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The Long-Term Impact of Financial Ratios, Profit, and Capital Structure on the Value of Companies Listed on the Tehran Stock Exchange

Mahdi Alimadadi[a,*]

[a]*Department of Financial Management, Science and Research Branch, Islamic Azad University, Tehran, Iran*

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Abstract

Since the ultimate goal of investors in turning to the stock market is to increase wealth, and one of the ways to increase wealth is to increase the value of companies, it is necessary to provide information that can help them evaluate the activities and capabilities of business units and select the desired company for investment. Therefore, this study has attempted to examine the impact of driving factors on the value of companies listed on the Tehran Stock Exchange based on the panel data method. Therefore, this study examines the impact of debt ratios, capital expenditures, retained earnings, distributed earnings, dividend per share, and capital structure on the value of companies listed on the Tehran Stock Exchange during the years 2020-2024. For this purpose, after collecting the required information, statistical tests were conducted on panel data using SPSS and EVIEWS software to examine the research hypotheses, and the results obtained are presented. The results indicate a negative and significant relationship between the debt-to-total assets ratio, retained earnings, capital expenditures, and distributed earnings, as well as a positive and significant relationship between dividend per share and capital structure.

Keywords: (Company value, capital structure, earnings, capital expenditures, stock exchange)
2022 MSC: O20, O10

Introduction

Achieving economic growth and increasing the willingness to invest requires adopting fundamental and comprehensive policies. With the advancement of industry and technology, most industrial companies are seeking to develop their main activities, and the motivation for such development is often to increase profitability and also to increase shareholder benefits. In this case, creating a suitable environment for healthy and productive investments and developing company activities, as well as strengthening the capital market, including the stock exchange, are among the most important measures that must be taken. In this regard, investors, in the form of holders or applicants for shares, play a fundamental role in providing the financial resources needed by economic units with different motivations. Investors are looking for factors that can better understand the factors affecting the value of the company and can make better decisions (Chandra et al [6], Chen et al [7]). Economic units also pursue different goals in attracting dispersed

*Corresponding author
Email address: m31tir@gmail.com (Mahdi Alimadadi)

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capital, and ultimately the optimal point (goal) for both groups is to achieve greater benefits and maximize wealth (Creswell et al [8], D'Amato [9]). The benefits that accrue to shareholders from these investments are manifested in the form of maximizing profits or stock value, or both. [13] Therefore, maximizing the value of the company as a goal is much more useful for many companies than maximizing profits, because the profitability factor should be considered primarily from a long-term perspective, and at the same time, adopting this goal creates a balance between the wealth maximization factor and its related goals, such as growth, sustainability, risk aversion, and stock market value.

All companies ultimately aim to maximize their long-term value. According to Lanin & Hermanto [23], company value represents the level of public trust in the company, achieved over time through its operational activities since its establishment. When a company operates efficiently, its value is often reflected in its stock price. Company value is highly significant, as a higher value typically leads to greater shareholder prosperity (Baines et al [3]; Ohemeng et al [31]; Podsakoff et al [33]). Therefore, it can be inferred that company owners strive to enhance their firm's value, as higher value indirectly translates to increased shareholder wealth. Several factors influence a company's value, including capital structure and profitability (Oktasari et al [32]; Rabiah et al [34]). According to capital structure theory, if a company exceeds its optimal capital structure, any additional debt will reduce its overall value. This theory emphasizes that a company's financing decisions should aim to optimize its value through an effective capital structure (Naqshbandi & Tabche [29]; Rabiah et al [34]; Shi et al [40]). Capital structure refers to the ratio of debt to equity, which is reflected in the company's year-end financial statements. Managing capital structure effectively is crucial, as deviations from the optimal balance can impact the company's worth. In particular, exceeding the optimal level of debt may lead to a decline in company value. This highlights the importance of a well-planned financial policy that ensures the company's capital structure supports its long-term growth and value (Ayange et al [2]; Ezeani et al [12]; Hirdinis [21]). A company can utilize various financial instruments, such as equity or debt, to finance its operations. The optimal capital structure depends on multiple factors, including industry characteristics, market conditions, and the regulatory environment (Dakua [10], Feng et al [15], Hendratama et al [20]). To optimize their capital structure, companies may employ different financial strategies, such as issuing bonds, repurchasing shares, or distributing dividends (Kluiters et al [22]). Profitability is another key factor influencing a company's value. It is determined by several elements, including revenue, cost structure, market dynamics, and competition [29]. Companies can enhance their profitability through various strategies, such as cost reduction, revenue growth, improving operational efficiency, or expanding their product and service offerings [30].

