Estimating The Real Value Of Stocks Using Relative Valuation Models In Building The Investment Portfolio:An Applied Study In The Iraqi Stock Exchange For The Period (2013-2022)

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Abstract : The research aims to study the level of estimation of the Real value of stocks using relative valuation models in building the investment portfolio for the stocks of the companies under study. The study population is represented by the Iraq Stock Exchange. The study sample, which was chosen in a conditional purposive manner, included (10) companies listed on the Iraq Stock Exchange. Data and information were collected through the financial statements issued by the study sample companies and the financial reports issued by the Iraq Stock Exchange for the period (2013-2022). The researcher also adopted financial and statistical methods. The economic methods were represented by trading volumes, ownership, market value of the share, earnings per share, and the real value of the share. To extract the required results, the program (Excel, 2010; 15Minitab.v.) was used, and the study reached a set of conclusions, the most important of which was that better diversification in the investment portfolio could be achieved by building a diversified portfolio of common stocks that belong to different sectors and have risks. And various benefits, The most important recommendation included the necessity of directing investors in the Iraqi Stock Exchange to focus their investments and trading on companies that have profitable indicators to achieve high returns and good capital gains as well.

Key words:- Investment portfolio, common shares, market value, actual value of share.

Introduction:
The integration of the globalization of financial markets has led to the influx of foreign capital and the growing recognition that these flows are beneficial to investors and local companies and, thus, have a positive impact on the host countries. Evaluating the true value of common stocks takes the form of investing in financial assets through the purchase and sale of stocks and bonds, as One of the important factors that are directly involved in moving stock values in the financial markets. Therefore, these reasons prompted us to study the variables represented by relative valuation models to determine the extent of the impact of evaluating the real value of common stocks in building the investment portfolio. The importance of the research came through highlighting the main role. Relative valuation models in stimulating and developing the Iraqi Stock Exchange, as it works to increase the liquidity and prices of shares in the market as a result of the expansion of the investor base and directing the attention of companies to increasing interest in financial management, which specializes in studying the factors affecting stock values. The researchers prepared some of the hypotheses emerging from the problem and questions of the study and developed a hypothetical model for them. The hypotheses were chosen through statistical methods by studying the financial indicators of the companies in the research sample for the period. To achieve the goal of the research, it was divided into four sections: as the first section dealt with the scientific methodology, and the section was also devoted to second section covers the theoretical framework, and the third section deals with the practical aspect, which is devoted to analyzing the data and discussing the results. The final section is devoted to mentioning the most prominent conclusions and recommendations.

The First Topic: Research Methodology

First: Problem Of The Search
The success of any investment project depends on the correctness and soundness of the investment decision taken regarding that project, as the investment decision based on sound scientific foundations enables maximizing the current value of the owners' wealth. Therefore, investors depend in making their rational investment decisions in securities on the information available in the financial market, and the extent to which this information is fully and quickly reflected in securities prices so that those prices are fair and reflect their true value, and achieve an efficient allocation of available resources to ensure the efficiency of the securities market. This is what helps investors make their decisions about whether to buy, sell, or keep securities.

Ordinary shares are considered one of the most commonly bought and sold instruments exchanged in the financial markets, but these shares may not be priced at their true value, especially in the absence of efficient financial markets, which makes investors and stock owners in a state of distrust in these markets, which prompts them to rely on... Models for measuring or determining the true value of ordinary shares. The most important of these models is the relative valuation models, which help to identify the price imbalance between the market value of the ordinary share and its true value with the aim of making the optimal investment decision and achieving extraordinary profits by comparing the calculated true value with the value recorded in On the stock market, we can pose the research problem as follows**: (How does the process of measuring the true value of common shares using relative valuation models contribute to building the investment portfolio?**)

Several questions arise from it:-

a. Do relative valuation models lead to building the investment portfolio of shares of sample companies search?

B. Does comparing the real value and the market value lead to building the investment portfolio for the shares of the companies in the research sample?

Second: Importance Of The Search:

The study derives its importance from the importance of the role of the investment portfolio in companies in the Iraq Stock Exchange in maximizing the profitability of these companies on the one hand and as a tool for customer service. The importance of the investment portfolio stems from the fact that it is based on collecting investment tools that reduce investment risks, and this is what investors want to meet their needs in light of... Financial markets are characterized by constant volatility, which requires the use of scientific methods in making investment decisions, emphasizing the importance of diversification in reducing investment risks within the framework of the investment portfolio. In addition, there are several ways to build investment portfolios and the possibility of distributing investments in the portfolio in more than one way, and this requires comparison between... Performing several investment portfolios to arrive at the best evaluation method. From this standpoint, the importance of the study stems from the fact that it seeks to evaluate the efficiency of investment portfolio management, which may have a role in enhancing the performance of companies in the Iraqi Stock Exchange.

Third:- Objectives Of The Search:

The research seeks to achieve the following objectives:

1- Providing information about the importance of investment portfolios as an investment asset.

-2Identify the principles and policies followed in managing the Iraq Stock Exchange investment portfolios.

3-Study the impact of the efficiency of investment portfolio management on the profitability of companies in the Iraqi Stock Exchange.

Fourth: Research Hypotheses:

These hypotheses were formulated based on an understanding of the nature of the problem as follows:-

1- **First Main Hypothesis**: The Real value of stocks can be estimated using relative valuation models for companies studied in a stock market.

