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The Role of Stock Market Development in Enhancing Financial Concepts

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Abstract

This study examines the impact of stock market development on key corporate financial outcomes among firms listed on the Tehran Stock Exchange, with a comparative analysis across two distinct capital market periods. The study tests five hypotheses using panel data from 140 listed companies over the period 2011–2024. To capture structural changes in the market, the sample period is divided into two sub-periods: 2011–2017 (first period) and 2018–2024 (second period). The empirical analysis is conducted using panel regression models

with firm fixed effects. The results indicate that stock market development has a stronger and more pronounced impact during the second period (2018–2024). Specifically, investment efficiency and corporate financial health improve more substantially in the second period compared to the first. In addition, the cost of capital and reliance on debt financing decline more significantly in the second period. The findings also show a structural shift in corporate investment behavior: under greater stock market development, firms tend to move toward financial investment strategies and away from non-financial asset investment in the later period. This study contributes to the literature by providing comparative evidence on how structural changes and transparency-enhancing reforms in the stock market influence corporate financial outcomes over time. By distinguishing between two development phases of the capital market, the study offers new insights into the effectiveness of market reforms and their implications for corporate financial behavior.

Keywords: Stock Market Development, Transparency in Financial Reporting, Economic Development, Supervisory Mechanisms, Disclosure Quality.

JEL Classification: O11, O1, O2

Introduction

One of the key drivers of economic growth is financial development in any society. Economies that enjoy higher stock market development have the potential for greater economic growth and are thus positioned on a higher trajectory of economic advancement. The unexpected growth of capital markets worldwide over the past two decades and their increasing integration have necessitated that governments prioritize the development of domestic financial markets in their planning (Ben-Naceur & Ghazouani, 2018).

On the other hand, considering the emphasized importance of financial market development, the behavior of the stock market in the Iranian economic environment can be divided into two seven-year periods; the first seven years, from 2011to 2017, marked when the Tehran Stock Exchange (TSE) emerged as a nascent market, making strides towards capital attraction and fostering a thriving security market. Technology, computers, and the internet experienced significant growth during this period, leading the market towards a defined reporting framework and relative stability in market-related laws and

regulations. Additionally, access to reliable information increased compared to the years preceding this period.

The second seven-year period spans from 2018 to 2024 (the stock market experienced unprecedented growth in 2020), during which legislative bodies set more comprehensive standards. Transparency increased through the mandatory use of audit committees (since 2013 or 1392 in the Persian calendar), internal auditing (since 2013), limiting independent auditors' tenure to 4 years, and implementing new laws and regulations in the capital market to enhance transparency. Moreover, during this period, sanctions were highlighted more than ever as a major threat to the stock market's growth and development in the country's economic environment.

Moreover, during this period, the adoption of International Financial Reporting Standards (starting in 2016, or 1395 in the Persian calendar) and the imposition of stricter disclosure requirements by the Securities and Exchange Organisation received increased attention in the market. The number of listed companies and the volume of transactions on the TSE also increased during this second period, as the government provided more support for the capital market. Compared to the first period, society focused more on the stock market as an investment option alongside other markets. The number of brokerage firms, portfolio managers, investment consultants, and investment banks also increased during this second period.

This research is based on the perspective that, due to the facilities and changes in the second period compared to the first, greater stock market development has occurred, potentially affecting financial indices. Therefore, considering the changes in supervision and financial reporting, some of these changes were necessary for the market to move towards greater transparency and to be influenced by capital market development.

Reviewing the literature on stock market development in domestic and foreign research reveals that most studies have focused on the impact of stock market development on economic growth. At the same time, other areas have been largely ignored. Therefore, given the issues raised, the fundamental issue of this research is to examine the role of stock market development in

enhancing financial concepts, answering questions such as whether the growth and development of the stock market can improve financial indices and whether, in the second period, with the established laws and regulations and the existing obligations for improving transparency, the stock market was able to have a greater impact on financial indices compared to the first period.

Furthermore, this research can partially answer whether the changes made in the second period of the stock market, in terms of establishing stronger supervisory mechanisms and approving directives to enhance transparency, have managed to reduce the problems of the stock market and whether these changes, which have cost the market and companies, have managed to improve market efficiency or not.

This study contributes to the financial literature in several important ways. First, while previous studies on the Tehran Stock Exchange have primarily focused on specific dimensions of stock market development such as liquidity, market value, investment, and ownership structure, this research provides a more comprehensive framework by examining how stock market development enhances key financial concepts at the firm level.

Second, the study extends the literature by providing empirical evidence from companies listed on the Tehran Stock Exchange, an emerging market with unique institutional and economic characteristics. Given that most evidence on stock market development originates from developed economies, the findings offer valuable insights into how it influences corporate financial outcomes in emerging markets.

Finally, the study provides practical implications for policymakers, regulators, investors, and corporate managers. The findings can assist market authorities in designing policies that promote market depth, liquidity, and transparency, thereby improving the efficiency of the Tehran Stock Exchange and supporting sustainable corporate growth.

Literature Review

The role of stock market development on investment efficiency and cost of capital

Given the importance of this market and its development, it is posited that during the second phase of the capital market compared to the first, due to the further development of the capital market in terms of new standards, transparency, and the establishment of more precise supervisory mechanisms, increased transparency in the economic decision-making environment of the company and country has been achieved, which will enhance investment efficiency. Moreover, there are two competing arguments regarding the impact of capital market development on the cost of capital. The first argument claims that in the second phase of the capital market, compared to the first, the development of equity and debt instruments in the country's capital market, and market development in relation to liquidity and increased transaction volume alongside improved transparency in this market, will result in a further reduction in the cost of capital. On the other hand, the competing argument suggests that with the intensification of sanctions in the second phase of the capital market compared to the first, inflationary expectations have been generated in the capital market, leading to an increase in the expected returns of investors and lenders, increasing the cost of capital (Kumar & Yadav, 2019).

Considering these arguments, Umar (2022) studied the role of stock market development on economic growth. His research period was from 2010 to 2020. The research method was practical in its objective, correlational in type, and used regression to test the hypotheses. The research results showed a positive and significant relationship between capital market performance indicators and economic growth, as measured by real gross domestic product, indicating that capital market development will have a noticeable positive impact on economic growth.

