years from 2014-2019.

Profitability Ratio

Return on Sales. KazMunayGas company showed unprofitable activities in 2014-2016, This is due to the national crisis, namely the devaluation of the national currency caused by drop in oil and gas price, as well as the global crisis in the oil and gas sector, also sanction policies of the leading powers. Company KMG incurred a loss in the amount of 0.7526 USD per 1 USD of the total net turnover in 2015. The best ROS was in 2013 + 0.1075 USD per 1 USD from the total net turnover, this year KMG had the highest level of profitability. ROS of KazMunayGas represented the worth performance than its competitor Gazprom across the entire period 2012-2019. Gazprom depicted the constant profitable performance. On contrary, ROS of KMG represented results above the industry average, except for 2014.

Return on Equity. The normal value is 10-12%, for inflationary countries the value may be higher. Only in 2012,2013,2019 the obtained values achieved the norm. During these years, KMG effectively used the capital invested in the business and had a great financial return. 2019 recorded the highest return, \$ 1 brought in \$ 0.1418 in profit. The worst results were in 2014-2017. KMG used capital inefficiently and had a low rate of return. This drop is explained by the global crisis in the oil and gas sector due to the fall in oil prices. 2014 had the lowest return, with \$ 1 of \$ 0.0451 in profit. ROE directly affects existing investors and attracting new investors. Compared to Gazprom, KMG had higher results of ROE in 2014, 2015, 2017, 2019, lower results were in 2012,2013,2018. ROE of KMG are higher than the industry average, only in 2014 ROE of KMG was lower than the industry average.

Return on Assets. ROA of KazMunayGas has a positive trend, no negative values across the entire period. Throughout the entire time, the company generated profit from each invested USD. The highest profit was recorded in 2019 + 0.083 USD for each invested 1 USD. On the contrary, the lowest indicator was in 2012 + 0.027 USD of profit for each invested 1 USD. ROA of KazMunayGas had higher result than Gazprom results in 2014 and 2019. Moreover, KMG had ROE higher in all analyzed time series than industry average.

Return on Capital Employed. The results show almost the same negative trend from 2014 to 2016. Such a drop in ROCE is associated with the global crisis in the oil and gas sector caused by the fall in oil and gas prices, which led to the devaluation of the national currency - tenge (KZT). KMG incurred losses for every US dollar invested. 1 invested US dollar of equity capital and long-term liabilities brought significant losses -

0.0797 USD for KMG in 2014. KMG reached higher ROCE than Gazprom results only in 2017, 2019. ROCE of KMG in comparison to industry average reached a higher gain only in 2019.

5.2 Proposals

The fall in oil prices in 2014,2015 had a strong impact on the profitability and not entirely healthy activities of KazMunaiGas in the period from 2014-2016. The main fluctuations, according to the financial analysis, were in Sales, Operating Profit/Loss, as well as in Net Profit, accounts receivable and payables.

To avoid crisis as in years 2014,2015,2016, author believes that intervention of hedging is the best solution to protect KMG from the impact of a sharp drop in oil and gas prices in future. So, if the oil producer KMG feels the approaching fall in prices it should be needed to fix the price at this stage in order to sell oil products in the future in established price. The concluded contract for the hedging of sales for a certain period will secure the KMG company from a possible decline in gas and oil prices. The author believes that by systematically insuring the oil price against a fall will minimize the negative effect in the future.

Of course, insurance against falling oil prices carries significant costs (expenses). But author suggests that the cumulative benefits outweigh the costs of hedging. Because the monetary policy of “floating rate” pursued by Kazakhstan till this day had not given KMG a stable and healthy profitable activity during the period of a sharp drop in prices.

Confidence in forecasts is transformed into more sustainable financial planning models, the impact of external shocks and the economy's vulnerability to shocks are reduced. The stability and predictability of planning will create the basis for attracting investments, including in the national currency, and, as a result, the cost of insurance against foreign exchange risks will decrease.

The author believes that the stability of oil and gas prices will increase the stability and predictability of the economy as a system, as a result will create the preconditions for raising the state's credit rating. The upgrade of the credit rating will lower the cost of debt financing for the state as a whole and its main economic entities, namely the oil company KMG. This helps to improve the situation with Payable Turnover Ratio.

The stability of oil price also affects the national exchange rate. With the fall in oil prices, the dollar strengthens, the tenge weakens, thereby provoking inflation, moreover, the devaluation of the national currency. Fluctuations in the exchange rate have a different effect on the financial performance of KazMunaiGas. KazMunayGas operates in the national currency tenge, the main income of the Company is generated in US dollars, for KMG, an increase in the dollar exchange rate brings benefits, since oil exports become much more profitable. But, at the same time, part of the expenses is incurred in the ratio of the national currency to the US dollar and incurs significant losses, as evidenced by the increase in expenses reflected in the income statement. Therefore, fluctuations in the

exchange rate caused by the fall in oil and gas prices have a negative impact on KMG's expenses. The stabilization will lead to expense stability.