2- **Second Main Hypothesis**: There is a statistically significant correlation between the investment portfolio of common stocks and the Real value of the stocks using relative valuation models for the companies in the study sample.
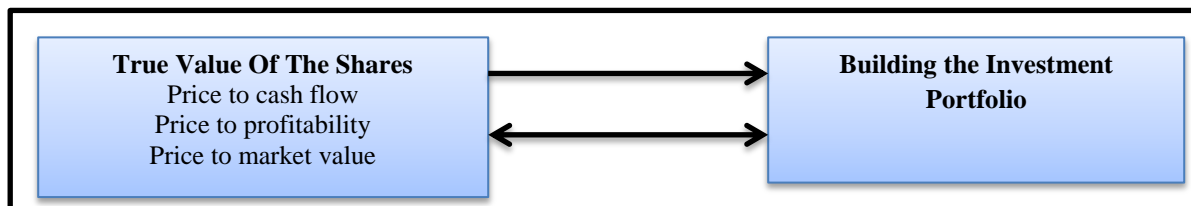
Source: Prepared by researchers

Fifth:-Search Population And Sample

The target population in the study is determined before selecting the sample so that its vocabulary has the same characteristics. The study population (the Iraq Stock Exchange) is defined in light of what serves the

study's objectives, and then it is decided how to select the sample from it. The study sample consists of (10) companies from the Industrial sector listed on the Iraq Stock Exchange.

The Second Topic: Theoretical Framework For The Research

First- Real Value Of Shares

Organizations rely on ordinary shares more than other securities because they do not impose any kind of obligations on the organization issuing them, as is the case with other securities such as shares, for example. The shareholder does not receive his share of the distributions unless profits are achieved and it is decided to distribute them (Katagiri et al.,2011:8).

One of the main means of long-term financing in the organization is ordinary shares. Joint stock organizations depend almost entirely on issuing ordinary shares to obtain the necessary financing on a permanent basis, especially at the beginning of establishment. Accordingly, ordinary shares guarantee the organization's funding proprietary and also guarantee their holder the right to obtain a share of the profits. The organization is proportional to the shares it owns (Buigut et al., 2013:29). The real owners of business organizations are the shareholders of common stock. Holders of common stock are sometimes referred to as residual owners because they get what is left over - the remainder - after all other claims on the organization's income and assets have been satisfied. They are assured of only one thing: that they will not lose more than what they have invested in the organization. As a result of this generally uncertain situation, common stockholders expect to be compensated with sufficient dividends and, ultimately, capital gains (Gitman et al., 2015:307).

It is defined as a negotiable property instrument, and its holder has the right to obtain fixed returns in addition to his share in the organization's assets, which is recorded in the share certificate (Al-Naimi and Al-Tamimi, 2016: 126). Ordinary shares are one of the forms of external long-term financing available to the organization, and one of the important sources of proprietary financing, and the primary source in the first stage of establishing the organization. What most restricts the organization's desire to issue this type of financing is the information asymmetry that often makes the share price in the financial market devalue due to the information asymmetry between insiders and external investors. Through the organization's study of the financing decision to issue common shares, it should take Taking into account how investors evaluate the organization in the financial market and assume that information is asymmetrically distributed in the market, i.e. (the financial market is not very efficient), here investors evaluate the organization at less than its value, and when this situation increases in the market, the organization must It resorts to issuing debt instead of ownership because it is less affected by the asymmetry of information. However, in the event that the organization is valued at more than its value, here the organization has the opportunity to issue this type of ownership, meaning that the organization stops issuing it for financing with ordinary shares based on what the value of these shares is in the market (Anbari, & Jaber, 2021:225). Financing with common shares, which is known as commonly used shares, is one of the types of long-term external financing that represents a share in the ownership of the company, as the shareholders expect to obtain capital returns as a result of the rise in share prices in the financial markets, in addition to achieving revenue returns that the organization's management decides to distribute to the shareholders as well. The common stock has no maturity date, and the holders of the common stock are the Real owners of the organization and their liability in the event of bankruptcy is limited to the amount of their investments only, and the cost of the common stock is calculated according to several evaluation models, the most important of which is (Al-Jubouri and Al-Khalidi, 2021: 315).

Second: Factors Affecting The Value Of Common Shares
When we search for profit in the financial market, we must take into account a set of main factors that affect the choice of the stock that is preferable to own given the circumstances, taking into account that the expected four-part ratio is directly proportional to the risk ratio, so the most important factors affecting the stock price will be presented below (Hussein and Hafez 196:2011) and (Lamia and Mufidah, 35:2014)

1- Dividends per share: Dividends per share are the focus of attention for most investors, and the expected dividends are linked to expected future profits, the distribution ratio, and the dividends policy adopted by management to maximize the benefits to shareholders and the organization (Hussein and Hafez, 2011: 196)

2-Earnings per share: The organization's management seeks to maximize earnings per share so that it can increase the dividend per share. Earnings per share are defined as the profits allocated to each share of the financing shares owned, based on the profits after tax and after deducting the dividend for preferred shares divided by a number of Ordinary shares (Hussain and Hafez, 2011:196)

3-The required rate of return: The required rate of return has been given many names, including the discount rate, the cost of capital, and the opportunity cost. It represents the required rate of return at which the expected cash flow returns are discounted, and it is the continuous rate of return that is required to compensate for the level of risk for a particular investment. The risks intended here are Systemic risks that cannot be avoided by diversification (Hussain and Hafez, 2011: 196)

4-Capital structure composition: The capital structure is defined as that structure that includes the basic sources of permanent capital in the organization, which are long-term loans, common shares, preferred shares, bonds, and profits.

Detained woman (Hussein and Hafez, 2011: 196)

5-The general movement of the financial market. The rise or fall of stock prices is affected by the fluctuations witnessed by the financial market in the volume of demand and supply of stocks.