Also, Kumar and Yadav (2019) believe that the indicators of banking sector development and the value of traded stocks are positively related to economic growth. Furthermore, their results suggest that the development of

the banking sector and indicators of stock market development stimulate economic and political growth in complementary ways. In addition, Golina (2019) showed that investing in the stock market, another factor affecting stock market development and an important role in income distribution, gives people wider and more extensive choices in a market-based financial system when the stock market is larger. The accumulation and investment of savings, guiding them towards the stock market, increases income inequality, as increased investment by the wealthy creates economic opportunities and concentrates power in the hands of society's wealthy.

The role of stock market development on financial health and financial strategies

In relation to the impact of capital market development on the financial health of companies, it is expected that in the second period of the Iranian capital market, compared to the first, due to developments in transparency, supervisory mechanisms, and stringent supervisory regulations of the stock organization, there will be a greater increase in the financial health of companies in the second period compared to the first. Also, it is claimed that stock market development can affect companies' investment and financing strategies (Ben Naceur et al., 2018). In terms of the impact of capital market development on the company's investment strategy, there is an argument that in the second period, with the expansion of various types of equity and debt instruments and the existence of portfolio management companies, investment consultants, and investment institutions, it will lead to the development of diverse investment strategies.

As a result, it is expected that during this period, with the development of the capital market and growing trust in it, investment strategies will shift towards financial rather than physical investment. On the other hand, regarding the impact of capital market development on the financing strategy, there is an argument that, with the development of the stock market, trust in the capital market increases, leading to improved transparency and lower financing costs for companies. Therefore, with the development of the capital market, financing through the issuance of equity instruments is expected to increase

compared to debt instruments (Pan & Mishra, 2018).

In light of the reasons stated, Tohidi (2022) examined market sentiment and stock market fluctuations on the Tehran Stock Exchange; the research period covered 2011 to 2017. The findings indicated that both optimistic and pessimistic sentiments have statistically significant negative and positive impacts on TEPIX fluctuations. However, the intensity of these negative and positive effects was mild. Furthermore, the results showed that inflation and liquidity fluctuations influence stock market fluctuations more than other variables, such as optimistic and pessimistic sentiments. Chen and Shen (2020), on the other hand, believe that a profit management detection model that considers stock market development can provide better estimates and classification. Moreover, Ibrahim et al. (2020) stated that the development of Nigeria's stock market had a significant positive impact on economic growth during the study period. The results also indicate that control variables, such as the performance of the banking system, have a significantly positive effect on gross domestic product growth. Godfrey and Ifuero (2019) conducted a study to examine the relationship between stock market development and economic growth in Brazil, Russia, India, China, and South Africa (BRICS) using time-series data from 1994 to 2015. The research findings indicated a positive correlation between these countries' economic growth index and stock market development.

On the other hand, Pan and Mishra's (2018) findings suggested that the Shanghai stock market has a long-term negative relationship with the real economy and has not had a significant impact on China's economy. These findings demonstrated a negative relationship between stock market development and the economic bubble in China's financial sector. The findings did not provide evidence of a short-term relationship between the stock market and the real economy.

Research Hypotheses

Based on the proposed theoretical and experimental background, the research hypotheses are as follows.

Hypothesis one: The development of the stock market in the second period, compared to the first period, has played a more significant role in enhancing investment efficiency.

Hypothesis two: The development of the stock market in the second period, compared to the first period, has played a more significant role in reducing the cost of capital.

Hypothesis three: The development of the stock market in the second period has played a more significant role in enhancing the financial health of companies compared to the first period.

Hypothesis four: The development of the stock market in the second period has played a more significant role in reducing the strategy of physical investment versus financial investment compared to the first period.

Hypothesis five: The development of the stock market in the second period has played a more significant role in reducing the strategy of companies' financing through the debt market compared to the first period.

Research Methodology

Given the impossibility of controlling all relevant variables, this research cannot be categorized as a purely empirical study; however, as it involves the analysis of past data, it can be classified as semi-empirical research. Furthermore, as the findings of this study address a specific problem or issue, it is applied in nature and utilizes correlation analysis with a regression approach. The study's statistical population includes all companies listed on the Tehran Stock Exchange from 2011 to 2024. In this study, to determine the statistical sample at each stage, from all the companies existing from the beginning of 2011 to the end of 2024, companies that did not meet the following conditions were eliminated, and the remaining companies were selected for testing:

- The companies should have continued their operations throughout the review period and not changed their fiscal year or business activity.
- The sample should not include companies active in insurance, banks, financial investments, or holdings.

- The companies' fiscal year must end on March 20.

Finally, as shown in the table below, 140 companies, encompassing the 1960 company years, were selected to investigate this issue.

Table 1. Sample Selection Method

Number of firm-years accepted for trading	5376
Number of firm-years with available data and continuous operation	4984
Number of firm-years ending on December 29	4438
Number of investment, insurance, leasing, banking firm-year, etc.	1008
Number of firm-years with incomplete data (or outliers) during the research period	1470
The remaining number of firm-years as a sample	1960

It should be noted that in this research, the sample was divided into two sub-samples: the years 2011-2017 as the first period of the stock market (as a period with less stock market development), and the years 2018-2024 as the second period of the stock market (as a period with more stock market development). Comparative tests were then conducted to confirm or reject the hypotheses.

Research Models

Given the theoretical foundations presented, this research aims to investigate the role of stock market development in promoting financial indices in companies listed on the Tehran Stock Exchange. Therefore, the following models are selected based on theoretical foundations and the reviewed literature to test the chosen hypotheses.

