Quest Journals
Journal of Research in Business and Management
Volume 12 ~ Issue 6 (2024) pp: 120-125
ISSN(Online):2347-3002
www.questjournals.org

Research Paper

Factors that can affect stock price on HNX

Vu Kim Dung
[1](*University of Melbourne*)

ABSTRACT: *The factors which are influenced market values of shares plays an important to investors' decisions. This research focus on 359 listed companies on Hanoi Stock Exchange (HNX), with data is collected from 2012-2016 to find out factors that affect to market value of these firms. The result shows that, dividend, EPS, P/E, GDP and CPI influence to market value of listed firms on HNX.*
KEYWORDS: *Stock Price; DIV;EPS; GDP;CPI*

R*eceived 03 June, 2024;* ***R****evised 12 June, 2024;* ***A****ccepted 14 June, 2024 © The author(s) 2024.*
P*ublished with open access at* ***www.questjournals.org***

I. INTRODUCTION

In recent years, many researchers have paid special attention to the factors that affect the stock price. By studying these factors, investors can predict the future stock price trend, and thus get the specific stock trading strategy at each stage.

Empirical studies have shown that there are many factors that affect stock market prices such as dividend payout ratio, financial leverage, EPS, P/E, etc. (Black and Scholes, 1974; Gordon et al, 2000; Al- Tamimi et al, 2007, etc.). In Vietnam, there are a number of studies by authors Tran Thi Minh and Vu Minh Thao (2013), Pham Minh Tuan (2014) also researched factors affecting stock prices listed on the Stock Exchange. TP. Ho Chi Minh City (HOSE), including influencing variables such as money supply, oil prices, exchange rates, etc. Thus, there have been many different studies examining factors affecting the market price of shares listed on the stock market. However, research in Vietnam is still limited, especially research on the Hanoi Stock Exchange (HNX). Furthermore, in Vietnam there has been no research on the impact of variables such as the number of years of listing, net asset value per share, and the number of years of establishment of a business on stock market prices. Therefore, this study will focus on those research gaps.

II. THEORETICAL BASE AND RESEARCH MODEL

Al-Qenae et al. (2002) studied the Kuwait stock market, concluding that earnings per share (EPS), gross domestic product (GDP) have the same impact on the fluctuation of stock prices on the market; However, stock market prices fluctuate inversely with interest rates and inflation. Similarly, Al- Tamimi et al. (2007) said that, on the UAE stock market (United Arab Emirates), the EPS factor has the strongest impact and is in the same direction as the fluctuation of stock market prices, GNP has the same impact as stock prices, but is not statistically significant.

Mehr-un-Nisa and Nishat (2011) used the GMM (Generalized Method of Moments) method to study the Karachi stock market (Pakistan). The results show that there are fluctuations in the same direction between stock prices and capital structures, market value-to-book value ratio, EPS and company size. Regarding macro factors, research results show that stock prices fluctuate in the same direction as GDP growth rate, money supply and financial depth. On the contrary, stock prices fluctuate inversely with interest rates and inflation rates. In another study, Haque and Faruquee (2013) studied the factors affecting the prices of stocks in the financial sector in Bangladesh. The data used in the study were collected from the financial statements of 67 companies listed on the Dhaka Stock Exchange in the period from 2005 to 2011. The results of regression analysis show that EPS, asset value Net profit (NAV), profit before tax, P/E ratio (market price to profit) fluctuate in the same direction as the prices of stocks in the financial industry listed on the Dhaka Stock Exchange.

Regarding business age and number of years listed, Clark (2002) studied over 1,000 businesses in the US during the period 1991-1997, including the time before and after the company IPO and listed on the Stock

*Corresponding Author: Vu Kim Dung
University of Melbourne

Exchange. stock trading. The results show that the age of a business has a positive relationship with the business results of the business, thereby having a positive impact on the stock market price of those businesses. However, in the period 1995-1997 alone, newly listed technology companies surpassed established companies when comparing the profit ratio achieved, and had a better market price growth rate than other companies. previously listed. In addition, in the period 1991-1997, companies in the technology sector with young age suffered more losses when the economic crisis occurred in 1997, causing market prices to decline deeply, even bankrupt.

In Vietnam, Tran Thi Minh and Vu Minh Thao (2013), Pham Minh Tuan (2014), studied the influence of some macro factors on the market price index of the City Stock Exchange. Ho Chi Minh City (VN-Index) in the period from July 2000 to September 2011 and the period 2006-2012. Research results show that money supply, industrial output and world oil prices are positively correlated with the market price index. On the contrary, the interest rate variable changes in VN-Index. What's special is that the authors found a fluctuation in the same direction between inflation and the market price index but it was not statistically significant.