(Lamia and Mufidah, 2014: 35)

6-Trading volumes are one of the most important daily factors that affect stock prices up and down (Lamia and Mufidah, 2014: 35)

7-The status of the issuing institution in the past, present, and future, embodied in the results recorded in previous years related to inflows and their discount rate, the institution's growth rate, distributed profits, self-financing ratio, the development of the turnover, especially the share multiplier (Lamia and Mufidah, 2014: 35)

8-The state of the economy, that is, the general condition represented by economic activities, the indicator of which is the gross domestic product (Lamia and Mufidah, 2014: 35)

9-The state of demand and supply for the stock in the market is linked to the sum of the previous factors, which can lead to an increase or decrease in demand for it

The show (Lamia and Mufidah, 2014: 35)

10- The investor's maturity in terms of gender, age, experience, and qualifications (Lamia and Mufidah, 2014: 35).

Third: Common Stock Valuation

The evaluation of ordinary shares differs from the evaluation of other securities, such as bonds and preferred stocks, because the evaluation in all cases is based on the idea of the present value of the set of returns achieved from holding the share. Also, future expectations related to the national economy, sectors, and companies can come up with a model for evaluating ordinary shares to know the value of the share in The market and whether it correctly reflects its true value. Due to the complexity and importance of evaluating common stocks, many techniques have emerged that address this topic over time. These techniques dealt with the evaluation process of common stocks from two basic approaches (Abdul-Hakim and Mustafa, 2010: 58):-

A - Valuation approach techniques through discounting cash flows, when the value of the stock is estimated based on the present value of cash flows.

B - Ratio evaluation approach techniques, when the value of the stock is estimated based on the current price ratio, to estimate the volatility to be useful for evaluation, such as cash flow, book value, or sales.

Valuation is the process of predicting the current value of expected gains to shareholders and converting this prediction into a single number corresponding to the company's intrinsic fundamental value. Valuation models are merely "formal accounting systems" that constitute tools for clarifying the evaluation of future events, usually in terms of accounting structures. A good understanding of evaluation methods requires two main things. The first is to conduct an analytical review of the models, determine the relationship between them, and reveal their assumptions. The second is to evaluate the available data to use these models. Therefore, there is a statistically significant relationship between the choice of evaluation models and the available data. There are some important theoretical valuation models that can be applied to stock valuation. There are different types of valuation models most widely used, EBO model, P/E model, Price-to-book model, CAPM e, Dividend discount model, and Excess return model (Charumathi, & Suraj, 2014:113). The evaluation of ordinary shares represents the concept of evaluation, estimating the true value of the ordinary share, which is the value that is highlighted by economic and financial facts represented by the value of the organization's assets, the expected profits and dividends, and the growth rates of those profits and comparing them to the prevailing share price in the financial market (Price or Market Value). If the stock is overpriced or underpriced, make appropriate investment decisions to keep or buy the shares. If the real value is greater than the prevailing share price in the financial market, the demand to buy those shares will increase due to the discounted pricing of the share. Conversely, if the prevailing share price is greater than the real value, the offer to sell the shares will be higher than the

demand to buy them due to the inflated pricing for the stock, and then reaching equilibrium in both cases. However, this state of equilibrium is not characterized by stability, as the real value of the stock constantly fluctuates to reflect the extent of the market's response to new information (Ibrahim and Hassan, 2016: 4).

1-Relative Evaluation Models

A- The Ratio Of The Share Price To Its Earnings

The price-to-earnings ratio plays a crucial role in the investment community. This ratio reflects the market's expectations of future growth and company risk. This ratio can be used to estimate the cost of capital and gain excess stock returns from the value anomaly phenomenon. Financial analysts also widely cite the P/E ratio as justification for their decisions. Stock recommendations. The hypothesis of the link between the forward P/E ratio and profitability is based on the models presented in Ohlson and Gao (2006) according to the following formula (Wu, 2014:68):-

$$p \, / \, E = \frac{p}{E}$$

B- Price – Cash flow Ratio

Cash flow means net profit plus the annual depreciation premium. Some financial analysts prefer to look at cash flow per share (CFPS) when evaluating common stocks, as it is more significant than net profit when evaluating a company's financial performance or when comparing companies. Due to the different methods of calculating depreciation, the net profit of two companies with equal cash revenues and expenses and different methods of calculating depreciation is not an indicator of distinction between them. The P/CFPS ratio indicator can be a function of the quality of profits. What is meant by quality is that accounting profits reflect actual cash flow and not just accounting numbers. Therefore, this ratio is a function of the growth rate in profits, and a resultant sum of the growth rate in cash flow and is calculated according to the following (Al-Tamimi, 2010: 206):

$$pcR = \frac{MP}{c_0} = Ti$$

C- Price-Book Value Ratio

This ratio is based on the accounting measure of wealth per share and is sometimes called the market-to-book value ratio, which is symbolized by PBVR. There is a widespread belief among financial analysts and investors in general that the stock should not be sold for less than its book value, at least in the long term, and therefore, the PBVR ratio is an indicator of the company's ability to create wealth for shareholders. Therefore, a company with a PBVR ratio greater than the correct one is described as a company capable of creating wealth, and vice versa; it is an indicator of the company's weak ability to create wealth. The most important determinant of this ratio is the accounting measure of book value per share (BVPS). This determinant is the result of the difference in some accounting treatments used in preparing financial statements. However, the effects of this limitation can be mitigated by adopting the growth rates in profits and the retention rate to refinance investment opportunities. This appears clearly in the shares of companies that acquire a growth characteristic, as they tend to retain the most considerable portion of their profits to finance growth opportunities. Thus, the ratio can be adopted in determining the true value of the stock according to the following (Al-Tamimi, 2010: 207):

$$PBvR = \frac{MP}{Bv_0} = Ti\mathit{mes}$$

Fourthly:-The Concept Of The Investment Portfolio

The year 1952 marks the beginning of the emergence of the portfolio when the American analyst Markowitz established the basic principles of the portfolio investment theory. He presented the first idea about the portfolio and showed how to build the optimal investment portfolio that achieves a higher expected return with a specific level of risk. Sharpe developed the portfolio theory in 1962, then Sharpe and Walter presented in 1966 a model known as the capital asset pricing line model, and it became a standard for the efficiency of the investment portfolio. Then, in 1976, Ross developed the model and it became the weighted price model, which is based on choosing alternatives from among securities by comparing return and risk. When returns are equal, the least risky securities are chosen, and so on. Additions to portfolio theory continued after the seventies of the twentieth century (Maryam and Nour Al-Huda, 3: 2015).