Model (1): For testing the first hypothesis: Top of Form

$$\text{Investment Efficiency}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$$

Model (2): For testing the second hypothesis:

$$\text{Cost Cf}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$$

Model (3): For testing the third hypothesis:

$$\text{Solvency Ratio}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$$

Model (4): For testing the fourth hypothesis:

$$\text{PPE}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$$

Model (5): For testing the fifth hypothesis:

$$\text{Leverage}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$$

Dependent Variables

Investment Efficiency: In this study, the Richardson (2006) model is used to assess underinvestment and overinvestment among companies listed on the Tehran Stock Exchange. The estimation of Richardson's (2006) model is as follows:

Investment Efficiency Model

In the above model:

$$Inv_{i,t} = \beta_0 + \beta_1 Grow_{i,t-1} + \beta_2 Lev_{i,t-1} + \beta_3 Age_{i,t-1} + \beta_4 Cash_{i,t-1} + \beta_5 Size_{i,t-1} + \beta_6 \text{Ret}_{i,t-1} + \varepsilon_{i,t}$$

Investment $Inv_{i,t}$: The ratio of change in total net fixed assets, long-term investments, and intangible assets to the average of total assets of the company i in year t.

Previous Year's Growth Opportunities $Grow_{i,t-1}$: The annual income growth rate of the company i in year t-1.

Financial Leverage $Lev_{i,t-1}$: Equal to the ratio of total liabilities to total assets of the company i in year t-1.

Company Age $Age_{i,t-1}$: Equal to the ratio of the company's lifespan to the logarithm of total assets of the company i in year t-1.

Cash Ratio $Cash_{i,t-1}$: Equal to the ratio of cash and short-term investments to the company's average assets in year t-1.

Company Size $Size_{i,t-1}$: Equal to the natural logarithm of the assets of company i in year t-1.

Annual Stock Returns $\mathrm{Re}t_{i,t-1}$: Equal to the annual return of company i in year t-1.

According to Richardson (2006), the sales variable estimates and calculates expected investment opportunities. According to this approach, investment is a function of growth opportunities and influential control variables. Therefore, the deviation of a company's actual investment from the expected investment predicted by the fitted equation indicates overinvestment or underinvestment. The magnitude of this deviation is an inverse index of investment efficiency (i.e., investment inefficiency). Therefore, this model represents the amount of investment not explained by growth opportunities. These error values may be positive or negative. Positive error values are called overinvestment, and negative values are called underinvestment. The dependent variable of the main model of this research, i.e., investment efficiency, is measured as the absolute value of this error term multiplied by a negative one. Therefore, the larger this value, the greater the investment efficiency.

Cost of capital (Cost Cf): The Gordon valuation model is used to measure the cost of equity in this research.

P is the stock price at the beginning of the period, D is the expected profit for the next year, K is the expected return rate of shareholders, and e is the expected growth rate. The geometric mean of three-year sales growth has been used to estimate the expected growth rate because sales growth is more stable and predictable than profit growth. This is due to sales' slight susceptibility to accounting practices compared to profit (Francis et al., 2008).

Company's Financial Health (Solvency Ratio): This ratio is obtained by dividing the total net profit after tax plus depreciation costs by the company's total liabilities (Widantoro, 2012).

Investment Strategy ($PPE_{i.t}$): It represents the company's investment strategy, equal to the sum of property, plant, and equipment (PPE) relative to the company's total assets (Christos & Vlismas, 2017).

Financing Strategy ($Leverage_{i.t}$): It represents the company's financing strategy, which is equal to the total sum of liabilities to the company's total assets (Christos & Vlismas, 2017).

Independent Variable

Stock Market Development (SMD): In this research, the Stock Market Development index is used as an independent variable derived from five variables. The variables used have been extracted from the studies by Atuilik and Salia (2018), Azam et al. (2016), Bayar et al. (2014), Ibrahim (2011), and Akinlo et al. (2009).

a) Market Capitalization (MKTCAP): Defined as the logarithm of the market value of the listed companies' stocks. Market capitalization has a positive relationship with capital stimulation and risk diversification. If it exceeds the median, it assumes 1; otherwise, it assumes 0.

b) Market Capitalization to GDP Ratio (MKTCAPGDP): Another indicator of stock market development, calculated by dividing the value of stocks of listed companies by Gross Domestic Product (GDP). If it exceeds the median, it assumes 1; otherwise, it assumes 0.

c) Number of Listed Companies (LDCT): Equal to the logarithm of the number of companies listed on the stock exchange. If it exceeds the median, it assumes 1; otherwise, it assumes 0.

d) Stock Turnover Ratio (STR): Equal to the ratio of the total value of traded stocks to the Gross Domestic Product (GDP). If it exceeds the median, it assumes 1; otherwise, it assumes 0.

e) Turnover Ratio (Turnover): This indicator reflects stock market activity and equals the ratio of total trading volume to the market value of listed companies' shares. If it exceeds the median, it assumes 1; otherwise, it assumes 0.

Finally, after determining a number for each year, the stock market development index is calculated as follows:

CMD = (Items which have obtain score 1)/(All the items which have obtained score 0 and 1)

Control Variables

Company Size: Equal to the natural logarithm of the sum of the company's assets (Andrew et al., 2018).

Company Liquidity: Equal to the ratio of cash and cash equivalents to the company's total assets (Andrew et al., 2018).

Loss Incurred: This is a dummy variable equal to 1 if the company incurs a loss in the current year; otherwise, 0 (Andrew et al., 2018).

Company Age: Equal to the natural logarithm of the company's age since its establishment (Andrew et al., 2018).

Market-to-Book Value Ratio (MBV): Defined as the ratio of the market value of shareholders' equity to the book value of shareholders' equity (Andrew et al., 2018).

Cash Flow from Operating Activities (CFO): Equal to the company's operating cash flow, which is adjusted for the company's total assets (Andrew et al., 2018).

Inflation Rate Changes: The Consumer Price Index is used as an inflation benchmark and is derived from economic indicators. Also, the changes in this index compared to the previous year have been calculated (Awad & Awad, 2015).

Exchange Rate Changes: This variable includes the free-market dollar price, derived from the Central Bank's economic indicators for the period (Awad & Awad, 2015).

Results

Descriptive Statistics

As observed, the descriptive statistics for the research variables are presented in Table 2.