According to the author, hedging is not aimed at increasing the main profit of the KazMunayGas company, but at stabilizing it. Author believes that hedging will reduce potential risks and losses, achieve stability in the company's profitability by controlling the volume of sales at stable set prices. As a result, an increasing in ROS and ROCE.

6 Conclusion

The main objective of Diploma Thesis was to describe the methodology of financial analysis and apply the described theory to the selected KazMunayGas company to obtain a certain number of basic parameters that give an objective and reasonable description of the company's financial position. The purpose of this work is to assess the financial condition of the company over a certain period from 2012 to 2019. For an accurate assessment of the company's position in the oil market, the results obtained were comparable with Gazprom for the same analyzed period from 2012-2019 and with the industrial average from 2014-2019. And based on the results obtained, propose recommendations to KazMunayGas for future development. The practical chapter included the application of financial ratios such as liquidity, profitability, leverage, activity ratio and differential, absolute indicators. The selected analyzed period from 2012 to 2019 reflects the fluctuations in performance of KazMunayGas across the period before the global and national financial crisis, during the crisis and after it. Calculations were made based on consolidated financial statements such as: Consolidated Statement of Financial Position, Consolidated Statement of Profit and Loss for the period 2012-2019. Based on the results obtained, the author noticed that KazMunayGas faced certain financial problems in the period from 2014-2016. According to the author, in order to avoid a crisis situation in the future, it is necessary to introduce changes for future development not only at the company level, but also at the state level, because the fall in oil prices affects not only the company as a unit, but also the state. It is not an easy task, but author's recommendations can significantly help to avoid the situation that happened in 2014-2016 in future. Fluctuations of oil and gas prices has a significant impact on KMG's profitability, because in this section of the analysis author identified significant losses in profit (unprofitability), to avoid this it is necessary to apply the following actions. Firstly, author believes that the intervention of hedging is the best solution to protect KMG from the impact of a sharp drop in oil and gas prices in future. Because the monetary policy of "floating rate" pursued by Kazakhstan till this day had not given KMG a stable and healthy profitable activity during the period of a sharp drop in oil prices. Of course, the introduction of hedging carries significant costs (expenses), but the benefits will outweigh the costs. Hedging will give confidence in forecasts, which translates into more sustainable financial planning models, reducing the impact of external shocks and the economy's vulnerability to shocks.

The stability and predictability of planning will create the basis for attracting investments, including in the national currency, and, as a result, the cost of insurance against foreign exchange risks will decrease. The stability of oil and gas prices will increase the stability and predictability of the economy as a system, as a result, will create the preconditions for raising the state's credit rating. An increase in the credit rating will reduce the cost of debt financing for the state as a whole and its main economic entities, namely the oil company KMG. It helps to improve the situation with the Payable Turnover Ratio. The stability of the oil price also affects the national exchange rate. Fluctuations in the exchange rate affect KazMunayGas financial performance in different ways. KazMunayGas operates in the national currency - tenge, the main income of the Company is generated in US dollars, for KMG the increase in the dollar exchange rate is beneficial, since oil exports become much more profitable. But at the same time, part of the expenses was incurred in the ratio of the national currency to the US dollar and incurs significant losses, as evidenced by the increase in expenses reflected in the income statement from 2014 to 2016. Thus, exchange rate fluctuations caused by falling prices for oil and gas, negatively affect KMG's expenses. Hedging will allow the company to achieve stability in profitability by controlling sales at stable set prices and will also lead to cost stability. Consequently, an increase in ROS and ROCE. Secondly, the significantly reduce a delay of accounts receivable with introducing a request to make advance payments or introducing the high penalty interest for late payment, will positively effect on CCC and Receivable Turnover Ratio/Period.

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8 Appendix

Appendix 1: Balance Sheet/ Income Statement 2012-2013 -KazMunayGas

Appendix 2: Balance Sheet/ Income Statement 2014-2015-KazMunayGas

Appendix 3: Balance Sheet/ Income Statement 2016-2017-KazMunayGas

Appendix 4: Balance Sheet/ Income Statement 2018-2019-KazMunayGas

Appendix 5: Balance Sheet/ Income Statement 2012-2013-Gazprom

Appendix 6: Balance Sheet/Income Statement 2014-2015-Gazprom

Appendix 7: Balance Sheet/Income Statement 2016-2017-Gazprom

Appendix 7: Balance Sheet/Income Statement 2018-2019-Gazprom