Fifth:-The Importance Of Investment Portfolios

The importance of investment portfolios is highlighted by the features that distinguish them from other investment tools, which are (Tawfiq, 2015:372) and (Muhammad, 2018:64):-

1-Providing appropriate opportunities to invest and deal with financial markets for small savers who do not have sufficient experience in this dealing (Muhammad, 2018: 64).

2-Using optimal investment methods in managing the investment portfolio contributes to protecting savers' funds and directing them toward the correct investment areas to achieve high returns for participants in the portfolio (Tawfiq, 2015: 372).

3. Pay attention to achieving the principle of alternative opportunity, which is working to optimally exploit surplus capital to achieve profit. The ability to diversify and distribute risks over several investment areas reduces the overall investment risks   (Muhammad, 2018: 64).

4- Their assets differ in type, as they may contain natural or financial assets. They also differ in quality, as they may contain low-return but low-risk assets and vice versa (Tawfiq, 2015:372).

Sixthly:-Investment Portfolio Objectives

 There are several goals that push the investor to build a portfolio instead of investing in a single financial instrument, which is represented by (Kapoor, 2014:2) and (Olweny, 2011:92)

1-Investment safety principle: The first important goal of a portfolio, regardless of who owns it, is to ensure that the investment is completely safe. Other considerations like income, growth, etc., come into the picture only after ensuring the safety of your investment

2-Consistency of Return: Once the safety of the investment is ensured, the portfolio should generate a consistent current income. Current returns must at least match the opportunity cost of the investor's money. What we are referring to here is current income via dividend interest, not capital gains.

3-Capital growth: A good portfolio should rise in value to protect the investor from any erosion in purchasing power due to inflation.

4-Marketability: A good portfolio consists of an investment that can be marketed without difficulty. If there are a lot of unlisted or inactive stocks in your portfolio, you will have problems wrapping them up and switching from one investment to another.

5-Liquidity: The portfolio must ensure that sufficient funds are available within a short period of time to meet the investor's liquidity requirements. It is recommended that a line of credit from the bank be maintained in case it is necessary to participate in the right issues or for any other personal needs.

6-Portfolio diversification: Portfolio management is designed to reduce investment risks and provide the optimal or highest investment return. The investor must be aware of the fact that there is no such thing as a risk-free investment

7-Appropriate tax status: Since taxes are an important variable in comprehensive planning, a good portfolio should enable its owner to enjoy an appropriate tax shelter.

Portfolio objectives can also be classified into main and secondary objectives (Abo and Rabia, 2022:148)

Seventh: Restrictions And Controls For Building The Investment Portfolio

A- Restrictions on building the investment portfolio

When composing the portfolio, the investor specifies the restrictions and controls to which he is subjected when forming, which are represented by the following (Bouchatab and Bouchlouh, 16:2022)

1-Time restrictions: Time restrictions mean the period (short, medium, or long) in which the owner of the investment portfolio wishes to continue investing his money, as the longer the investment period, the wider the scope of movement for the portfolio manager.

2-Capital restrictions: These relate to the number of funds available to the portfolio manager through which securities can be purchased and held, and the appropriate combination or mix of securities can be formed.

3-Restrictions on the need to manage the portfolio: The owner of the portfolio often has to place a restriction on the portfolio manager, in the form of the possibility of liquidating the entire portfolio, or part of it, suddenly, or in the short term for certain considerations, which makes the portfolio manager choose certain types of securities. Finance that achieves his goal.

4-Mandatory tax restrictions: Laws or legislation often offer certain tax benefits and exemptions to specific securities, companies themselves, specific geographical areas, or activities of a special nature. These exemptions may be for stipulated periods of time or in exchange for fulfilling one of the conditions and conditions. Then the investment manager in the stock exchange is aware and aware of all of this and

what is required to be taken into account when forming a portfolio of securities from these securities. Rather, the most important thing is: When will this exemption disappear, or will these advantages be limited؟

5-Risk controls and restrictions: The degree of tolerance and acceptance of risk varies and varies from one individual to another and from one investor to another, and therefore, the individual investor's willingness to obtain a high return means at the same moment, his willingness to bear high risks in exchange for obtaining this return, and then a manager Investments by choosing securities in which the degree of risk in investing is proportional to the investor's willingness and ability to accept and bear risks.

B- Controls for building the investment portfolio

The controls for building the portfolio are summarized as follows (Nima and Muhammad, 2020: 6:(

1- The investor must rely on his capital to finance the portfolio without resorting to borrowing.

2-There must be a part of the portfolio that contains shares of low-risk companies after the investor determines the level of risk that he can bear, and it must contain a part of high-risk shares.

3-The time period for the investment must be determined in advance and be long-term.

4- The investor adjusts his portfolio according to market conditions. For example, if he feels that one stock has declined and other stocks have improved, his portfolio must be reshaped again.