III. RESEARCH METHODS

This study focuses on collecting secondary data of companies listed on HNX, with a data collection period of 5 years, period 2012-2016. Of the 376 listed companies during this period, only 359 companies had complete data for research purposes. In particular, the research variables are shown in Table 1:

Applying the regression research model of Tamimi (2007), adjusting some variables to suit this study, the regression model is built as follows:

$$MP = \beta 0 + \beta 1\ DIV + \beta 2\ EPS + \beta 3\ NAVPS + \beta 4\ Size + \beta 5\ CPI + \beta 6GDP + \beta 7NNY + \beta 8NTL + \beta 9P/E$$

***Table 1**. Research variables and determination*

Code	Variable Name	Variable Type	Unit	Definition
MP	Market Price	Dependent Variable	VND	MP = closing price of the stock at the end of the year
DIV	Dividend Payout Ratio	Independent Variable	VND	DIV = Percentage of dividend payout x Par value of the stock
EPS	Earnings Per Share	Independent Variable	VND	EPS = (Net profit - Preferred dividends) / Total outstanding shares
NAVPS	Net Asset Value Per Share	Independent Variable	VND	NAVPS = Net asset value of the company / Total outstanding shares
SIZE	Firm Size	Control Variable	VND	Log (Total assets)
CPI	Consumer Price Index	Control Variable	%	CPI over the years
GDP	Gross Domestic Product	Control Variable	Billion VND	GDP over the years
NNY	Number of Years Listed	Control Variable	Years	Number of years the company has been listed
NTL	Number of Years Established	Control Variable	Years	Number of years since the company was established

In this study, the author uses research factors analysis (EFA), reliability analysis using Cronbach's Alpha, autocorrelation model and regression model to examine variables and determine get research results.

IV. RESEARCH RESULTS AND RECOMMENDATIONS

4.1. Description of the research sample

Of the total 359 companies, industry accounts for the highest proportion with 118 companies (about 30%); Construction industry accounts for 19.5%; Service trade also contributed to 53 companies on the list. The remaining industries account for a small proportion, especially the healthcare industry has only 8 companies. Table 2 shows the proportion of industries with a total of 359 companies listed on the Hanoi Stock Exchange (HNX).

From Table 2, it can be seen that in the period 2012-2016, there were businesses that did not pay dividends, while there were businesses that paid up to 80% (equivalent to 8,000 VND/share). The average number of years listed for a business is 6.65 years; while the average age of a business is 36 years old. Besides, the average income per share of businesses is 1,600 VND/share, however there are businesses with very large losses, with the index EPS reached negative nearly 20,000 VND/share. In addition, looking at the data table, we can see that the average indexes of P/E, business size, NAVPS are 77 respectively; 0.38 and 15.89; while average GDP and CPI over the years are 5.7% and 4.0%.

Table 2. *Proportions of industries of companies listed on the Hanoi Stock Exchange (HNX)*

Industry Name	Quantity	Percentage (%)
Healthcare	8	2.22%
Construction	70	19.5%
Transportation and Warehousing	18	5%
Real Estate Business	16	4.45%
Finance	25	7%
Professional, Scientific, and Technical Activities	13	3.62%
Information and Communications	17	4.73%
Mining and Oil and Gas Extraction	21	5.85%
Accommodation and Food Services	53	14.73%
Industry	118	32.9%
Total	359	100%

Source: Data collected by the author from HNX

In the companies in this study, specific data when collecting data are as follows:

Table 3. Some indicators in research variables of companies listed on HNX

Variable Name	Minimum	Maximum	Average	Standard Deviation
Dividend	0.0	8,000.0	674.5838	993.2338
Number of Years Listed	5.0	12.0	8.6574	2.5279
Number of Years Established	8.0	61.0	36.1114	182.2879
EPS	-19,582.6308	44,243.5246	1,599.7556	2,998.5429
P/E	-429.3703	81,271.6510	77.3220	1,925.0724
Size	10.0003	14.3707	11.4741	0.6350
NAVPS	-55,340.2622	170,342.0	15,894.0244	12,736.3738
GDP	0.0060	0.0681	0.0401	0.0240
CPI	0.0503	0.0668	0.0586	0.0058

Source: Author's own calculations

4.2. Results of the research model

Analysis EFA

Research factors analysis (EFA) for independent variables showed that: KMO (Kaiser-Meyer-Olkin) and Bartlett's test were accepted with a value of 0.577 within the allowable range of 0.5 to 1. The Observed variables have Eigenvalues greater than 1, and explain about 72.15% of the data variables. KMO coefficient = 0.772 > 0.5; therefore all variables were kept in the analytical model.

Reliability analysis using Cronbach's Alpha Results from Table 4 show that Cronbach's Alpha is greater than 0.7 and the Corrected Item-Total Correlation coefficient is all greater than 0.5. Therefore, the scale meets the requirements.