Table 2. Descriptive Statistics of Research Variables

Variable	Mean	Median	Standard Deviation	Maximum	Minimum
Stock Market Development	0.50	0.50	0.428	1	0
Investment Efficiency	-0.156	-0.101	0.189	-0.001	-1.677
Cost of Capital	0.254	0.232	0.163	0.626	0
Financial Health	0.447	0.322	0.449	2.456	-0.311
Investment Strategy	0.365	0.324	0.176	0.806	0.050
Financial Provision Strategy	0.611	0.624	0.192	1.342	0.108
Company Size	13.910	13.709	1.659	19.374	9.777
Company Liquidity	0.069	0.045	0.081	0.434	0.001
Company Age	3.365	3.560	0.609	4.204	0.693
Market Value to Book Value Ratio	3.451	2.716	3.512	23.874	-3.490
Cash Flow from Operating Activities to Total Assets Ratio	0.145	0.129	0.143	0.532	-0.339
Inflation Rate	23.60	23.45	11.605	41.20	9
Exchange Rate Changes	0.333	0.156	0.455	1.665	0.030

Based on the descriptive statistics for the research variables and the proximity of the mean and median across most variables, it can be stated that all variables have a suitable distribution. Moreover, standard deviation, skewness, and kurtosis statistics are also employed to examine the normality of data distribution (Keller & Warrack, 2003). On the other hand, the stock market development variable has a mean of 50 per cent, which, when examined annually, indicates that, as anticipated for the second market period, development was higher than in the first period. In the years related to the second period, the value of this index is larger than in the first period.

In addition, the averages for the independent variables of investment strategy and financing are approximately 36 and 61 per cent, respectively, indicating a reasonable share of physical investment in the asset structure and a high share of debt financing in the financial structure of Iranian companies. Similarly, the company loss variable has a frequency of about 9 per cent, indicating that around 9 per cent of sample-year companies are loss-making. Furthermore, the average inflation rate during the research period is

approximately 24 per cent, and the average exchange rate changes are around 33 per cent, indicating that economic conditions fluctuated during the research period, which could be due to sanctions.

Additionally, the company liquidity variable averages about 7 per cent, which, given high inflation and existing economic fluctuations, indicates significant liquidity problems in Iranian companies. Moreover, the ratio of operating cash flow to total assets averages about 14 per cent, which, given the average inflation of 24 per cent during the research period, indicates operational weakness in Iranian companies, possibly due to macroeconomic variables and sanctions.

Hypothesis Testing Results

This research examines the role of stock market development in promoting financial concepts in companies listed on the Tehran Securities Exchange. In this regard, considering the theoretical foundations presented, five hypotheses were formulated and subsequently tested. However, before fitting the research models, the Chow and Hausman tests must be conducted, respectively, to examine the use of the panel data method versus the pooled data method and to select between the fixed-effects and random-effects models for the research sample (Keller & Warrack, 2003). The results obtained from the Chow and Hausman tests for the other research models are shown in Table 3.

Table 3. Results of Chow and Hausman Tests for the Research Models

Examined Model	Chow Test		Hausman Test		Accepted Method
	Statistic	Error Level	Statistic	Error Level	
First Capital Market Period (2011-2017)					
Model 1	4.373	0.000	45.08	0.000	Panel data
Model 2	17.748	0.000	57.26	0.000	Panel data
Model 3	6.046	0.000	48.85	0.000	Panel data
Model 4	32.526	0.000	78.98	0.000	Panel data
Model 5	13.074	0.000	56.87	0.000	Panel data
Second Capital Market Period (2018-2024)					
Model 1	6.635	0.000	48.93	0.000	Fixed Effect
Model 2	13.474	0.000	52.08	0.000	Fixed Effect
Model 3	7.286	0.000	49.05	0.000	Fixed Effect
Model 4	20.265	0.000	63.98	0.000	Fixed Effect
Model 5	14.854	0.000	58.90	0.000	Fixed Effect

As shown in Table 3, the results of the model specification tests indicate that the fixed-effects panel data model is the most appropriate estimation method for the study. Accordingly, the first research model was estimated separately for the two capital market periods, 2011–2017 and 2018–2024, to test the first hypothesis. The estimation results are reported in Table 4. In addition to evaluating the statistical significance of the coefficients, the analysis considers their economic significance by assessing the magnitude of the estimated effects and their practical implications for stock market development and financial outcomes.

Table 4. Estimation Results of Stock Market Development on Investment Efficiency

$$Investment\ Efficiency_{i,t} = \beta_0 + \beta_1 CMD_{i,t} + \beta_2 size_{i,t} + \beta_3 Liquid_{i,t} + \beta_4 Loss_{i,t} + \beta_5 Age_{i,t} + \beta_6 MBV_{i,t} + \beta_7 CFO_{i,t} + \beta_8 INF_{i,t} + \beta_9 Exchange_{i,t} + \varepsilon_{i,t}$$

	Capital Market Period 1: 2011-2017			Capital Market Period 2: 2018-2024		
Variable	Coefficient	T-statistics	P-value	Coefficient	T-statistics	P-value
Intercept	-0.026	-0.249	0.802	-0.428	-2.900	0.003
Stock Market Development	0.075	3.534	0.000	0.157	6.415	0.000
Company Size	-0.005	-1.276	0.202	-0.003	-0.644	0.519
Company Liquidity	0.007	0.277	0.781	0.028	0.926	0.354
Company Loss Status	-0.012	-0.993	0.320	-0.023	-2.841	0.004
Company Age	0.023	2.427	0.007	0.148	3.534	0.000
Market to Book Value Ratio	0.000	0.269	0.787	-0.000	-0.138	0.890
Cash Flow to Total Assets Ratio	0.013	0.814	0.415	0.065	2.816	0.005
Inflation Rate	0.000	0.182	0.855	0.002	5.607	0.000
Exchange Rate Changes	0.020	0.839	0.401	-0.022	-4.139	0.000
Determination Coefficient (R-squared)	0.458			0.477		
Adjusted Determination Coefficient	0.361			0.384		
Durbin-Watson Statistics	2.276			2.240		
F-Statistic	4.748			5.123		
Probability F-Statistic	0.000			0.000		
Paternoster test for comparing coefficients						
Test Results for Coefficient Comparison	2.530			0.011		

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Based on the results reported in Table 4, the F-statistics are significant at the 1 per cent level, indicating that the estimated models are jointly significant. The adjusted coefficients of determination indicate that the explanatory and control variables account for approximately 36 per cent and 38 per cent of the variation in investment efficiency during the first (2011–2017) and second (2018–2024) capital market periods, respectively. In addition, the Durbin–Watson statistics (2.276 and 2.240) are close to the benchmark value of 2, suggesting the absence of first-order serial correlation in the residuals.