The Third Topic: The Practical Aspect Of Research

First: Analyzing The Model Variables

A- A Model Of The Ratio Of Share Price To Earnings

It is a ratio used to measure the value of a company's stock against profitability. This ratio is one of the most basic indicators used in analyzing stocks and evaluating the performance of companies. This ratio is measured through the following: -

Table (1) Share price to earnings for companies in the study sample for the period from (2013-2022)

year	IMAP	IITC	IBSD	INCP	IKLV	IIDP	IBPM	IIEW	IKHC	IRMC
2013	20	0.645	2.525	0.093	4.833	4.538	9.780	3.452	6.130	23.143
2014	84	0.858	0.864	0.255	2.262	7.076	2.700	1.290	0.906	12.692
2015	1.627	1.305	1.344	12.593	7.108	9.117	4.207	1.607	3.431	1.413
2016	1.914	1.455	1.262	3.650	4.077	1.923	3.779	0.438	9.123	3.741
2017	2.482	0.309	0.104	2.460	8.920	0.567	3.448	4.293	14.281	0.321
2018	2	0.048	0.628	1.033	3.121	2.781	23.248	0.542	11.369	3.089
2019	0	0.127	0.031	0.089	1.653	1.669	1.328	0.050	14.664	2.808
2020	0.323	0.808	0.120	0.534	6.916	0.480	0.559	0.272	9.794	6.523
2021	0.502	0.463	0.507	2.745	10.712	0.316	0.266	7.520	2.653	0.081
2022	0.672	0.803	0.278	1.239	6.137	0.300	0.251	1.243	2.083	0.369

Source:- Outputs Of Program Excel, 2010

Second: Calculate The True Value Of Each Model

A- Calculating the real value according to the stock price to earnings model

The real value is also called the intrinsic value or the fair value. The real value of the share represents the present value of the expected future cash flow of the share and the risks of the share. Maximizing the company's profitability does not necessarily lead to maximizing the wealth of the owners, so the model of the real value of the company's share was used according to the following formula (Al-Tamimi ,2009: 205):-

$$P_O= PER* EPS_O(1+g)$$

Table (2) The real value of shares for companies according to the share price to earnings model

year	IMAP	IITC	IBSD	INCP	IKLV	IIDP	IBPM	IIEW	IKHC	IRMC
2013	1.35	11.508	2.626	3.741	1.068	1.068	0.508	9.874	0.783	4.082
2014	0.019	3.272	4.99	2.313	1.402	1.402	0.161	5.353	7.115	1.961
2015	4.831	2.834	2.46	1.007	0.306	0.306	1.662	0.838	1.355	3.042
2016	0.502	5.559	2.264	3.453	0.984	0.984	4.475	1.859	0.128	5.391
2017	0.548	9.872	5.075	2.779	0.332	0.332	2.403	0.045	0.914	1.227
2018	0.856	2.05	1.073	3.164	0.343	1.343	0.259	6.155	0.638	0.632
2019	0	2.982	4.233	5.625	0.205	2.205	1.147	7.918	3.603	2.249
2020	1.43	1.966	1.537	4.175	0.297	0.297	0.275	0.527	2.483	1.25
2021	1.461	5.137	1.21	3.62	0.169	1.169	0.642	0.011	7.249	1.884

2022	0.971	10.465	4.316	3.195	0.17	2.17	0.238	1.448	2.089	4.29

Source :- Outputs Of Program Excel, 2010

Third: Comparison Between The Real Value And The Market Value

A- Comparison between the real value and the market value according to the price-to-earnings model

The results of the table (3) indicate the following:-

1- The real value of the shares of companies (Iraqi Carpets and Furnishings, (-2.311), Al-Kindi for Veterinary Vaccines Production (-0.896), Iraqi Dates Manufacturing and Marketing (-0.082), Baghdad Packaging Materials (-0.293), Al Khazir Construction Materials (-0.216), Ready-made clothing production (-2.378) was much lower than its market value, which indicates that the shares of these companies were overvalued by the market, which indicates weak disclosure and transparency, a move away from applying the principles of corporate governance, and a lack of information asymmetry, and thus the emergence of the traditional signaling hypothesis from On the part of companies, but on the part of investors, it indicates poor performance and their failure to rely on sound scientific foundations in selecting the stocks to invest in, and the majority of them have turned from investors into speculators.

2-The real value of the companies (Al-Mansour Pharmaceutical Industries (0.202), Baghdad Soft Drinks (0.252), Chemical and Plastic Industries (2.144), Iraqi Engineering Works (2.153)) was higher than their market value, which indicates that the shares of these companies were not overvalued. Evaluated by the market, and therefore the gap between the two values has decreased compared to the previous one, which indicates that the market value of the shares of the companies in the research sample is close to the real share values, and this is clear evidence of the market's recognition of the real value of those shares.

Table (3): Comparison between the real value and the market value according to the price-to-earnings model

Al Mansour Pharmaceutical Industries				Iraqi Carpets and Furniture			
year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2013	0.9	1.35	0.450	reduced	4.15	11.508	7.358	reduced
2014	0.84	0.019	-0.821	Amplifier	4.25	3.272	-0.978	Amplifier
2015	0.76	4.831	4.071	reduced	4.28	2.834	-1.446	Amplifier
2016	0.67	0.502	-0.168	Amplifier	5.15	5.559	0.409	reduced
2017	0.69	0.548	-0.142	Amplifier	8.1	9.872	1.772	reduced
2018	0.69	0.856	0.166	reduced	8.11	2.05	-6.060	reduced
2019	0.64	0.000	-0.640	Amplifier	7.96	2.982	-4.978	Amplifier
2020	1.43	1.43	0.000	reduced	10	1.966	-8.034	Amplifier
2021	1.8	1.461	-0.339	Amplifier	12	5.137	-6.863	Amplifier
2022	1.53	0.971	-0.559	Amplifier	14.75	10.465	-4.285	Amplifier
average	0.995	1.197	0.202	reduced	7.875	5.564	-2.311	Amplifier