Therefore, examining the factors affecting the value of a company is an important issue that this study addresses by examining the effect of factors such as debt to total assets ratio, capital expenditures, retained earnings, distributed earnings, dividend per share, and capital structure on it.

Research background

Falavandi, Tabarrostami [13] studied the factors affecting the value of companies on the Tehran Stock Exchange during the 5-year period of 1388-92. 84 companies from among the companies listed on the Tehran Stock Exchange constitute the statistical sample of this study. The results obtained also indicate that the ratio of retained earnings to distributed earnings and also the ratio of debt to total assets have an effect on the value of the company. Rahimian et al. [35], in a study titled "Investigating the Curvature Relationship between Capital Structure and Performance and Value of Companies Listed on the Tehran Stock Exchange", investigated this issue during the years 2007 to 2010 for 102 companies listed on the Tehran Stock Exchange. The results obtained indicate the existence of a U-shaped relationship between capital structure and performance and value of companies listed on the Tehran Stock Exchange. Meshki and Fahim [26], in a study titled "Investigating the Relationship between Dividends, Book Value, and Earnings per Share with the Market Value of Companies Listed on the Tehran Stock Exchange," investigated this issue for 80 companies listed on the Tehran Stock Exchange during the period 2004 to 2011. The findings of this study indicate the existence of a positive linear and significant relationship between each of the variables of book value per share, earnings per share, and dividend per share with the market value of each share. In the combined model of book value and earnings per share and also the combined model of book value and dividend per share, it can be said that the interaction of two variables can better interpret the changes in the market value of each share and is a more appropriate model. Hashemi et al. [19] in their study examined the interrelationship of factors affecting the capital structure and stock returns of companies listed on the Tehran Stock Exchange. The statistical population of this study includes companies listed on the Tehran Stock Exchange, of which 51 companies were selected from the total number of companies based on systematic exclusion from the three industries of chemical products, non-metallic minerals and automotive. The results of this study, which were obtained based on structural equation modeling, indicate the existence of an interrelationship between capital structure and stock returns, so that stock returns have a

negative effect on capital structure and capital structure has a positive effect on stock returns according to the direct relationship of risk and return.