The estimation results indicate that stock market development is positively associated with investment efficiency in both periods. Specifically, the coefficients on stock market development are 0.075 for the 2011–2017 period and 0.157 for the 2018–2024 period, both statistically significant at the 5 per cent level. These findings suggest that improvements in stock market development contribute to higher levels of investment efficiency. However, while the estimated effects are statistically significant, their economic magnitude appears to be moderate, implying that stock market development is one of several factors influencing investment efficiency rather than the sole or dominant determinant.

The larger coefficient observed in the second period indicates that the contribution of stock market development to investment efficiency strengthened after 2018. From an economic perspective, this result may reflect improvements in market infrastructure, greater market participation, enhanced information dissemination, and more efficient capital allocation mechanisms during the later period. Furthermore, the coefficient comparison test confirms that the difference between the two estimated effects is statistically significant at the 5 per cent level, suggesting that the role of stock market development in enhancing investment efficiency has increased over time. Therefore, the empirical evidence supports the first research hypothesis. These findings are consistent with those reported by Li et al. (2019) and align with the theoretical expectations underlying the study.

On the other hand, the research's second model has been used to examine the effect of stock market development on the firm's cost of capital. The estimation results of this model for the first period of the capital market (2011-2017) and the second period of the capital market (2018-2024) for the examination of the second hypothesis, considering the fixed effects method, are presented in Table 5.

Table 5. Estimation Results of Stock Market Development on Cost of Capital

$\text{Cost Cf}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$						
	Capital Market Period 1: 2011-2017			Capital Market Period 2: 2018-2024		
Variable	Coefficient	T-statistics	P-value	Coefficient	T-statistics	P-value
Intercept	254.0	4.20	0.000	-0.783	-5.770	0.000
Stock Market Development	-0.148	-12.977	0.000	-0.489	-26.436	0.000
Company Size	-0.005	-1.276	0.202	-0.003	-0.644	0.519
Company Liquidity	-0.001	-0.120	0.904	-0.017	-0.681	0.495
Company Loss Status	0.021	3.548	0.000	0.008	1.401	0.161
Company Age	-0.051	-5.670	0.000	-0.241	-6.177	0.000
Market to Book Value Ratio	-0.003	-6.433	0.000	0.000	-0.090	0.927
Cash Flow to Total Assets Ratio	0.023	2.472	0.013	-0.001	-0.117	0.906
Inflation Rate	0.001	9.259	0.000	0.008	27.873	0.000
Exchange Rate Changes	0.144	11.302	0.000	0.058	14.316	0.000
Determination Coefficient (R-squared)	0.885			0.916		
Adjusted Determination Coefficient	0.873			0.902		
Durbin-Watson Statistics	1.736			1.764		
F-Statistic	80.991			82.022		
Probability F-Statistic	0.000			0.000		
Paternoster test for comparing coefficients						
Test Results for Coefficient Comparison	15.683			0.000		

Based on the results reported in Table 5, the F-statistics for both periods are significant at the 1 per cent level, indicating that the estimated models are jointly significant. The adjusted R-squared values further demonstrate substantial explanatory power, indicating that the independent and control variables explain approximately 87 per cent and 90 per cent of the variation in the cost of capital during the first (2011–2017) and second (2018–2024) capital market periods, respectively. Moreover, the Durbin–Watson statistics of 1.736 for the first period and 1.764 for the second period are reasonably close to the benchmark value of 2, suggesting the absence of serious first-order autocorrelation in the residuals and supporting the reliability of the regression estimates.

The estimation results indicate a negative and statistically significant relationship between stock market development and the cost of capital in both periods. Specifically, the coefficients of stock market development are −0.148 for the 2011–2017 period and −0.489 for the 2018–2024 period. These findings suggest that improvements in stock market development are associated with reductions in firms' cost of capital, which is consistent with the view that more developed capital markets enhance liquidity, improve information efficiency, reduce information asymmetry, and facilitate more efficient resource allocation.

From an economic perspective, the magnitude of the estimated coefficients indicates that the impact of stock market development on the cost of capital became substantially stronger during the second period. The coefficient of −0.489 implies a considerably larger reduction in the cost of capital relative to the coefficient observed during 2011–2017. This finding suggests that the benefits of stock market development in lowering financing costs intensified over time, potentially reflecting improvements in market depth, regulatory quality, investor participation, and the overall efficiency of financial intermediation.

Furthermore, the coefficient comparison test confirms that the difference between the estimated effects across the two periods is statistically significant at the 5 per cent level. Therefore, the empirical evidence supports the second

research hypothesis and indicates that the role of stock market development in reducing the cost of capital strengthened during the 2018–2024 period. These results are consistent with the study's theoretical framework and align with the empirical evidence reported by Kumar and Yadav (2019).

Moreover, the third model was used to investigate the effect of stock market development on the company's financial health. Table 6 presents the estimation results of this model for the first (2011-2017) and second (2018-2024) capital market periods, using the fixed effects method, to examine the third hypothesis.

Table 6. Estimation results of the impact of stock market development on the financial health of companies

$\text{Solvency Ratio}_{i,t} = \beta_0 + \beta_1 \text{CMD}_{i,t} + \beta_2 \text{size}_{i,t} + \beta_3 \text{Liquid}_{i,t} + \beta_4 \text{Loss}_{i,t} + \beta_5 \text{Age}_{i,t} + \beta_6 \text{MBV}_{i,t} + \beta_7 \text{CFO}_{i,t} + \beta_8 \text{INF}_{i,t} + \beta_9 \text{Exchange}_{i,t} + \varepsilon_{i,t}$						
	Capital Market Period 1: 2011-2017			Capital Market Period 2: 2018-2024		
Variable	Coefficient	T-statistics	P-value	Coefficient	T-statistics	P-value
Intercept	0.914	4.757	0.000	-0.463	-1.871	0.061
Stock Market Development	0.149	3.777	0.000	0.387	9.322	0.000
Company Size	0.019	1.353	0.176	0.018	1.389	0.165
Company Liquidity	0.126	2.197	0.028	0.545	5.489	0.000
Company Loss Status	-0.274	-10.941	0.000	-0.198	-17.352	0.000
Company Age	0.080	2.908	0.003	0.260	3.795	0.000
Market to Book Value Ratio	-0.004	-2.102	0.035	0.002	2.089	0.036
Cash Flow to Total Assets Ratio	0.398	10.938	0.000	0.261	7.066	0.000
Inflation Rate	-0.002	-3.633	0.000	-0.003	-6.452	0.000
Exchange Rate Changes	-0.115	-2.665	0.007	-0.048	-5.540	0.000
Determination Coefficient (R-squared)	0.728			0.804		
Adjusted Determination Coefficient	0.680			0.769		
Durbin-Watson Statistics	1.747			1.709		
F-Statistic	15.058			23.124		
Probability F-Statistic	0.000			0.000		
Paternoster test for comparing coefficients						
Test Results for Coefficient Comparison	4.143			0.000		

