**N.T.Adambekov, [1] A.A.Adambekova[2]**

[1]*International IT University, Almaty, Kazakhstan*
*(E-mail: [1]nuradamsdu@gmail.com, [2]ainatas0408@gmail.com)*

# Investment Analysis Methodology: Overview and Application

**Abstract.** *In the context of geopolitical trends that change the practice of business, the significance of the results of investment analysis increases. The goal of the work is to study classical approaches to investment analysis of the issuer, taking into account current trends in analytics, to identify the most relevant methods and test them, assessing their application prospects. The scientific interest of this work is determined by the use of RSWA analysis when conducting a literature review, substantiating the applicability of fundamental and technical analysis methods from the perspective of the practice of CFA analytics, identifying the scientific background on the need to develop ESG analysis tools. The methodological basis was the methods of comparison and interpretation of statistical data, a critical review of studies, which made it possible to assess the factors and justify the selection of recommended investment analysis methods. The application of the stated methodology made it possible to develop applied recommendations in analytics regarding the need to take into account certain limitations: the difficulty of obtaining a real assessment of companies that maintain their exchange rate value through market-making services, the rare reflection of goodwill by companies in accounting and, as a result, in financial statements (distorts the value, and therefore and analysis results), the influence of geopolitical factors cannot be quickly influenced and can produce the opposite effect from the expected one. The significance of the research results is determined by the possibility of further development of the investment analysis methodology, expanding research in the direction of applying ESG analysis.*

**Key words:** *investment analysis, fundamental analysis, technical analysis, analysis methodology, exchange rate.*

### Introduction

Due to current geopolitical transformations, the trends in the global economy have changed not only approaches in doing business and building intercompany relationships, but also pointed to the need to revise methods and approaches to analyze this economy. In economic science and business practice itself, there is a constant clarification and study of trends that determine changes in the methodology of investment analysis and the tools used in it. The need to adjust the goals of the analysis in accordance with the need to comply with GRI standards, sustainable development goals, ESG principles, mission and strategy of the company dictate a review of both macro and micro factors that determine the investment potential of the company and region. According to current research, investment analysis is an important aspect of investment management and is used by investors, analysts and financial professionals to identify and evaluate potential investment opportunities, reduce risk and optimize investment returns. According to its purpose, investment analysis is usually used when assessing the investment attractiveness of certain companies' securities. The most extensive and meaningful investment analysis is when funding through an IPO. This is due to the fact that companies during this period provide fairly detailed data on their activities. It was these factors that determined the choice of **the *object of**

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***the research*** are companies that placed their shares through an IPO. ***The subject of the research*** are current methods and approaches used in investment analysis, justified both from the position of scientific argumentation and applied demand among researchers and analysts. ***The goal of the research*** is to study classical approaches to investment analysis of an issuer, taking into account current trends in investment strategy. As part of this goal, there were stated such *objectives* as assessing current research on the interpretation of the concept of investment analysis and its methods, and basing on them selecting indicators that will be useful for predicting changes in prices for investment assets, testing and applying the selected methods in the investment analysis of selected companies, and development of recommendations for its improvement.

### Research methodology

Research strategy and methods. As part of this scientific work, current publications were studied as the results of a study of investment analysis and its methods, by collecting theoretical approaches and interpretations in the field of investments, investment analysis and analysis methods. To conduct a literature review, a special RSWA method was used, which allows us to systematically approach this problem and obtain comparable conclusions. To carry out the selection and development of recommendations on current and promising methods of investment analysis, the systemic, structural, and dialectic methods were used. When testing the recommended methods of analysis, data on the financial indicators of public companies were collected and processed, to which statistical and mathematical methods were applied for a certain time period.

***Main methods used.*** Descriptive research is used to provide a meaningful overview of CFA investment analysis methods and the main evidence-based approaches used by leading investment companies, rating agencies and international organizations. Methods of critical analysis, comparison and interpretation of the data obtained, based on the methods of deduction and genesis, made it possible to identify factors and solve the problems.

Primary data is collected using the following methods:

1) Conducting research on scientific and business publications on world and domestic scientific works, collecting financial indicators of companies.

2) Content analysis of regulatory instructions, governing procedures, methods and content of investment analysis in financial organizations.

In accordance with the set objectives, the *stages of the study* were built, which include literature review and RSWA analysis of its findings, selection of indicators applicable in predicting changes in prices for investment assets, testing and application of the selected methods using the example of the research object and development of recommendations for its improvement.

### Literature review

The term "investment analysis" refers to the process of making informed investment decisions based on the assessment of investment opportunities and careful analysis of various factors [1]. As a rule, investment analysis falls into the category of applied methods of analysis and from this position is perceived as a combination of quantitative and qualitative methods, including financial modelling, valuation methods, risk analysis and market research. Let us conduct a comparative analysis of the definitions given by famous authors to the definition of investment analysis.

We propose to use the methodology of critical applied analysis RSWA (Relevance/Strengths/Weaknesses/Applicability), developed by Professor A.Adambekova as the basis for the research, which allows for a comparative analysis using a unified methodology and linking the findings with the author's research [2].