Hashemi, Akhlaqi [18]in a study examined the relationship between the future value of the company and its capital structure, dividend policy and profitability in companies listed on the Tehran Stock Exchange during the period 1380-1387. The statistical population of this study consisted of companies listed on the Tehran Stock Exchange, of which 110 companies were selected as a sample through systematic elimination. The results obtained indicate that there is a positive and significant relationship between capital structure and profitability and company value, and an inverse and significant relationship between dividend policy and company value. There is also a positive and significant relationship between the variables examined and the future value of the company. Rezaei, Piri [36] in a study examined the effect of ownership structure, capital structure and liquidity on the market value of companies for 176 companies that were selected as a statistical sample during the years 1383 to 1387. The results of the hypothesis test have shown that the percentage of shares held by institutional investors has a positive and significant effect on the company's market value. However, the concentration of shares has a negative and significant effect on the market value. In addition, the existence of a significant relationship between the capital structure (the ratio of the company's total liabilities to the book value of shareholders' equity) and the company's market value was not confirmed. Liquidity also has a positive and significant effect on the company's market value. Also, the control variables of the research; including Tobin's Q, dividend percentage and tangible fixed assets ratio have a positive and significant effect on the company's market value. Emeni & Ogbulu [11] in their study examined the effect of dividend policy on the market value of financial services companies in Nigeria during 2002-2011. The results of this study, which were obtained based on the ordinary least squares method, indicate that cash dividends, stock dividends and investment policies have a negative and significant relationship with the market value of the company in the Nigerian financial services sector. Based on these results, it is recommended that companies operating in the Nigerian financial services sector should use dividend policy to increase their market value. Manuel et al. [25] examined the relationship between corporate governance and company value during the years 2003-2007 for 22 countries. In this study, 64 indicators were used as corporate support indicators and the results obtained showed that there is a positive and significant relationship between corporate governance indicators and company size. Sulong & Mat Nor [28] examined the effects of corporate governance mechanisms (types of ownership and board structures) and dividend policy on firm value. The findings of the study indicate a positive and significant relationship between concentrated ownership, government ownership, and the number of board members with firm value. Another result of this study is a negative and significant relationship between managerial ownership and firm value. Bozec, Bozec [5] examined corporate governance and firm value. The findings of the study showed that there is a positive and significant relationship between corporate governance resources and Qtobin as a criterion for firm value. Felix & Lima [14] studied whether financial leverage, ownership structure, and dividend policy are effective in creating firm value. In this study, 213 Brazilian companies were studied during the period 1995-2004 and the findings show that financial leverage has a negative relationship with the value of companies with more growth opportunities and a positive relationship with the value of companies with less growth opportunities. Also, dividend policy has a negative relationship with the value of the company. According to the results, there is also a nonlinear relationship between the ownership structure and the value of the company. Ghosh [17] has studied the effect of financial leverage, dividend policy and profitability on the future value of the company in a study in India. This study shows that there is a nonlinear relationship between financial leverage, profitability and the probability of an increase in the future value of the company. Also, the probability of an increase in the future value of the company decreases exponentially with an increase in financial leverage, while the probability of an increase in the future value of the company increases with an increase in dividend payment and profitability of the company.

Research Method

The present study is an applied research in terms of its purpose. Because the results of this study can be used to solve practical and real problems. In this study, data analysis was performed using EVIEWS software and the panel data method was used. The method of this study is also descriptive-correlational. Because on the one hand, it describes the general characteristics of the sample under study using statistical characteristics such as frequency, mean, and standard deviation, and on the other hand, it uses regression analysis tests to answer the research hypotheses and find specific relationships between variables. The F-limer test, the Hausman test, and the t-test were used to determine the type of data and the t-test to determine the stationarity of the variables. Also, the F-significance test was used for regression analysis and hypothesis testing. Excel and Eviews software were also used to process the information.

Nonlinear Structural Equation Model

The traditional linear structural equation model is typically made up of two parts: the measurement model describing the relationships between the observed and latent variables and the structural model describing the relationships between the latent variables. Given a vector of p observed variables Z_i for the ith individual in a sample of size n and a vector of q latent variables f_i, the linear structural equation model system can be written:

$$Z_i = \mu + \Lambda f_i + \epsilon_i, \tag{1}$$
$$b_o + B_o f_i = \delta_{oi}, \tag{2}$$

where in the measurement model, the matrices $\mu(p \times 1)$ and $\Lambda(p \times q)$ contain fixed or unknown scalars describing the linear relation between the observations Z_i and the common latent factors f_i, and represents the $(p \times 1)$ vector of random measurement error independent of f_i such that $E(\varepsilon_i) = 0$ and $Var(\varepsilon_i) = \Psi$ with fixed and unknown scalars in; and in the structural model, the matrices $b_o(d \times 1)$ and $B_o(d \times q)$ contain fixed or unknown scalars defining d different additive linear simultaneous structural equations relating the factors to one another plus the $(d \times 1)$ vector of random equation error δ_{oi}, where $E(\delta_{oi}) = 0$ and $Var(\delta_{oi}) = \Delta_o$ with fixed and unknown scalars in Δ_o.