According to the results presented in Table 6, the F-statistics for both sub-periods are significant at the 1 per cent level, indicating that the estimated models are jointly significant. The adjusted R-squared values further demonstrate satisfactory explanatory power. Specifically, the independent and control variables explain approximately 68 per cent of the variation in corporate financial health during the first capital market period (2011–2017) and 76 per cent during the second period (2018–2024). In addition, the Durbin–Watson statistics of 1.747 and 1.709 for the first and second periods, respectively, are reasonably close to the benchmark value of 2, suggesting the absence of serious first-order autocorrelation in the residuals and supporting the reliability of the regression estimates.

The estimation results reveal a positive and statistically significant relationship between stock market development and corporate financial health in both periods. The estimated coefficients are 0.149 for the 2011–2017 period and 0.387 for the 2018–2024 period, indicating that improvements in stock market development are associated with stronger corporate financial health. This finding is consistent with the argument that more developed stock markets facilitate access to external financing, enhance liquidity, improve information transparency, and strengthen corporate governance mechanisms, all of which can contribute to improved financial performance and stability.

From an economic perspective, the magnitude of the estimated coefficients suggests that the beneficial effect of stock market development on corporate financial health increased substantially over time. While the coefficient of 0.149 indicates a positive but moderate effect in the first period, the coefficient of 0.387 implies a considerably stronger effect in the second period. This pattern suggests that the capacity of stock market development to support firms' financial conditions became more pronounced during 2018–2024, possibly reflecting greater market efficiency, increased investor participation, and enhanced financial market infrastructure.

Furthermore, the coefficient comparison test confirms that the difference between the estimated effects across the two periods is statistically significant at the 5 per cent level. Therefore, the empirical evidence supports the third

research hypothesis and indicates that the positive contribution of stock market development to corporate financial health strengthened over time. These findings are consistent with the study's theoretical framework and align with the empirical evidence reported by Chen and Shen (2020).

In addition, to investigate the impact of stock market development on investment strategy, the fourth model was used. The results of this model's estimation for the first capital market period (2011-2017) and the second capital market period (2018-2024), examining the fourth hypothesis using the fixed effects method, are presented in Table 7.

Table 7. Results of Estimating Stock Market Development on Investment Strategy

$PPE_{i,t} = \beta_0 + \beta_1 CMD_{i,t} + \beta_2 size_{i,t} + \beta_3 Liquid_{i,t} + \beta_4 Loss_{i,t} + \beta_5 Age_{i,t} + \beta_6 MBV_{i,t} + \beta_7 CFO_{i,t} + \beta_8 INF_{i,t} + \beta_9 Exchange_{i,t} + \varepsilon_{i,t}$						
	Capital Market Period 1: 2011-2017			Capital Market Period 2: 2018-2024		
Variable	Coefficient	T-Statistic	Error Level	Coefficient	T-Statistic	Error Level
Intercept	0.286	6.650	0.000	-0.176	-2.599	0.009
Stock Market Development	0.035	4.465	0.000	-0.042	-4.282	0.000
Company Size	0.015	4.387	0.000	0.042	8.926	0.000
Company Liquidity	-0.008	-0.830	0.406	-0.113	-4.537	0.000
Company Loss	-0.022	-5.065	0.000	-0.008	-2.130	0.033
Company Age	0.065	10.148	0.000	0.035	2.289	0.022
Market-to-Book Value Ratio	-0.001	-3.232	0.001	-0.001	-4.591	0.000
Ratio of Operating Cash Flow to Total Assets	0.006	0.988	0.323	0.007	0.700	0.484
Inflation Rate	-0.0002	-1.522	0.128	-0.0004	-2.927	0.003
Exchange Rate Changes	-0.056	-6.381	0.000	-0.005	-2.933	0.003
Determination Coefficient	0.968			0.967		
Adjusted Determination Coefficient	0.962			0.961		
Durbin-Watson Statistic	1.789			1.718		
F-Statistic	169.87			165.058		
Probability of F-Statistic	0.000			0.000		
Paternoster test for comparing coefficients						
Results of the Coefficient Comparison Test	6.138			0.000		

Based on the results reported in Table 7, the F-statistics for both sub-periods are significant at the 1 per cent level, indicating that the estimated models are jointly significant. The adjusted R-squared values indicate substantial explanatory power, showing that the independent and control variables explain more than 96 per cent of the variation in the dependent variable in both the first (2011–2017) and second (2018–2024) capital market periods. Moreover, the Durbin–Watson statistics of 1.789 for the first period and 1.718 for the second period are reasonably close to the benchmark value of 2, suggesting the absence of serious first-order autocorrelation in the residuals and supporting the reliability of the regression estimates.

With respect to the fourth research model, the coefficient on the stock market development variable is positive (0.035) and statistically significant at the 5 per cent level in the first period. In contrast, it is negative (−0.042) and statistically significant in the second period. These results indicate a change in the direction of the relationship between stock market development and the investment strategy of non-financial assets across the two periods.

From an economic perspective, the estimated coefficients are relatively modest in magnitude, suggesting that stock market development is only one of several factors influencing firms' investment decisions regarding non-financial assets. Nevertheless, the reversal of the coefficient's sign is noteworthy. During 2011–2017, stock market development was associated with a slight increase in investment in non-financial assets, possibly reflecting favorable financing conditions that encouraged firms to expand their real asset base. In contrast, during 2018–2024, greater stock market development was associated with a modest reduction in such investments. One possible explanation is that as capital markets became more developed and efficient, firms gained access to a broader range of investment and financing opportunities, potentially reducing the relative emphasis on non-financial asset accumulation.