Table 1 RSWA - Assessment of investment analysis interpretations in modern researches

| Relevance | Strengths | Weaknesses | Applicability |
|---|---|---|---|
| Sharp, Alexander & Bailey(1999) - Investment analysis is the process of analysing the financial indicators of investments and the risks associated with them, as well as macroeconomic factors influencing these investments [3] | | | |
| A fairly general approach that forms the basis of technical and fundamental analysis. They are used as a guide when conducting investment analysis, both when assessing the external and internal environment. | Taking into account financial and macroeconomic factors provides a complete view of the investment analysis. Emphasizes the importance of understanding the investments risks | Investment as a concept can be too broad. This makes it difficult to determine the exact methods used in the analysis. The role of the investor's goal in the analysis and existing limitations are not taken into account | The definition allows us to understand the significance of macro and micro factors, although it is too general. Difficult to use when selecting recommended investment analysis methods |
| A.Torok & I.Futyu(2012) – Investment analysis is the process of assessing the suitability of an investment by analysing a company's financial information, economic and industry trends, and the company's state in the industry [4]. | | | |
| A fairly general understanding of investment analysis, while providing an approach to the main elements, but not reflecting current trends | The definition provides a detailed description of the investment analysis process and the factors that should be considered when evaluating an investment | For investors who are less familiar with financial analysis or who prioritize environmental or other factors such as social impact in their investment decisions may be inconsistent | Unlike the previous definition, it is applicable from clarifying the elements of analysis, taking into account the risks caused by weaknesses |
| Ganesan & Sridhar (2016) Investment analysis is the process of evaluating an investment in terms of risk and return to determine whether it is suitable for a particular investor. [5] | | | |
| Sufficiently general concept, but reflects trends expressing the focus on a specific recipient of its results | It shows the importance of assessing the suitability of an investment for an investor, taking into account factors such as risk tolerance | The definition is rather broad and does not provide clear guidance on how to evaluate investments or what factors to consider | Focuses our attention on the need to take into account the interests of the customer, the consumer of the results of analysis |
| Yu Sheng & Ibrahim (2019) Investment analysis - assessment of investment opportunities, including assessment of their risk and potential return, analysis of market trends and conditions, as well as consideration of macroeconomic factors affecting investment results [6] | | | |

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| Taking into account the approach applied by the authors to investment analysis in the context of Islamic finance, it shows interest in it in conditions different from traditional ones. | Includes recognition of the importance of risk management in investment analysis and focus on investment analysis in a cultural and religious context | The definition may be less applicable to investment analysis in non-Islamic contexts or contexts where risk management is not a major concern. | It draws attention to the identification of investment opportunities, which is especially applicable when analysing the investment attractiveness of an issuer |
|---|---|---|---|
| A.Kumar et al. (2020) Investment analysis - is the process of evaluating investment opportunities and making informed investment decisions based on analysis of factors such as financial performance, market trends and macroeconomic conditions [7]. | | | |
| Reflects current trends in the applied technologies of investment analysis , it is important when developing new solutions | Includes recognition of the importance of quantitative analysis methods and big data, which help investors identify unseen patterns and trends. | This definition may be less useful to investors who are less quantitatively savvy or who lack access to data and technology. | It is applicable when studying the advantages and disadvantages of investment analysis and developing factorial model |
| Saktia & Suwadid (2023) Investment analysis is an assessment of investment opportunities by analysing the issuer's financial results and stability, investment risk and potential return, market trends, and macroeconomic and geopolitical factors that affect investment results [8]. | | | |
| Reflects current trends and approaches to investment analysis, while taking into account the element-by-element approach and analysis methods | Includes concepts of understanding the broader economic and political context to help investors make more informed decisions. | This definition may be less applicable to investment analysis in developed markets, where the influence of macroeconomic and geopolitical factors may be less. | Applicable in the framework of this study, since it is interesting due to its emphasis on emerging markets, which should be taken into account in the interpretation of the definition itself |
| Note: Compiled by the author based on the above studies [3-8] | | | |

In contrast to the definitions presented, the CFA considers any analysis of a company to be the process of examining a company's performance in the context of its industry and economic environment in order to make a decision or make a recommendation. Analysts' recommendations are often related to the provision of capital, in particular whether to invest in a company's debt or equity securities and at what price. An equity investor evaluates a company's ability to pay dividends and the likelihood that its share price will rise [9].

When conducting investment analysis, various methodological tools are used depending on its main purpose, who conducts the analysis and what its results are aimed at.

According to the CFA Institute's guidelines, a company's investment analysis can be conducted on a variety of assets, from an equity assessment to subsidiaries performance assessment. Any analysis of a company should consider: financial analysis and creditworthiness analysis. In our case, we consider the analysis of the issuer conducted from the outside. This is done by a credit institution or a bondholder in order to assess the investment effectiveness of the decision when the company attracts external borrowings, or as an investor in order to invest in equity securities of the company.