Baghdad for soft drinks				Chemical and plastic industries			
year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2013	2.99	2.626	-0.364	Amplifier	0.84	3.741	2.901	reduced
2014	2.26	4.99	2.73	reduced	0.85	2.313	1.463	reduced
2015	2.94	2.46	-0.48	Amplifier	0.54	1.007	0.467	reduced
2016	2.5	2.264	-0.236	Amplifier	0.62	3.453	2.833	reduced
2017	2.68	5.075	2.395	reduced	0.57	2.779	2.209	reduced
2018	4.17	1.073	-3.097	Amplifier	0.87	3.164	2.294	reduced
2019	2.9	4.233	1.333	reduced	0.65	5.625	4.975	reduced
2020	4.15	1.537	2.613	Amplifier	2.14	4.175	2.035	reduced
2021	4.6	1.21	-3.39	Amplifier	2.61	3.62	1.010	reduced
2022	3.3	4.316	1.016	reduced	1.94	3.195	1.255	reduced
average	3.249	2.978	0.252	reduced	1.163	3.307	2.144	reduced

Canadian company for producing veterinary vaccines				Iraqi Company for Manufacturing and Marketing Dates			
year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2013	2.5	1.068	-1.432	Amplifier	1.13	1.068	-0.062	reduced
2014	1.28	1.402	0.122	reduced	1.27	1.402	0.132	Amplifier
2015	1.11	0.306	-0.804	Amplifier	1.29	0.306	-0.984	Amplifier
2016	0.79	0.984	0.194	reduced	1.65	0.984	-0.666	Amplifier
2017	0.76	0.332	-0.428	Amplifier	0.88	0.332	-0.548	Amplifier
2018	1.95	0.343	-1.607	Amplifier	1.43	1.343	-0.087	Amplifier
2019	1.51	0.205	-1.305	Amplifier	1.05	2.205	1.155	Amplifier
2020	1.37	0.297	-1.073	Amplifier	1.2	0.297	-0.903	reduced

year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2021	1.57	0.169	-1.401	Amplifier	1.22	1.169	-0.051	Amplifier
2022	1.4	0.170	-1.230	reduced	0.98	2.17	1.190	Amplifier
average	1.424	0.528	-0.896	Amplifier	1.21	1.128	-0.082	Amplifier
Baghdad Packaging Materials					**Iraqi Engineering Works**			
year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2013	1.900	0.508	-1.392	Amplifier	3.000	9.874	6.874	reduced
2014	2.200	0.161	-2.039	Amplifier	2.450	5.353	2.903	reduced
2015	2.720	1.662	-1.058	Amplifier	1.600	0.838	-0.762	Amplifier
2016	1.700	4.475	2.775	reduced	0.900	1.859	0.959	reduced
2017	1.930	2.403	0.473	reduced	0.630	0.045	-0.585	Amplifier
2018	1.840	0.259	-1.581	Amplifier	0.700	6.155	5.455	reduced
2019	1.380	1.147	-0.233	Amplifier	0.720	7.918	7.198	reduced
2020	0.400	0.275	-0.125	Amplifier	1.429	0.527	-0.902	reduced
2021	0.350	0.642	0.292	reduced	0.670	0.011	-0.659	Amplifier
2022	0.280	0.238	-0.042	Amplifier	0.400	1.448	1.048	reduced
average	1.47	1.177	-0.293	Amplifier	1.250	3.403	2.153	reduced
Al Khazir Construction Materials					**Production of ready-made clothing**			
year	Market value	real value	Comparison	Pricing	Market value	real value	Comparison	Pricing
2013	1.910	0.783	-1.127	Amplifier	6.400	4.082	-2.318	Amplifier
2014	4.610	7.115	2.505	reduced	7.000	1.961	-5.039	Amplifier
2015	4.860	1.355	-3.505	Amplifier	5.000	3.042	-1.958	Amplifier
2016	1.290	0.128	-1.162	Amplifier	8.450	5.391	-3.059	Amplifier
2017	1.360	0.914	-0.446	Amplifier	3.640	1.227	-2.413	reduced
2018	0.830	0.638	-0.192	Amplifier	4.700	0.632	-4.068	Amplifier
2019	6.000	3.603	-2.397	Amplifier	3.100	2.249	-0.851	Amplifier
2020	3.150	2.483	-0.667	Amplifier	3.000	1.25	-1.750	Amplifier
2021	2.490	7.249	4.759	reduced	2.100	1.884	-0.216	Amplifier
2022	2.020	2.089	0.069	reduced	6.400	4.29	-2.110	Amplifier
average	2.852	2.636	-0.216	Amplifier	4.979	2.601	-2.378	Amplifier

Source :- Outputs Of Program Excel, 2010

Fourthly:-Building A Portfolio Of Common Stocks According To The Simple Gradient Model

The research aims to build a portfolio of common stocks according to the simple gradient method that is based on the market index model, which is the most widely used and common approach to simplify the Markowitz covariance matrix and simplify the calculation of weights, return, and risk of the portfolio. Table () shows the companies included in building the portfolio according to the simple gradient model. In light of the results of the relative valuation referred to in the applied aspect related to analyzing the true value, companies were chosen in which the pricing is (discounted), as the primary goal of analyzing the true value of stocks and comparing them to their market value is to establish the extent of the randomness of the prevailing market valuation prices while studying their current patterns expected from On the one hand, and on the other hand, benefit from the results of analysis and comparison to determine whether the stock is inflated or underpriced, given that the decisions of small investors have recently become ill-considered, as these decisions depend on rumors, speculation, and false information, and if these decisions are relied upon, then this is... This would lead to making irrational investment decisions, and based on the comparison presented between the real value and the market value, it is possible to build a portfolio of common shares from the companies shown in the table below: -

Table (4) companies and their abbreviation

Al Mansour Pharmaceutical Industries	IMAP
Baghdad for soft drinks	IBSD
Chemical and plastic industries	INCP
Iraqi Engineering Works	IIEW

First: A Presentation Of The Research Inputs In The Iraqi Stock Exchange

1-The highest expected rate of return was in the Chemical and Plastic Industries (INCP), as it reached (0.015), and this means a high pace of economic activity for this company. As for the lowest expected rate of return, it was in Baghdad Soft Drinks (IBSD), as it reached (0.008), which means a decrease. The economic activity of this company.