Furthermore, the coefficient comparison test confirms that the difference between the estimated effects across the two periods is statistically significant at the 5 per cent level. Therefore, the empirical evidence supports the fourth research hypothesis and suggests that the relationship between stock market

development and non-financial asset investment strategies underwent a meaningful structural change over time. While the economic magnitude of the estimated effects remains moderate, the shift from a positive to a negative association highlights the evolving role of stock market development in shaping firms' investment behavior. These findings are consistent with the study's theoretical framework and align with the empirical evidence reported by Chen and Shen (2020).

On the other hand, the fifth model has been used to examine the effect of stock market development on the financial sourcing strategy. The estimation results of this model for the first (2011-2017) and second (2018-2024) periods of the capital market, used to test the fifth hypothesis, are presented in Table 8, using the fixed effects method.

Table 8. Estimation Results of Stock Market Development on Financing Strategy

$Leverage_{i,t} = \beta_0 + \beta_1 CMD_{i,t} + \beta_2 size_{i,t} + \beta_3 Liquid_{i,t} + \beta_4 Loss_{i,t} + \beta_5 Age_{i,t} + \beta_6 MBV_{i,t} + \beta_7 CFO_{i,t} + \beta_8 INF_{i,t} + \beta_9 Exchange_{i,t} + \varepsilon_{i,t}$						
	Capital Market Period 1: 2011-2017			Capital Market Period 2: 2018-2024		
Variable	Coefficient	T-Statistic	Error level	Coefficient	T-Statistic	Error level
Intercept	0.017	0.176	0.859	1.126	7.388	0.000
Stock Market Development	0.187	9.350	0.000	0.065	2.744	0.006
Firm Size	0.043	5.510	0.000	0.036	4.190	0.000
Firm Liquidity	-0.023	-0.832	0.405	-0.168	-3.591	0.000
Firm Loss-making	0.132	11.165	0.000	0.056	6.894	0.000
Firm Age	0.009	0.746	0.455	0.019	0.476	0.633
Market to Book Value Ratio	0.015	15.834	0.000	0.008	9.192	0.000
Operating Cash Flow to Total Assets Ratio	-0.159	-9.046	0.000	-0.122	-5.650	0.000
Inflation Rate	-0.003	-10.298	0.000	-0.0007	-2.072	0.038
Exchange Rate Changes	0.095	4.265	0.000	0.020	3.912	0.000
Determination Coefficient	0.878			0.916		
Adjusted Determination Coefficient	0.856			0.901		
Durbin-Watson Statistic	1.827			1.853		
F-Statistic	40.423			61.786		
F-Statistic Probability	0.000			0.000		
Paternoster Test for Comparing Coefficients						
Results of the Coefficient Comparison Test	3.906			0.000		

Based on the results reported in Table 8, the F-statistics for both sub-periods are significant at the 1 per cent level, indicating that the estimated models are jointly significant. The adjusted R-squared values further demonstrate substantial explanatory power, indicating that the independent and control variables explain approximately 85 per cent and 90 per cent of the variation in corporate debt financing during the first (2011–2017) and second (2018–2024) capital market periods, respectively. Moreover, the Durbin–Watson statistics of 1.827 and 1.853 are reasonably close to the benchmark value of 2, suggesting the absence of serious first-order autocorrelation in the residuals and supporting the reliability of the regression estimates.

The estimation results indicate a positive and statistically significant relationship between stock market development and corporate debt financing in both periods. Specifically, the coefficients on stock market development are 0.187 in the first period and 0.065 in the second period, with both coefficients significant at the 5 per cent level. These findings suggest that improvements in stock market development are associated with greater use of debt financing by firms, which may reflect enhanced access to financial markets, improved information transparency, and lower financing frictions.

From an economic perspective, however, the magnitude of the effect declined considerably over time. While the coefficient of 0.187 during 2011–2017 indicates a moderate positive association between stock market development and debt financing, the coefficient of 0.065 during 2018–2024 suggests a much weaker effect. Although stock market development continued to support firms' financing activities in the later period, its contribution to debt financing appears to have diminished. One possible explanation is that as capital markets became more developed, firms gained access to a wider range of financing options, including equity and other market-based sources, thereby reducing their reliance on debt financing.

Furthermore, the coefficient comparison test confirms that the difference between the estimated coefficients across the two periods is statistically significant at the 5 per cent level. Therefore, the empirical evidence supports the fifth research hypothesis and indicates that the positive relationship

between stock market development and corporate debt financing weakened over time. While stock market development remains an important factor influencing firms' financing decisions, the results suggest that its economic impact on debt financing became less pronounced during the 2018–2024 period. These findings are consistent with the study's theoretical framework and align with the empirical evidence reported by Chen and Shen (2020).Top of Form

Discussion and Conclusion

This study examined whether stock market development enhances key corporate financial outcomes—investment efficiency, cost of capital, financial health, investment strategy, and financing strategy—among firms listed on the Tehran Stock Exchange, comparing two capital market periods (2011–2017 and 2018–2024).

From a theoretical perspective, stock market development is expected to improve corporate outcomes through several channels, including enhanced transparency, stronger supervisory mechanisms, expanded financial instruments, greater liquidity, and improved corporate governance. In the second period, reforms such as stricter disclosure requirements, strengthened audit and governance mechanisms, and broader market participation likely reduced information asymmetry and improved monitoring. These structural changes provide a foundation for expecting stronger financial performance effects in the later period.

Investment efficiency and financial health

Consistent with these expectations, the findings show that stock market development has a stronger positive effect on investment efficiency and corporate financial health in the second period compared to the first. Improved transparency and monitoring mechanisms likely reduced agency problems and resource misallocation, thereby enhancing firms' ability to undertake value-creating projects. The results suggest that capital market maturation contributes to more disciplined managerial decision-making and stronger financial stability.