The simultaneous linear structural model as written in (2) is very general. For many practical research questions which can be addressed by simultaneous structural models, it is useful to model specific variables in terms of the rest of the variables, i.e., it is useful to consider some of the latent variables as endogenous and others as exogenous, where endogenous variables are those that are functions of other endogenous and exogenous variables. Let $f = (\eta_i', \xi_i')'$ where η_i are the d endogenous latent variables and ξ_i are the $q - d$ exogenous latent variables. Then a commonly used form for the structural model (2) becomes:

$$\eta_i = b + B\eta_i + \Gamma\xi_i + \delta_i, \tag{3}$$

where it is assumed the equation errors δ_i have $E(\delta_i) = 0$, $Var(\delta_i) = \Delta$ and are independent of the ξ_i as well as independent of ϵ_i in (1), and the matrices $b(d \times 1)$, $B(d \times d), y(d \times (q-d))$, and $\Delta(d \times d)$ are fixed or unknown scalars. The structural model (3) is said to be in implicit form, implicit because it has endogenous variables on both sides of the equations, L.e., it is not "solved" for the endogenous variables. It is assumed that the diagonal of B is zero so that no element of η_i is a function of itself. A sufficient condition for solving is that $(I - B)$ is invertible, then (3) can be solved for the endogenous variables and written as

$$\eta_i = b^\star + \Gamma^\star\xi_i + \delta_i^\star \tag{4}$$

where $b^\star = (I - B)^{-1}b$, $Y^\star = (I - B)^{-1}y$, and $Var(\delta_i^\star) = (I - B)^{-1}\delta(I - B)^{-1}$.

The structural model (4) is said to be in reduced form as the η_i now appears only on the left-hand side of the equation. It is important to note the assumption that the equation errors δ_i were additive and independent of the ξ_i. In the implicit form (3) results in the equation errors δ_i in the reduced form (4) also being additive and independent of the η_i.

Given p, q and d, additional restrictions must be placed on μ, A, Y, b_o, B_o, and Δ_0 in (1)-(2) in order to make all the unknown parameters identifiable. The assumption that (2) can be written in reduced form (4) is the typical restriction placed on the structural model. Additionally, a common restriction placed on the measurement model is the errors-in-variables parameterization where q of the observed variables are each fixed to be equal to one of the q different latent variables plus measurement error. For a thorough discussion of identifiability in linear structural equation models see, e.g., Bollen [38]. Finally, it should be noted that there is no inherent distributional assumptions needed for ϵ_j, δ_{oi}, nor fl at this point of model specification although distributional assumptions may be added eventually to perform estimation.

A mixture SEMs for a $p \times 1$ random vectory y_i is defined as follows:

$$f(y_i) = \sum_{k=1}^{K} \pi_k f_k(y_i|\mu_k\Sigma_k), \qquad i = 1, \cdots, n \tag{5}$$

where K is the number of components which can be unknown, π_k's are component probabilities which are nonnegative and *sum* to 1.0, $f_k(y|\mu_k\Sigma_k)$ is a multivariate normal density function with an unknown mean vector μ_k and a covariance matrix Σ_k. Conditional on the kth component, suppose that y satisfies the following measurement model:

$$y = \mu_k + \Lambda_k\omega_k + \epsilon_k \tag{6}$$

where μ_k is an $p \times 1$ intercept vector, Y_k is a $p \times q$ factor loading matrix, ω_k is a $q \times 1$ random vector of latent variables, ϵ_k is a $p \times 1$ random vector of error measurements with distribution $N(0, \Psi_k)$ which is independent of ω_k, and Ψ_k is a diagonal matrix. Let ω_k be partitioned into $(\eta_n^T, \xi_k^T)^T$ where η_k is a $q1 \times 1$ vector, ξ_k is a $q2 \times 1$ vector, and $q1 + q2 = q$. The structural equation is defined as

$$\eta_k = b + B_k \eta_k + \Gamma_k \xi_k + \delta_k, \tag{7}$$

where B_k and Y_k are $q1 \times q1$ and $q1 \times q2$ matrices of unknown parameters; and random vectors $\xi_k \lambda_k$ are independently distributed as $N(0, \phi_k)$ and $N(0, \phi_{\lambda k})$ respectively; and ϕ_k is a diagonal matrix.

We assume that $B_{ok}(q1 - B)$ is nonsingular and l_{ql} Is Independent of any elements in B_k. One specific form of B_k that satisfles this assumption is the lower or upper triangular matrix.