From the above definitions, it becomes clear that investment analysis is a complex and multifaceted process that involves the evaluation of a wide range of factors in order to identify

suitable investment opportunities. Ultimately, *the goal of investment analysis is to identify investment opportunities that are in line with the investor's objectives and are most likely to generate the desired returns through proper risk management.*

Table 2 – RSWA assessment of investment analysis methods for issuers

| Relevance | Strengths | Weaknesses | Applicability |
|---|---|---|---|
| Fundamental analysis is an analysis of all factors affecting the value of a company and its securities at the macroeconomic and industry level, determining the true value of these securities. | | | |
| The basic classical approach underlying investment analysis. It guides investment analysis both in assessing global and country trends. | The ability to see the situation in business and identify both promising companies and possible bankrupts. The ability to search for valuable shares and promising growing companies on the market. | It takes a lot of time. It is very difficult for novice traders to connect the results of fundamental analysis with a chart. The method that can lead to errors in this work is very extensive. | Mandatory component of investment analysis. The experience of using this approach shows that it has no alternative for many years. As part of this study, the task is to choose the most accessible indicators for the implementation of the goal. |
| Technical analysis is a technique that involves analysing historical price and volume data of a security to identify patterns and trends that can predict future price movements. | | | |
| Refers to the most applied approaches in analysis. Relevant at all times as it is associated with the performance of the companies themselves acting as the object of analysis | The universal approach can be used for transactions of different lengths. Simple and easy to learn, useful for making short-term trading decisions. | It can ignore fundamental factors that affect the long-term success of the company, such as the quality of management and industry trends. In addition, it strongly depends on historical data. | In emerging markets, this may not give a completely clear picture. However, in this study it is the most basic one. |
| Quantitative analysis - this method involves the use of mathematical models and statistical analysis to assess the financial and economic factors of the company and identify investment opportunities. | | | |
| It reveals the features of the object of analysis in terms of characteristics and indicators that can be tracked, verified and calculated. Acceptable where there is systematic data collection and reflection | Provides objective and systematic analysis of a large amount of data, providing a complete picture of the company's activities. | Can be complex and may require additional statistical knowledge and programming skills. It can also be difficult to determine which variables are truly important and useful in predicting performance. | Within the framework of this study, it is a key method that determines the specifics of these economic accounting methods of analysis. |
| Qualitative analysis - takes into account factors beyond financial data, such as the quality of management and industry trends, which can be important in determining long-term results. | | | |

| | | | |
|---|---|---|---|
| Contributes to obtaining data based on expert opinions, qualitative expansion of research and argumentation of conclusions using non-financial indicators, which is relevant in recent years | Considers factors beyond financial data, such as management quality and industry trends, that may be important in determining long-term success. | May be subjective and based on personal views and opinions. In addition, qualitative factors can be difficult to measure and compare across companies. | Unpopular in investment analysis and therefore its study and development of proposals for its application can have a scientific foundation and a scientific perspective |
| Environmental, Social Responsibility and Corporate Governance (ESG) Analysis – This method includes an analysis of a company's environmental and social performance, as well as corporate governance practices, to identify risks and opportunities related to sustainability and ethical considerations. | | | |
| Especially popular in recent years against the backdrop of expanding perception of the philosophy of sustainable development. Allows you to evaluate a business not only from the financial side, it is useful from the standpoint of assessing the perception of society | This can help investors identify potential risks and opportunities related to environmental, social and governance factors. Increasingly popular among socially responsible investors. | This can be subjective and difficult to measure consistently across companies and industries. May not fully reflect the financial impact of ESG factors. | Requires extended study not only from the standpoint of the essence of perception and the methodology of ESG analysis, but also the interpretation of the findings, taking into account industry and regional specifics of business implementation |
| Note: Compiled by author based on the above studies [10 -11] | | | |

It is important to note that the pros and cons of each method may vary depending on the specific context and goals of investment analysis. In addition, many analysts use a combination of methods to gain a broader view of a company's success potential. Technical analysts get the information they need to make decisions by analysing historical price movements while ignoring fundamental variables [12]

In fundamental analysis, an investor examines the company's financial and accounting records and tries to determine the fair value of its securities. Investors who use this method include Warren Buffett and Peter Lynch. [10]

Thus, fundamental analysis is one of the analytical methods aimed at predicting price changes from the point of view of studying the political and economic situation in the world and in the country, the economic situation and the general situation of the industry with a particular issuer. Based on CFA research, analysts can use a top-down, bottom-up, or hybrid approach to forecast income and expenses. Graham and Dodd (2000) noted: "However, many very large organizations use a bottom-up approach to investing, and many individual investors with very modest resources move from the top to bottom" [10]. The top-down analysis approach will be carefully considered and used in our research work. Almost all foreign specialists use this method, and sometimes a hybrid method.

**Results and discussion**

Many stock market studies show that: about half of the volatility (variability) of investment results can be explained by movements in the macroeconomic environment. In addition, according to the results of a number of studies, an interesting conclusion was made - the appearance of macroeconomic estimates for one country significantly affects the movement of the indices of a number of other countries. Traditionally, the largest signalling effect for investors is provided by the US market, which receives standardized information with a certain frequency and accumulates a large statistical base.

To determine the main indicators, consider a number of indicators proposed by various authors and studies.

McLeavey, D. (2007) groups known indicators into 4 groups as follows:

- Monetary (monetary) indicators
- Production indicators
- Labor market indicators
- A group of trust indicators (mood, expectation) [13]

Altunbas, Y. et al. (2020) suggest in their work that in some cases only the economic cycle and current fiscal and monetary policy should be taken into account [14]. Berger & other (1997) divide the indicators into three groups depending on the duration of the impact on the market value of securities. And according to the hierarchy of fundamental analysis in the research of the CFA Institute, external factors affecting the growth of the industry include macroeconomic, technological, demographic, government, and social factors. [15]

Summarizing the above and other studies and taking into account that the indicators in the experiments are generally similar and repeatable, we obtain the following indicators for our research work:

- Gross Domestic Product and Growth Rate (GDP)
- GNP and growth rates.
- Inflation indicators
- Period of the business cycle.