Cost of capital and financing structure

The relationship between stock market development and cost of capital is ambiguous. On the one hand, greater liquidity, improved disclosure, and expanded access to equity and debt instruments should reduce financing costs. On the other hand, macroeconomic pressures—such as sanctions and inflationary expectations during the second period—could increase required returns, thereby raising the cost of capital.

Empirically, the results support the first argument: stock market development is associated with a stronger reduction in the cost of capital and debt financing in the second period. This indicates that improvements in market infrastructure and transparency outweighed macroeconomic pressures, ultimately lowering financing costs and facilitating more efficient capital allocation.

Investment strategy and financial orientation

The findings also reveal a structural shift in corporate investment behavior. With the expansion of financial instruments, institutional investors, and portfolio management services in the second period, firms increasingly shifted toward financial investment strategies. They reduced their reliance on non-financial (physical) investments. This suggests that as the capital market deepens and gains credibility, firms respond by reallocating resources toward financial assets and market-based opportunities.

In addition, greater market development encourages a financing structure more closely aligned with capital market mechanisms, supporting the view that market trust and sophistication promote more efficient financial decision-making.

Policy and practical implications

The results have important policy implications. Since stock market development is associated with lower financing costs, improved investment efficiency, and stronger financial health, policymakers should prioritize reforms that enhance transparency, regulatory stability, and investor protection. Avoiding inconsistent or interventionist regulatory actions that undermine

investor confidence is critical for sustaining market development.

Corporate managers should also recognize that compliance with transparency-enhancing regulations and governance standards is not merely a legal obligation but a mechanism that contributes to long-term financial performance. Resistance to such reforms for short-term considerations may limit firms' access to the benefits of a developed capital market.

Finally, for investors, the findings highlight the importance of market sophistication and institutional quality when making domestic or international investment decisions. More developed and transparent capital markets reduce information risk, lower transaction costs, and provide stronger protection against opportunistic behavior.

Overall conclusion of the discussion

Overall, the evidence suggests that the structural evolution of the capital market in the second period strengthened the positive role of stock market development in shaping corporate financial behavior. The comparative approach of this study demonstrates that market reforms and transparency-enhancing mechanisms are not neutral—they materially influence firms' investment, financing, and strategic decisions over time.

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References

Akinlo, A. E., & Akinlo, O. (2009). Stock market development and economic growth: Evidence from seven sub-Sahara African countries, *Journal of Economics and Business.* 61, 162–171.

Andrew, C., & Bin, M. (2018). Does Long-Term Earnings Guidance Mitigate Managerial Myopia?. www. ssrn.com /abstract=2570037.

Atuiatuilik, W. A., & Salia, H. (2018). The Importance of financial reporting to capital market development in Ghana, *Journal of Economics and International Finance*, Vol. 10(8), 89–94.

Awad, E., & Awad, I. (2015). Economic growth and cost stickiness: evidence from Egypt. *Journal of Financial Reporting and Accounting*, 13(1): 119–140.

Azam, M., Haseeb, M., & Samsi, A. (2016). Stock market development and economic growth: Evidences from Asia-4 countries, *International Journal of Economics and Financial Issues,* 2016, 6(3), 1200–1208.

Bayar, Y., Kaya, A., & Yıldırım, M. (2014). Effects of Stock Market Development on Economic Growth: Evidence from Turkey, *International Journal of Financial Research,* 5(1); 2014.

Ben Naceur, S., & Ghazouani (2018). The relationship among financial market development and economic growth. *Research in International Business and Finance,* 21(2), 297-315.

Breuer, W., Rosenbach, D., & Salzmann, A. (2015). Corporate Social Responsibility, Corporate Governance and Cost of Equity: A Cross-country Comparison, ssrn.com/abstract=2569557.

Chen, S., & Shen, Z. (2020). An Effective Enterprise Earnings Management Detection Model for Capital Market Development, *Journal of Economics, Management and Trade*, 26(4): 77–91, 2020; Article no.JEMT.58568.

Christos V., N., & Vlismas, O. (2017). Strategy, managerial ability and stick behavior of selling, general and administrative expenses, Management Science, September 2016.

Francis, J., Nanda, D. J. , & Olsson, P. (2008). Voluntary disclosure, earnings quality and cost of capital, *Journal of Accounting Research* 46, 53–99.

Godfrey, O., & Ifuero O., (2019). Impact of Stock Market Development on Economic Growth in BRICS. *International Journal of Financial Research*, 10(1), 23–30.

Golina, N. J. (2019). An examination of the stock market's effect on economic inequality. *Undergraduate Economic Review*, (1), 7–28.

Ibrahim, M, H. (2011). Stock Market Development and Macroeconomic Performance

in Thailand, Inzinerine Ekonomika. *Engineering Economics*, 22(3), 230–240.

Ibrahim, U., & Mohammed, Z. (2020). Assessing the Impact of Capital Market Development on Economic Growth: Evidence from Nigeria, *IOSR Journal of Economics and Finance* (IOSR-JEF) e-ISSN: 2321–5933, 11(2), 1–15.

Keller, G., & Warrack, B. (2003). Statistics for management and economics. Pacific Grove, CA: Duxbury Press.

Kumar, B., G., & Yadav, I., S. (2019). Financial development and economic growth: panel evidence from BRICS, *Journal of Economics, Finance and Administrative Science.* 24(47), 113–126.

Li, Y., He, J., & Xiao, M. (2019). Risk Disclosure in Annual Reports and Corporate Investment Efficiency, *International Review of Economics and Finance*, 112(3), 522-558.

Pan, L., & Mishra, V. (2018). Stock market development and economic growth: Empirical evidence from China. *Economic Modelling*, 68, 661–673.

Richardson, S. (2006). Over-investment of free cash flow. *Review of Accounting Studies*, 11 (2-3), 159–189.

Tohidi, M. (2022). Market Sentiment and Stock Market Volatility: Evidence from Tehran Stock Exchange, *Iranian Journal of Management Studies* (IJMS) 15(4), 701-720.

Widiantoro, D. (2012). Measuring the Impact of Intangible Asset Investment toward Company Financial Health and Company Agency Problem, *ACRN Journal of Finance and Risk Perspectives,* 1(2), Upcoming, Dec. 2012, ISSN 2224-9729.

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