As the mixture model defined in (5) is invariant with respect to permutation of labels $k = 1, \cdots, K$, adoption of an unique labeling for identifiability is important. Roeder and Wasserman [37], and Zhu and Lee [24] proposed to impose the ordering $\mu_{1,1} < \cdots < \mu_{K,1}$, for eliminating the label switching (jumping between the various labeling subspace), where $\mu_{K,1}$ is the first element of the mean vector μ_k. This method works fine if $\mu_{1,1}, \cdots, \mu_{K,1}$ are well separated. However, if $\mu_{1,1}, \mu_{K,1}$ are close to each other, it may not be able to eliminate the label switching, and may Introduce incorrect results. Hence, it is necessary to find a sensible identifiability constraint. In this chapter, the random permutation sampler developed by Frühwirth-Schnatter [16] will be applied for finding the suitable Identifiability constraints. See the following sections for more details.

Moreover, for each $k = 1, \cdots, K$, structural parameters in the covariance matrix Σ_k corresponding to the model defined by and are not identified. A common method in structural equation modeling for identifying the model Is to fix appropriate elements in A_k, B_k, and/or Y_k at preassigned values. The positions of the preassigned values of the fixed elements in these matrices of regression coefficients can be chosen on a problem-by-problem basts, as long as each Σ_k is identified. In practice, most manifest variables are usually clear indicators of their corresponding latent variables. This give rather clear prior information to specify the zero values to appropriate elements in these parameter matrices. See the illustrative example in Section 5 for a more concrete example. For clear discussion of the proposed method, we let $\prod = (\prod_1, \cdots, \prod_K)$, and O be the vector which contains all unknown parameters in the covariance matrices that defines an identified model.

Statistical population

The statistical population of this study includes companies listed on the Tehran Stock Exchange, from which 107 companies that met the following conditions were selected through systematic elimination. The aforementioned conditions are as follows:

1. The companies have announced annual profitability during the period under study.
2. They have been listed on the Tehran Stock Exchange before 2011.
3. They have been listed on the Tehran Stock Exchange throughout the entire research period (2020-2024).
4. They are not brokerage, investment, leasing, or insurance companies.
5. In order to increase comparability, their fiscal year ends at the end of Esfand.

Therefore, considering the above conditions and limitations, 104 companies were selected. Also, the time scope of the research is 1398 to 1402. The availability of the desired information and the above conditions are the reasons for the limited time period and number of statistical samples.

Research model and introduction of its variables

In this study, in order to investigate the factors affecting the value of companies listed on the Tehran Stock Exchange; the effect of the debt-to-total assets ratio, capital expenditures, retained earnings, distributed earnings, dividend per share, and capital structure on the value of companies will be examined, and the definition of each of the mentioned variables is as follows:

FirmValue (FV): The value of an asset, whether real or financial, depends on the extent to which it can satisfy the wants and needs of individuals. The value or desirability of a company's assets depends on its ability to generate cash flows in a certain period of time. Several concepts are used to determine the value of assets. In this study, the natural logarithm of the ratio of market value of equity (MTBR) to the book value of equity is used as a measure of company value.

Debt Ratio (DR): One of the most important leverage ratios is the debt ratio, which is obtained by dividing the total debt by the total assets.

Capital Expenditure (CE): Capital expenditures are expenditures that maintain, continue, or increase the production capacity of goods and services and have future profitability for the company. Capital expenditures are spent on the purchase, construction, improvement, and repair of fixed assets [27]. In this study, the value of property, machinery, and equipment before depreciation is considered as capital expenditures.

Retained Earnings (RE): Undistributed earnings are: the company's net profit for the fiscal year minus losses from previous fiscal years and legal reserves and other discretionary reserves plus distributable (undistributed) profits from previous years.

Dividend (DPS): Every year, companies keep part of the net profit according to the law and part based on the company's needs, and distribute the rest among shareholders. The amount of profit that a company distributes and reaches the shareholder in cash is called DPS or dividend. In other words, DPS is a part of the after-tax profit per share paid by the company.

Earnings per share (EPS): Earnings per share is one of the most important financial statistics that is of interest to investors and financial analysts. EPS is calculated by dividing the company's after-tax profit by the total number of shares. It indicates the profit that the company has earned in a given period per common share.