Thus, analysis of the state of the economy at the macro level includes how the economy has performed in the past, how it is performing now, and how it is expected to perform in the future. In this context, it is also important to know how different sectors of the economy will grow in the future. According to the CFA Institute, industry and company analysis is a key step in the process of evaluating companies and the securities they issue. In our analysis, we focus on how a company uses industry and corporate information to predict future financial results and share prices. [16]

An effective forecasting model must be based on a deep understanding of the company's business and historical performance. Thus, the analyst begins with an analysis of the company and its environment — industry, key products, strategic position, management, competitors, suppliers, and customers.

The fundamental approach of the theory of cyclical development is based on the fact that companies in certain industries outperform other industries in the dynamics of the company's development at all stages of the economic cycle.

In fact, an important problem in the implementation of sectoral analysis is the lack of a generally accepted classification of industries and the creation of sectoral indices (growth rates, inflation, etc.) on its basis. The most popular classifications in the world, which, as a rule, are the most popular in investment analysis:

- SIC (standard industry classification) - a system adopted in the United States, Canada, Mexico (includes 20 major sectors of the economy);

- Classification of the investment company Morgan Stanley - Morgan Stanley Capital International (MSCI), which is used to create analytical studies of sectoral indices (the classification includes 10 sectors of the economy, 23 industry groups, 59 industries and 123 sub-sectors);

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- Classification by Standard & Poor's (S&P), the largest rating agency of countries and companies;

- The Dow Jones classification and the global indices built on it (Dow Jones Global Indexes), which are divided into 10 economic sectors, 18 market sectors, 40 industry groups and 70 subgroups [13].

After choosing a certain industry, it is necessary to focus on the stage of individual analysis and selection of issuers. Most analysts usually use the following indicators, but in addition to them, in a deeper analysis, there are used B
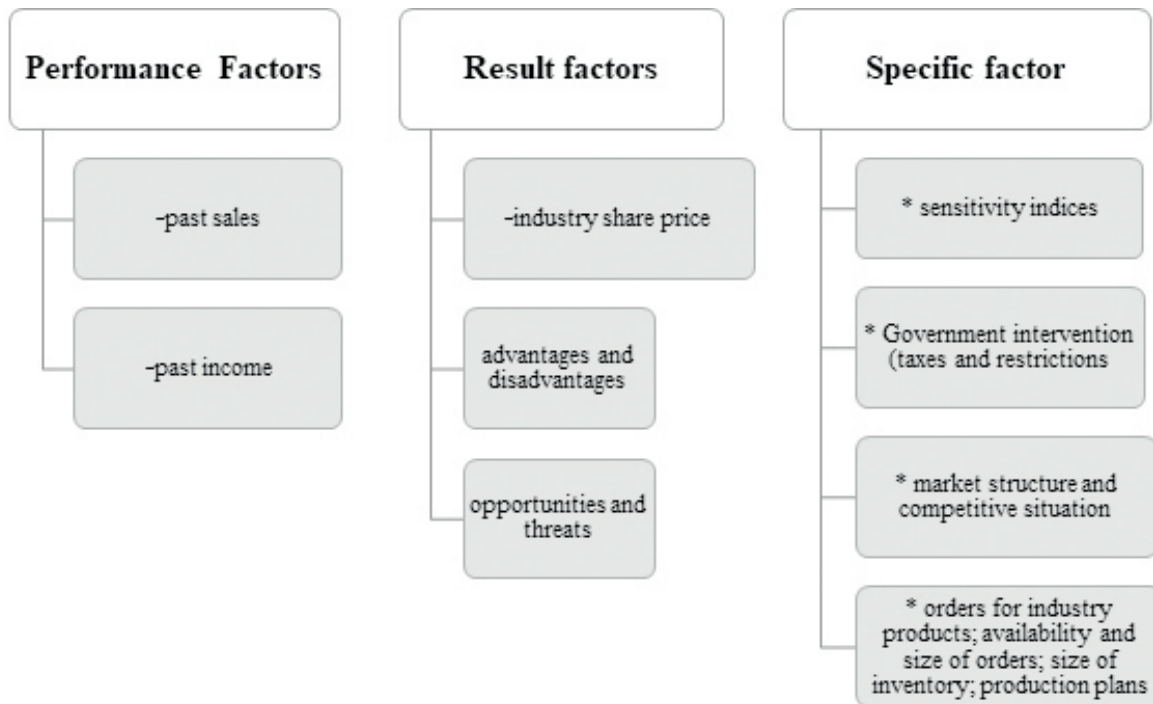


Figure 1 - Indicators of analysis and selection of issuers.
Note: is based on source [17]

The need for sectoral analysis is dictated by two arguments. First, firms in every single industry typically face the same levels of risk and the same rates of return. Second, average stocks in growth industries tend to outperform stagnant industries. From the point of view of the methodology of investment analysis, this allows taking into account a larger number of existing identified factors to ensure greater efficiency of the management decision.