2- As for the standard deviation, its highest value was in the Iraqi Engineering Works Company (IIEW) stock, as it reached (0.176), compared to the market standard deviation, which reached (-0.00524). This means an increase in the company's overall risk, while the lowest rate of standard deviation In Al-Mansour Pharmaceutical Industries (IMAP), it reached (0.095). This means a decrease in the company's overall risk compared to the market standard deviation.

3- The highest alpha value was in the Chemical and Plastic Industries (INCP), reaching (0.019), which indicates that this company's stock has the superior ability to achieve additional returns. As for the lowest alpha value, it was (0.009) in Baghdad Soft Drinks (IBSD), which means This company's stock is overpriced and its market value is higher than its real value.

4-The highest value of the beta was in the stock of Al Kindi Company for the Production of Vaccines and Veterinary Medicines (IIEW), which reached (1.015). This means that the shares of this company are more volatile than market fluctuations. As for the lowest value of the beta, it was in the Baghdad Soft Drinks Company (IBSD), which reached (0.405) This means that the company's stock movement is less volatile than the market movement.

5- The highest value of the private risk was in the stock of the Iraqi Engineering Works Company (IIEW), which amounted to (0.029) and when compared with the market variance, which amounted to (0.016617). This means an increase in the value of the variance that is not associated with the market variance in this company. As for the lowest value of the private risk It was in Al-Mansour Pharmaceutical Industries (IMAP) stock, reaching (0.008). This means that the variance not associated with market variance is low, as shown in the following table: -

Table (5): Calculating the beta coefficient for the companies in the study sample

Company Name	R_i	σ	σ^2	α	β	σei^2
	Company return	-0.00524	standard deviation	0.0472929		
IMAP	0.013	0.095	0.009	0.015	0.497	0.008
IBSD	0.008	0.133	0.018	0.009	0.405	0.017
INCP	0.015	0.111	0.012	0.019	0.921	0.010
IIEW	0.011	0.176	0.031	0.017	1.015	0.029

Source :- Outputs Of Program Excel, 2010

Second: Building A Portfolio Of Common Stocks According To The Simple Gradient Model

The Treynor ratio was calculated for the shares of companies listed in the Iraqi Stock Exchange for the research sample as in Table (6), and then we arranged it from top to bottom according to the desirability of the shares and the desirability of each stock for inclusion in the portfolio. We note after extracting the Treynor ratio and arranging the stocks included from the top To the bottom, it turns out that the highest value of the Treynor ratio is It was for (INCP) Company, which amounted to (0.022), which indicates that this company is the most attractive among the stocks in the research sample for inclusion in the risky portfolio, while the lowest value for (Treynor) ratio was (0.009) for Baghdad Soft Drinks Company (IBSD), The company is considered the least attractive for inclusion in the risky portfolio.

Table(6)Inputs Portfolio Simple Gradient Model

Company	(R-RF)/ β	(R-RF) β/σ 2ei	∑(R-RF) β/σ 2ei	B2/σ 2ei	∑B2/σ 2ei
INCP	0.022	0.649	2.054	29.176	78.836
IMAP	0.018	0.394	2.448	21.380	100.216
IIEW	0.014	0.136	2.584	9.485	109.701
IBSD	0.009	0.314	3.994	36.113	227.915

Company	CI	C*	(R-RF)/ β- C*	β/σ 2ei	Zi	WI
INCP	0.004	0.006	0.016	58.759	0.960	0.200
IMAP	0.004	0.006	0.013	54.897	0.687	0.143
IIEW	0.005	0.006	0.008	23.427	0.196	0.041
IBSD	0.006	0.006	0.003	35.577	0.099	0.021

Source:- Outputs Of Program Excel, 2010

Third: Testing Hypotheses

Multiple linear regression was conducted in order to test the research hypothesis, which stated that there is no statistically significant difference between stock valuation indicators (price-earnings ratio, price-to-cash flow ratio, and price-to-book value ratio) in the real value of the shares in the study sample, and based on it, it can be Write the regression equation as follows:-

$$MVAi,t= b_0+ b_1 \frac{P}{Ei,t} +\mu_{i,t}$$

Where (MVA), the dependent variable, represents the real value of company (i) in period (t). (bo) also shows the constant of the equation. Meanwhile, 1, 2, and 3 show the slope of the estimation coefficient for the independent variables.

1- Al-Mansour Pharmaceutical Industries

Table (7) shows that the slope of the estimation coefficient for each of the price-to-earnings (P/E) variables indicated a statistically significant effect on the real value of Al-Mansour Pharmaceutical Industries shares in terms of the estimation coefficient values at a significance level less than (5%), as was the indication for both The two coefficients are consistent with the expected sign according to financial theory, and the table shows that (77.2%) of the effect on the dependent variable is due to the significant variables mentioned above and that the largest effect is due to price and cash flow. Table (7) also shows that the model is statistically appropriate for Calculated F values whose statistical significance reached zero up to the third-order level.