Capital Structure (SC): Capital structure, meaning the way the company is financed, affects the value of the company. The capital structure of a company can be defined as a combination of debt and equity to finance the company's assets. In this study, capital structure is obtained from the debt-to-equity ratio, which shows what percentage of equity and debt a company uses to finance its assets. A high debt-to-equity ratio can lead to excess interest expense and usually means that the company has used more debt in financing. If a large amount of debt is used in financing the company and causes an increase in the debt-to-equity ratio; the company should potentially generate more income than if it had not obtained external financing. If the company's income increases significantly compared to the cost of debt (interest expense), shareholders will benefit from more income with the amount of their previous investment in the company.

It should be noted that the dependent variables studied were selected based on previous studies such as Falavandi, Tabarrostami [13]; Meshki and Fahim [26]; Emeni, Ogbulu [11] and Sulong, Mat [28] and statistics related to all variables used were extracted from the Rahavard software. Considering the variables under study, in this study, the value of the company is considered as a dependent variable as a function of the following variables:

$$FV = F(DR, CE, RE, DPS, EPS, SC)$$

Therefore, the study model is as follows:

$$FV_{it} = \alpha + \beta_1 DR_t + \beta_2 CE_t + \beta_3 DPS_t + \beta_4 EPS_t + \beta_5 SC_t + \varepsilon_{it}$$

Where,

- FV represents the value of the company,
- DR represents the debt ratio,
- CE explains capital expenditures,
- RE represents retained earnings,
- DPS represents distributed earnings,
- SC represents capital structure
- EPS represents dividend per share.
- Index i represents the company and t represents time.

Research findings

The findings of this study are presented in the form of two parts: descriptive statistics and inferential statistics. The first part is dedicated to descriptive statistics and the second part is related to inferential statistics and the results obtained from each are presented below.

Descriptive statistics

First, for data analysis and interpretation, descriptive statistics of the data under study are calculated. Table 1 shows descriptive statistics and indicates descriptive parameters for each variable separately and includes information related to the mean and median. The second category of information includes parameters related to dispersion such as variance, standard deviation, skewness and kurtosis, which explain the dispersion of data around the mean axis. It should be noted that considering that the method of combining time series and cross-sectional data was used to test the research hypotheses, the number of observations per year-company based on balanced combined data is 520 observations.

Table 1: Descriptive statistics of research variables

Variable	Observations	Mean	Median	Standard Deviation	Variance	Kurtosis	Skewness
Firm Value (FV)	520	0.7124	0.5836	0.77735	0.604	1.531	9.124
Debt Ratio (DR)	520	0.6305	0.6265	0.31817	0.101	2.116	11.8
Capital Expenditure (CE)	520	1,307,628	200,000	3,924,936	1.54E+13	7.109	66.063
Retained Earnings (RE)	520	830,364.9	107,287.5	3,324,080	1.1E+13	2.948	21.576
Dividends (DPS)	520	671.1764	245	1,168.052	1,364,346	3.258	13.33
Capital Structure (SC)	520	1.879	1.2846	15.9872	255.591	12.501	249.036
Earnings Per Share (EPS)	520	766.075	484.377	1,454.489	2,115,538	1.091	7.743

Source: Researcher's findings

Statistical inference

In this section, first, in order to ensure the reliability of the variables, for panel data models, a unit root test was performed for each variable to ensure the existence of convergence. In this study, the Levin-Lin-Chu, Im Pesaran-Shin and Hadri tests were used to examine the reliability of the variables, and the results obtained are presented in Table 2. As is clear from this table, the results obtained confirm the reliability of all variables under study at the level and based on all three tests: Levin, Lin & Chui, Im Pesaran & Shin and Hadri. To avoid spurious regression, the Kao cointegration test was used and the results obtained are shown in Table 3. Considering the significance of the obtained statistic, it indicates the absence of spurious regression. F-limer and Hausman tests are other common tests in this field that need to be examined before estimating the final model in order to determine the final method. The results of these tests are also shown in Tables 3 and 4. As Table 4 shows, the probability statistics for the F and χ_2 tests are less than 0.05, indicating that the fixed effects coefficients are not equal for all companies and, therefore, the panel method should be used. The results of the Hausman test are presented in Table 5, indicating that for the data related to companies listed on the Tehran Stock Exchange, the null hypothesis (H_0) of the appropriateness of random effects is rejected. Since the χ^2 statistic shows a value less than 0.05, this supports the acceptance of the fixed effects model over the random effects model. After conducting common tests in this field, the final model was estimated, and the research hypotheses will be examined based on the results obtained from this model. The final results of estimating