The study showed that modern practice of investment analysis uses two approaches of Frank J. Fabozzi and David Brown, as well as the valuation model recommended by the CFA. The figure below shows a visual representation of these alternative approaches.
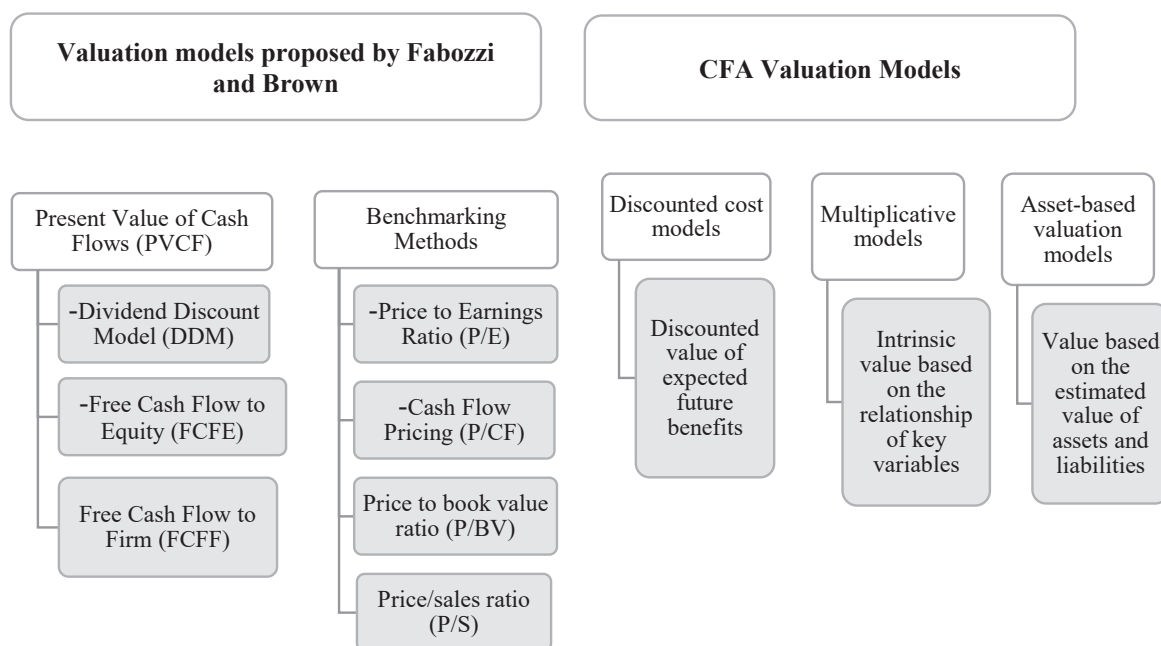
Figure 2 – Popular models for estimating company value in investment analysis.
Note: Compiled by author based on [16, 18].

The approach recommended by Fabozzi and Brown is based on several common factors. First, there is an effect of the rate of return on the stock, as this rate becomes the discount rate. Second, all valuation methods are affected by the expected growth rate of the variable used in the valuation method, such as dividends, earnings, cash flow, or sales.

CFA studies use several major categories of assessment models. These include present value models, which estimate value as the present value of expected future benefits, and multiplicative models, which estimate intrinsic value based on a variety of key variables. The study will use the models of these two directions. Focusing on each type of model separately, we will determine the selection criteria.

Present value models or discounted cash flow models evaluate return on securities in the form of cash to be distributed to shareholders (dividend discount models), or in the form of cash flows that can be distributed to shareholders after the necessary expenses have been incurred and working capital requirements have been met (Free Cash Flow to Equity (FCFE)). In the framework of this study, we will consider the most common ones. The study showed that the use of the Gordon model in investment analysis is dictated by the need to evaluate the infinite sequence of expected dividends. Because of its constant growth assumption, the Gordon growth model is ideal for valuing dividend-paying stocks that are relatively insensitive to the business cycle and are mature (CFA Institute, 2020).

We take the formula of the Gordon growth model (1 and 2) with the formulas:

$$P = \sum_{t-1}^{\infty} D \frac{(1+g)^t}{(1+r)^t} \quad (1) \qquad V_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1+r)^t} \quad (2)$$

Where,
P - share price on the current date
D - current annual dividends per share
r - required rate of return on shares / discount rate.
g - dividend growth rate
V0 is the value of shares on the current date, at time t=0

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Multistage growth models are often used to model the value of fast growing companies (John B. Williams). The two-stage dividend discount model (DDM) assumes that at some point the company will start paying dividends that grow at a constant rate, but until that point the company pays dividends that grow at a faster rate than long-term dividends.

Asset-based valuation models estimate the fair value of common equity capital as the estimated value of assets less the estimated value of liabilities and preferred shares. The estimated market value of assets is often determined by adjusting the book value of assets and liabilities. The theoretical basis of this approach is that the value of a business is equal to the sum of business assets. Thus, asset-based valuation is best suited for companies that do not have a high proportion of intangible or "off-balance sheet" assets and have a high proportion of current assets and current liabilities.

When making an asset-based valuation, the analyst should consider the following important facts:

- When using asset-based valuation methods, it is very difficult to analyze companies whose assets do not have an active market that makes it easy to determine the market (fair) value.