Table (7) shows the results of multiple linear regression for Al-Mansour Pharmaceutical Industries

Independent variables	Dependent variable			Significance level
	Intrinsic value			
Constant	Coefficient	t-stat	P-value	
P/E	0.507	2.93	0.007	**
F-test	(P-value = 0.000) 27.26			
R^2	%77.2			
N	10			
*P<0.10 **P<0.05 ***P<0.01 (P) refers to t-value calculated				

Source :- Outputs of Program Minitab.v15

2-Baghdad For Soft Drinks

Table (8) shows that the slope of the estimation coefficient for each of the price-to-earnings ratio (P/E) variables indicates a statistically significant effect on the real value of Baghdad Soft Drinks Company shares in terms of the estimation coefficient values at a significance level less than (5%), as The signal was consistent with the expected signal according to financial theory, and the table shows that (89.1%) of the effect on the dependent variable is due to the significant variables mentioned above, and that the largest impact is due to the price to its profitability. Table (8) also shows that the model is statistically appropriate in terms of the calculated F values, whose statistical significance reached zero up to the third rank.

Table (8) shows the results of multiple linear regression for Baghdad Soft Drinks Company

Independent variables	Dependent variable			Significance level
	Intrinsic value			
Constant	Coefficient	t-stat	P-value	
P/E	0.261	4.83	0.000	**
F-test	(P-value = 0.000) 63.09			
R^2	%89.1			
N	10			
*P<0.10 **P<0.05 ***P<0.01 (P) refers to t-value calculated				

Source :- Outputs of Program Minitab.v15

3-Chemical And Plastic Industries

Table (9) shows that the slope of the estimation coefficient for each of the price-to-earnings ratio (P/E) variables have indicated a statistically significant effect on the real value of the shares of the Chemical and Plastic Industries Company in terms of the values of the estimation coefficient at a significance level less than (5%), as The sign for both coefficients was consistent with the sign expected according to financial theory, and the table shows that (77.3%) of the effect on the dependent variable is due to the significant variables mentioned above, and that the largest effect is due to price and its profitability. Table (9) also shows that the model is statistically appropriate in terms of the calculated F values, whose statistical significance reached zero up to the third rank.

Table (9) shows the results of multiple linear regression for the Chemical and Plastics Industries Company

Independent variables	Dependent variable			Significance level
	Intrinsic value			
Constant	Coefficient	t-stat	P-value	
P/E	0.581	4.98	0.000	**
F-test	(P-value = 0.000) 28.18			
R^2	%77.3			
N	10			
*P<0.10 **P<0.05 ***P<0.01 (P) refers to t-value calculated				

Source :- Outputs of Program Minitab.v15

4-Iraqi Engineering Works

Table (10) shows that the slope of the estimation coefficient for each of the price-to-earnings ratio (P/E) variables has indicated a statistically significant effect on the real value of the shares of the Iraqi Engineering Works Company in terms of the values of the estimation coefficient at a significance level less than (5%), as The sign for both coefficients was consistent with the sign expected according to financial theory, and the table shows that (68.1%) of the effect on the dependent variable is due to the significant variables mentioned above, and that the largest impact is due to cash flow. Table (10) also shows that the model is statistically appropriate regarding the calculated F values, whose statistical significance reached zero up to the third rank.

Table (10) shows the results of multiple linear regression for the Iraqi Engineering Works Company

Independent variables	Dependent variable			Significance level
	Intrinsic value			
Constant	Coefficient	t-stat	P-value	
P/E	0.490	2.230	0.000	**
F-test	(P-value = 0.000) 14.61			
R^2	%68.1			
N	10			
*P<0.10 **P<0.05 ***P<0.01	(P) refers to t-value calculated			

Source :- Outputs of Program Minitab.v15

FOURTH PART: CONCLUSIONS AND RECOMMENDATIONS

First: - Conclusions

1-The emergence of large deviations in the real values of ordinary shares from their market values as a result of weak disclosure, transparency, and low quality of information, which sometimes leads investors to bear large losses as a result of the market moving away from its role as a tool for fair pricing.

2-The market value of common stocks follows the real value in its changes, ups, and downs, but the market's reaction to this tracking was exaggerated, at a rate of 70% of the shares of the sample companies studied.

3-The value of a share is not a real value unless it reflects all available information, whether negative or positive, and this can only be achieved in efficient financial markets.

4-It is possible to build an optimal portfolio using the simple grading method based on the market model and compare it with a portfolio. However, the procedures for building a portfolio of ordinary stocks according to the simple grading method allow the portfolio manager to build the portfolio quickly and easily.

5-There is an impact of earnings per share on the real value of company shares according to the model used to measure the real value of the share, as the results of the financial analysis indicate that earnings per share are not used to maximize the real value of the shares of the companies in the study sample.

6-The discrepancy between the market and real values of stocks is explained by the lack of rationality of investors in the financial market, as well as the inefficiency of the financial market as a result of the information not being quickly reflected in stock prices in the market.

Second: Recommendations

1- The necessity of directing investors in the Iraqi Stock Exchange to focus their investments and trading on companies that have profitable indicators in order to achieve high returns and good capital gains as well.

2-The Securities Commission directs joint stock companies to increase disclosure of important profitability indicators to rationalize securities trading operations through financial and accounting indicators.

3-The necessity of educating investors and dealers in the Iraqi Stock Exchange to rely on the simple gradual method to allow the construction of the optimal stock portfolio because it provides simplification of inputs and accurate and reliable results for choosing stocks that achieve the best trade-off between return and risk.

4-The need to emphasize that companies listed on the Iraqi Stock Exchange must disclose their financial position data and the decisions of their boards of directors and make them available to investors in a timely manner.

5-It is necessary to set certain limits for price changes because these changes may sometimes occur as a result of new, incorrect information, which leads to shading investors, which requires maintaining the stability of these prices.

6-The contemporary goal of financial management is to maximize the wealth of shareholders, which requires company managers to focus most of their attention on supporting the real value of their companies' shares by adopting strategies that create value for shareholders, meaning that they lead to increasing future economic benefits. Focus on investing in projects with a net value. Positive current value and reducing the cost of capital reduce risks and adopt an optimal capital structure because the real value is a function of the expected future economic benefits and the cost of capital.

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