Table 2: Examination of the reliability of variables based on the Levin, Lin & Chui, Im Pesaran & Shin and Hadri tests.

Variable	Intercept	Trend	Levin, Lin & Chui (Stat & p-value)	Im, Pesaran & Shin (Stat & p-value)	Hadri (Stat & p-value)	Stationarity Result
FV	Yes	No	-2.39 (0.0083)	-4.00 (0.0000)	8.29 (0.0000)	I(0)
DR	Yes	No	-7.40 (0.0000)	-2.65 (0.0039)	8.38 (0.0000)	I(0)
CE	Yes	No	-251.56 (0.0000)	-59.188 (0.0000)	8.92 (0.0000)	I(0)
RE	Yes	No	-62.79 (0.0000)	-32.164 (0.0000)	10.83 (0.0000)	I(0)
DPS	Yes	No	-192.308 (0.0000)	-37.900 (0.0000)	6.85 (0.0000)	I(0)
SC	Yes	No	-8.43 (0.0000)	-4.79 (0.0000)	8.75 (0.0000)	I(0)
EPS	Yes	No	-17.33 (0.0000)	-5.76 (0.0000)	7.85 (0.0000)	I(0)

Source: Researcher's findings

Table 3: Examination of the cointegration test based on the Kao test

P Value	t	ADF
0.000	5.47	

Source: Researcher's findings

Table 4: F-limer test for examining combined and panel models

Effect Test	Statistic	d.f.	Prob.
Cross-section F	12.59	(410,103)	0.000
Cross-section Chi-square	741.69	103	0.000

Source: Researcher's findings

Table 5: Hausman Test Statistics

Test	Chi-sq Statistic	Chi-sq d.f.	Prob.
Cross-section Random	30.96	6	0.000

Source: Research Findings

Table 6: Results of the Estimated Model for Examining Factors Affecting Firm Value

Variables	Coefficient	Standard Error	t-Statistic	p-value
C	1.574872	0.012640	124.5969	0.0000
DR	-1.342226	0.016868	-79.57220	0.0000
CE	-8.24E-09	3.69E-09	-2.230908	0.0262
RE	-4.29E-09	1.86E-09	-2.304843	0.0217
DPS	-0.000162	5.96E-05	-2.714998	0.0069
SC	6.74E-06	2.99E-06	2.254501	0.0247
EPS	1.00E-05	2.32E-06	4.316080	0.0000
Correlation Coefficient		Fisher's F-Statistic		Prob.
2.074334		496.5142		0.0000

Source: Research Findings

the fixed effects model using panel data are presented in Table 6. The hypotheses examination based on the obtained results is as follows:

0.0.1 Hypothesis Testing Based on the Obtained Results

Hypothesis 1: There is a significant relationship between the debt ratio to total assets and the value of companies listed on the Tehran Stock Exchange. Based on the results obtained in Table 5, the coefficient for the debt ratio to total assets is (-1.34) with a p-value of (0.000). Since this statistic is less than 0.05, there is a significant negative relationship between the debt ratio to total assets and the value of companies listed on the Tehran Stock Exchange. Therefore, the first hypothesis is accepted. This result contradicts the findings of Falavandi & Tabarrostami [13].

Hypothesis 2: There is a significant relationship between capital expenditures and the value of companies listed on the Tehran Stock Exchange. According to the results of examining the impact of capital expenditures on the value of companies listed on the Tehran Stock Exchange, the coefficient for this variable is (-0.0262), which is statistically significant. Therefore, the hypothesis that there is a significant relationship between capital expenditures and the value of companies listed on the Tehran Stock Exchange is accepted. Given the negative coefficient, this relationship is negative. This finding supports the results of studies by Falavandi & Tabarrostami [13] and Shakeri & Kazemi [39].