- The fair value of assets and liabilities may differ materially from their carrying amounts.

- Certain assets that are "intangible" are carried at their carrying amount. Other intangible assets such as goodwill may not be reported.

- In a hyperinflationary economy, it is more difficult to assess the value of assets (Serrano-Cinca, Mar Molinero, Gallizo Larraz, 2002). At the same time, the influence of geopolitical factors and global cataclysms can have an even greater impact, even than inflation.

The choice of model depends on the availability of the information used in the model, as well as the analyst's confidence in that information and the suitability of the model.

The work examines the algorithm for implementing the methodology of fundamental analysis of issuers of securities, as well as the analyzes and main indicators carried out at each stage. As we have noted, since fundamental analysis is a popular method among practicing analysts, there are many styles of flexible application by researchers. This study will use two valuation models presented in the CFA Institute guidelines. Some of the most successful and largest IPOs on the Kazakhstan Stock Exchange are presented in the table below.

Table 3 - the largest successful IPO on the Kazakhstan Stock Exchange

| IPO | International | | Local | | |
|---|---|---|---|---|---|
| Company | KCell | Kazatomprom | KazTransOil | KEGOC | KazMunayGas |
| Number of applications, in thousands | 34.7 | 2.8 | 34 | 42 | 129.9 |
| Placement volume, billion dollars tenge | 78.9 | 168.2 | 27.9 | 13.1 | 153.9 |
| Share of pension funds, % | 18.9 | 33.2 | 20.4 | 26.3 | 0.087 |
| Note: Compiled by author based on KASE [18] | | | | | |

For the purposes of the study, we identified two companies, designated as K1 and K2 . We will carry out further analysis at the level of issuers on the example of these two issuers. Let us estimate the true intrinsic value of the issuer's shares using the Gordon constant growth model, which is popular among dividend discount models.

Table 4-Gordon model for companies K1 and K2

|  | Results for company K1 | Results for K2 |
|---|---|---|
| P0 | 9983.6 | 726.1 |
| g | 19.1% | -12% |
| D1 | $(D_0 * (1 + g))$ = 328.1 *(1+0.191) = 390.767 | $(D_0 * (1 + g))$ = 26 *(1-0.12) = 22.88 |
| r | $(_{D1} / P_0)$ + g = (D1 / P0) + g =390.767/9983.6 + 0.191= 0.23=23% | $(_{D1} / P_0)$ + g = $(D_1 / P_0)$ + g /u003d 22.88/726.1 - 0.12 /u003d -0.08=-8% |
| V0 | D1 /rg = 390.767/ ( 0.23-0.191 ) = 10019.67 | D1 /rg = 22.8/-0.8+0.12 = 286 |
| Note: Compiled by author based on data [19,20] | | |

Gordon's model shows that K1 stocks are only slightly undervalued, and there is reason to conclude that they are relatively fairly priced. Judging by the amount of dividends paid last year and the forecast, this opinion is confirmed.
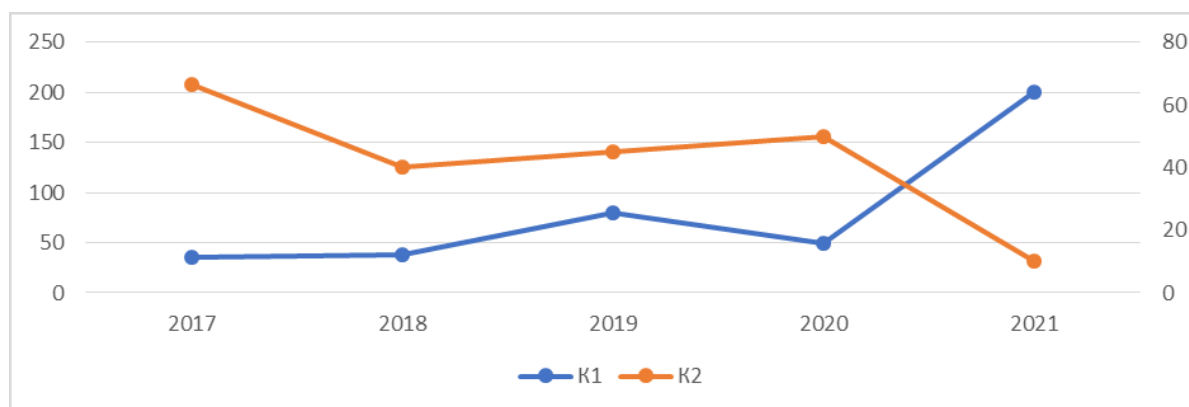


Figure 3 - dynamics of paid dividends of companies K1 and K2, billion tenge/dollars
Note: Compiled by the author based on data [19,20]

The forecast for dividends per share for 2022 is 390,082 tenge. Given the rapid growth of the company's dividends in the last year and in the next few years, more multi-stage discount models may appear.