Hypothesis 3: There is a significant relationship between retained earnings and the value of companies listed on the Tehran Stock Exchange. Given the obtained coefficient for the retained earnings variable and its significance, there is a significant negative relationship between retained earnings and the value of companies listed on the Tehran Stock Exchange. Therefore, the third hypothesis, which states that there is a significant relationship between retained earnings and the value of these companies, is accepted.

Hypothesis 4: There is a significant relationship between distributed dividends and the value of companies listed on the Tehran Stock Exchange. According to the results obtained, the coefficient for the relationship between distributed dividends and company value is (-0.000162), with a significance statistic of (0.0069). Therefore, this hypothesis, which states that there is a significant relationship between distributed dividends and the value of companies listed on the Tehran Stock Exchange, is accepted with 95% confidence, and this relationship is negative. This finding supports the study of Felix & Lima [14].

Hypothesis 5: There is a significant relationship between earnings per share (EPS) and the value of companies listed on the Tehran Stock Exchange. Based on the results obtained, the coefficient for EPS is positive and statistically significant. Given the significance of this relationship, it can be stated that there is a positive and significant relationship between EPS and the value of companies listed on the Tehran Stock Exchange. Therefore, the fifth hypothesis is accepted. This finding is consistent with the studies of Sinaei et al. [38] and Meshki & Fahim [26].

Hypothesis 6: There is a significant relationship between capital structure and the value of companies listed on the Tehran Stock Exchange. The obtained results indicate a positive coefficient for the relationship between capital structure and the value of companies listed on the Tehran Stock Exchange, with a significance level below 0.05. Therefore, the hypothesis stating that there is a significant relationship between capital structure and the value of these companies is accepted with 95% confidence. This result is consistent with the findings of Sinaei et al. [38], Hashemi et al. [19], and Al-Davoud et al. [1].

Based on the results obtained, the hypotheses of this study are confirmed, indicating that factors such as the debt ratio to total assets, capital expenditures, retained earnings, distributed dividends, earnings per share, and capital structure significantly impact the value of companies listed on the Tehran Stock Exchange.

Summary and Conclusion

Predicting and evaluating the future economy using accounting and financial information can be of special and major help to shareholders, investors and all users of information. Shareholders always want maximum benefits and managers, who are the stewards of shareholders, pursue the goal of maximizing shareholder benefits in their decisions, as a result, they try to take positive steps at a reasonable level to increase the value of the company compared to other competing companies active in the Tehran Stock Exchange. Therefore, identifying the factors affecting the value of companies is of great importance and can help investors in evaluating and selecting the desired company and providing them with useful and reliable information from various aspects. Because the effective application of the above policies can attract the attention and trust of investors and increase the demand of investors to purchase shares and other securities of the company. This type of demand will in turn lead to an increase in the value of the company. Therefore, it is important for managers to be able to consider variables or factors that have a major impact on increasing the value of the company. In this study, in order to investigate the driving factors on the value of companies listed on the Tehran Stock Exchange, the variables of debt to total assets ratio, capital expenditures, retained earnings, distributed earnings, dividend per share, and capital structure have been examined and explored. The results obtained indicate a negative and significant relationship between debt to total assets ratio, retained earnings, capital expenditures, and distributed earnings, as well as a positive and significant relationship between dividend per share and capital structure.

Therefore, according to the results obtained, it is suggested to the management of companies, stock brokers and financial advisors who are responsible for analyzing the financial status of listed companies and explaining the future

financial status of companies to applicants for buying and selling shares, to make appropriate decisions to enhance the value of companies based on the results of these studies and also to provide further support in the form of further studies in this area, and also to provide the required information to applicants in this regard, so that investors and creditors can better make decisions about investing or granting loans based on relevant information. Also, considering the limited time period and the variables under study, studying the impact of other factors, especially disclosure, on the value of companies listed on the stock exchange, as well as studying this issue in the industry, can be included in the agenda of other future research.

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