Table 5 - two-stage dividend discounting model for the company K1

|  | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| DPS | 327.6 | 409.7 | 512.4 | 640.3 | 736.2 |
| g |  | 25% | 25% | 25% | 15% |
| r | 23% | 23% | 23% | 23% | 23% |
| Vn |  |  |  |  | 9179.3 |
| Price | 9891,4 | | | | |
| Note: Compiled by author based on data [19,20] | | | | | |

The interpretation of the two-stage dividend discount model also confirms that the market price of K1 shares is relatively fairly valued. According to Table 4, Gordon's model for K2 shows that the issuer's shares are overvalued and have low investment attractiveness. This was caused by a sharp decline in the volume of dividends paid last year. In 2022 was the lowest dividend payout since the company's IPO. The main reason for the company's low value remains the construction of a new water main. When using multiplicative models, market multipliers are

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used as derivative financial indicators. We study two issuers taken as an example, comparing them with each other and with the industry average, putting them into a multiplier model.

Table 6 - Multiplier model for companies K1 and K2

|  | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| K1 | | | | | |
| P/E | 2.6 | 2 | 16.4 | 2.9 | 4.8 |
| P/B | 0.1 | 0.2 | 0.2 | 0.2 | 0.6 |
| P/S | 0.2 | 0.3 | 0.7 | 0.5 | 0.6 |
| P/CF | 2.8 | 18.9 | 6.3 | 3.1 | 4.0 |
| EV/EBITDA | 1 | 1.1 | 3.4 | 2.3 | 3.6 |
| K2 | | | | | |
| P/E | 14 | 9.4 | 9.0 | 7.4 | 11.8 |
| P&B | 0.87 | 0.57 | 0.6 | 0.5 | 0.3 |
| P/S | 2.39 | 1.33 | 1.72 | 1.58 | 0.9 |
| P/CF | 5.5 | 3.4 | 4.3 | 4.3 | 3.2 |
| EV/EBITDA | 4.59 | 3.85 | 4.1 | 3.4 | 2.8 |
| Compiled by author based on data [19,20] | | | | | |

If we study the main multipliers, we can conclude that K1 shares are relatively undervalued and attractive for purchase in terms of P/E, P/S. And P/CF and EV/EBITDA make it possible to draw a conclusion in favour of K2 only on the basis of last year 's data, albeit in the long term. P/B indicates high growth potential for shares of both issuers. Compared to the industry average, both companies show a good trend. Thus, an offer to purchase and own the issuer's shares would be justified.

Current cyclical trends demonstrate high elasticity depending on the phase of the cycle in the economy as a whole and conditions in the geopolitical oil field. And, in conclusion, K1 shares today may become a more attractive and optimal choice for investors. However, not all studies and indicators can be objective, and given the specifics of the stock market industry, the share price may undergo various changes due to the influence of completely different additional factors. Comprehensive and detailed studies will be required to make a decision and the level of risk cannot be ruled out.

It can be concluded that the principles and methods of the fundamental analysis methodology in the investment analysis of Kazakhstan issuers of securities, including issuers of equity securities, are consistent and have practical value. The cyclical nature of the shares of the Kazakh economy and the main large companies, including oil companies, selected for the study, the relationship observed between them in recent years, the relationship between the results of the analysis of the issuing company and the position of the issuer on the real stock market can serve as the basis for such a conclusion. In addition, it must be taken into account that a long-term and extensive review and additional research are needed to compile and justify a unified and universal analysis methodology adapted to the Kazakh stock market.

**Conclusion**

Within the framework of this scientific work, classical approaches to the issuer's investment analysis were studied, taking into account such macroeconomic factors as GDP growth, interest rates and their changes, the period of the business cycle. An in-depth RSWA analysis was carried out, which made it possible to obtain conclusions that determined approaches to the interpretation of investment analysis and identify four groups of methods. So, as a basis for developing a methodology for investment analysis, an approach based on goal-setting analysis

is recommended. The goal itself is to identify investment opportunities that match the investor's goals and are most likely to bring the desired return through proper risk management. The key groups of investment analysis are fundamental, technical, quantitative, qualitative and ESG analysis. Within the framework of this work, three methods are considered - fundamental, technical, quantitative. The remaining two methods will be studied in subsequent studies, since the key principle in conducting the study was the study of classical and at the same time popular methods. The study showed that despite the significant scientific groundwork on this issue, the main contribution to the systematization of approaches and the development of recommendations for application is made by the CFA Institute, acting as a methodological centre. In assessing the industry impact on the investment attractiveness or sensitivity of shares, internationally recognized ratings such as MSCI, S&P, Dow Jones Global Indexes and others play a significant role.

Within the framework of the tasks set, a critical review and selection of methods of analysis was carried out and the approaches of Fabozzi and Brown were selected, as well as the cost estimation model recommended by the CFA. When making an asset-based valuation, the analyst must take into account some limitations: the difficulty of obtaining a real valuation of companies that maintain their market value through market maker services (there is no active market for them), rare reflection of goodwill by companies in accounting and, as a result, in financial statements, the impact geopolitical factors are not amenable to rapid impact and may have the opposite effect from the expected a. The selected methods of investment analysis were tested on the evaluation of two companies. The results of fundamental, technical and quantitative investment analysis showed that the degree of overvaluation or undervaluation of the shares of these issuers is low and in the short-term forecasts expected. Current cyclical trends demonstrate high elasticity depending on the phase of the cycle in the economy as a whole and the conditions in the geopolitical field . This allows us to conclude that the tasks set within the framework of this scientific work have been achieved. For the purposes of further research, the task is to study and evaluate the application of ESG analysis in the general group of investment analysis methods.

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**Н.Т.Адамбеков, ¹ А.А.Адамбекова ²**
*¹АО «Международный университет информационных технологий»,*
*Алматы Казахстан*
*²КазНУ им.аль-Фараби, Алматы, Казахстан*

**Методология инвестиционного анализа: обзор и применение**

**Аннотация.** В условиях явных геополитических трендов, которые изменяют практику бизнеса и процессов и процедур, его обслуживающих, возрастает значимость результатов инвестиционного анализа. В работе поставлена цель - изучить классические подходы к инвестиционному анализу эмитента, учитывающие при этом текущие тенденции в аналитике, выявить наиболее актуальные методы и апробировать их, оценив их прикладную перспективность. Научный интерес данной работы определен применением RSWA-анализа при проведении литературного обзора, обосновании применимости методов фундаментального и технического анализа с позиции практики CFA-аналитики, выявлении научного задела о необходимости разработки инструментов ESG-анализа для целей оценки инвестиционной привлекательности эмитента. Методологической основой послужили методы сопоставления и интерпретации статистических данных и зависимостей между ними, критический обзор исследований, позволивший объективно оценить факторы и обосновать отбор рекомендованных методов инвестиционного анализа. Применение заявленной методики позволило выработать прикладные рекомендации в аналитике относительно необходимости учета некоторых ограничений: сложность получения реальной оценки компаний, поддерживающих свою курсовую стоимость за счет маркет-мейкерских услуг, редкое отражение компаниями гудвилла в учете и, как следствие, в финансовой отчетности (искажает стоимость, а значит и результаты анализа), влияние геополитических факторов не поддается быстрому воздействию и может давать противоположный от ожидаемого эффект. Значимость результатов исследования определена возможностью дальнейшего развития методологии инвестиционного анализа, расширение исследований в направлении применения ESG-анализа.

**Ключевые слова:** инвестиционный анализ, фундаментальный анализ, технический анализ, методология анализа, курсовая стоимость.

**Н.Т.Адамбеков, ¹ А.А.Адамбекова ²**
*¹Халықаралық ақпараттық технологиялар университеті,
Алматы, Қазақстан*
*²әл-Фараби атындағы ҚазҰУ, Алматы, Қазақстан*

**Инвестициялық талдау әдістемесі: шолу және қолдану**

Аңдатпа. Бизнес тәжірибесін және оны қолдау процестері мен процедураларын өзгертетін айқын геосаяси үрдістер жағдайында инвестициялық талдау нәтижелерінің маңыздылығы артады. Жұмыстың мақсаты – аналитикадағы ағымдағы тенденцияларды ескере отырып, эмитенттің инвестициялық талдауының классикалық тәсілдерін зерделеу, ең өзекті әдістерді анықтау және олардың қолданбалы перспективаларын бағалай отырып, оларды сынау. Бұл жұмыстың ғылыми қызығушылығы әдебиеттерге шолу жасау кезінде RSWA талдауын қолданумен, CFA аналитикалық тәжірибесі тұрғысынан іргелі және техникалық талдау әдістерінің қолданылуын негіздеумен, ESG талдау құралдарын әзірлеу қажеттілігі туралы ғылыми негізді анықтаумен эмитенттің инвестициялық тартымдылығын бағалау мақсатымен анықталады. Әдістемелік негіз ретінде факторларды объективті бағалауға және инвестициялық талдаудың ұсынылған әдістерін таңдауды негіздеуге мүмкіндік беретін, статистикалық деректерді және олардың арасындағы тәуелділікті салыстыру мен өзінше пайымдау әдістері болып табылды. Мәлімделген әдістемені қолдану кейбір шектеулерді ескеру қажеттілігіне қатысты аналитикада қолданбалы ұсыныстарды әзірлеуге мүмкіндік берді: маркет-мейкерлік қызметтер арқылы өз бағамдық құндылығын сақтайтын компаниялардың нақты бағалауға қол жеткізудің қиындығы, компаниялардың есептіліктерінде және сонымен қатар қаржылық есептілікте (құнды, демек және талдау нәтижелерін бұрмалайды) гудвиллдің сирек көрінісі, геосаяси факторлардың әсері жылдам әсер етуге бейім бермейді және күтілгеннен керісінше әсер етуі мүмкін. Зерттеу нәтижелерінің маңыздылығы инвестициялық талдау әдістемесін одан әрі дамыту мүмкіндігімен, ESG талдауын қолдану бағытында зерттеулерді кеңейтумен анықталады.

**Түйін сөздер:** инвестициялық талдау, іргелі талдау, техникалық талдау, талдау әдістемесі, бағамдық құн.

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### Information about authors:

*Adambekov N.T.* – corresponding  author, MSc, Head of the Educational program "Financial Engineering", International IT University, 34\1 Manas st., Almaty, Kazakhstan.

*Adambekova A.A.*  – Doctor of Economics, Professor, KazNU named after Al-Farabi, 4 Timiryazev Street, Almaty, Kazakhstan.

*Адамбеков Н.Т.* – негізгі автор, ХАТУ, Қаржылық инжиниринг БББ басшысы, Манас к-сі 34\1 Алматы, Қазақстан

*Адамбекова А.А*. – Э.ғ.д, әл-Фараби атындағы ҚазҰУ профессоры, көш. Тимирязева 4, Алматы, Қазақстан