Table 4. Results of testing the scale

Factor	Number of observed variables	Cronbach's Alpha	Minimum Corrected Item-Total Correlation
Dividend	10	0.782	0,793
Number of Years Listed	9	0.820	0,556
Number of Years Established	9	0.841	0,551
EPS	8	0.793	0,507
P/E	8	0.805	0,854
Size	8	0.811	0,715
NAVPS	8	0.840	0,822
GDP	9	0.826	0,620
CPI	9	0.799	0,852
MP	10	0.835	0,842

Source: Author's own calculations

Table 5. Autocorrelation model results

Table 6. Regression model results

	Coefficients	Standard Error	t Stat	P-value
Intercept	-43,666.314	10,661.646	-4.096	0.000
Dividend	3.245	0.447	7.259	0.000
Number of Years Listed	116.988	147.904	0.791	0.429
Number of Years Established	-1.261	2.026	-0.622	0.534
EPS	2.535	0.168	15.060	0.000
P/E	0.450	0.192	2.345	0.019
Size	111.361	589.960	0.189	0.850
NAVPS	0.040	0.035	1.156	0.248
GDP	753.560	765.751	3.389	0.001
CPI	767.950	698.856	3.014	0.000
Observations	1,795.0			
R Square	0.3005			
Significance F	0.0000			

Source: Regression regression model in research

From Table 5, it is evident that the correlation coefficients between the pairs of independent variables do not exceed 0.8, indicating that there is no multicollinearity in the regression model. The results from the regression model (Table 6) show that with 1795 observations, the R square value is 0.3005, meaning that the independent variables in the model explain 30.05% of the impact of internal and external factors on the stock prices listed on the stock exchange. Additionally, the Significant F value is 0.0000, indicating that the model used is significant. From the regression model results, 5 out of the 9 variables included are statistically significant (P<0.005). These variables are: Dividend (DIV); Earnings Per Share (EPS); and the P/E ratio, which has a positive effect on stock prices. When the P/E ratio increases or decreases by 1 unit, the stock price will increase or decrease by 0.450 units. The study by Uddin and colleagues also found that Earnings Per Share (P/E); Consumer Price Index (CPI); and Gross Domestic Product (GDP) are significant factors.

Dividends have a positive relationship with stock market prices, exactly as the initial hypothesis. When dividends increase, the stock market price will increase and vice versa. Specifically, when dividends increase by 1 unit, the stock market price will increase by 3,245 units. This is contrary to the research of Baskin (1989), who said that dividends have a negative impact on listed stock market prices. Besides, research by Black and Scholes (1974) suggests that there is no relationship between dividends and stock market prices.

(2013) also believe that P/E affects the same direction as stock market price .

GDP has the same impact as market price as initially predicted. An increase in GDP of 1 unit will increase the stock market price by 753,560 units. Besides, research by Eita (2012) also suggests that GDP fluctuates in the same direction as listed stock market prices.

However, CPI has a positive correlation contrary to the initial prediction of the study. When CPI increases by 1 unit, the market price also increases by 7671,950 units. However, research by Al-Tamimi and colleagues (2007) suggests that the consumer price index has a negative impact on listed stock market prices.

Earnings per share (EPS) fluctuates in the same direction as the stock market price. This is exactly as expected when building the model, and coincides with the research results of Al-Qenae (2002), Mehr-un-Nisa and Nishat (2012); They believe that EPS fluctuates in the same direction as the market price of stocks listed on the stock exchange. This means, the greater the EPS, the greater the market price of the company's listed securities on the stock exchange.

Additionally, the results from the regression model also show that the number of years listed, firm size, and net asset value per share have a positive relationship with stock prices, while the number of years since establishment has a negative impact. However, these relationships are not statistically significant (P-value > 0.05).

4.3. Recommendations

Firstly, investors need to observe the movements of the company's financial indicators such as annual dividend payout, earnings per share, and P/E ratios at each information disclosure period. This allows them to make forecasts about the future price movements of each stock in their investment portfolio. However, caution is needed when making investment decisions, as in some cases, the volatility of stock prices may have already been reflected in the period before or after the information is released.

Secondly, macroeconomic information such as annual GDP and CPI also serves as a basis for investors to predict the movements of listed stock prices in general and individual stocks in their investment portfolios. In general, when positive macroeconomic information is released, it will have a positive impact on the increase in stock prices in the market.

Thirdly, for company managers, based on the business performance results, financial indicators when announced, or macroeconomic information provided, they can partially predict the price fluctuations of their company's stock. This allows them to proactively address issues such as stock acquisition attempts by competitors and to strategically announce the buying or selling of the company's treasury stocks.

V. CONCLUSION

From studying 359 companies listed on the Hanoi Stock Exchange (HNX) during the period 2012-2016, this research has identified factors affecting the stock prices of listed companies, which are: Dividend (DIV); Earnings Per Share (EPS); Price-to-Earnings Ratio (P/E); Consumer Price Index (CPI); and Gross Domestic Product (GDP). Based on these findings, the author has made several recommendations for investors as well as company managers.

LIST OF REFERENCES

[1] Al-Qenae, R., Li, C. A., & Wearing, B, "The Information content of earnings on stock Prices: The Kuwait Stock exchange", Multinational Finance Journal, 6(3/4), 197–221, 2002.

[2] Black, F., & Scholes, M, "The effects of dividend yield and dividend policy on common stock prices and returns", Journal of Financial Economics, 1(1), 1–22, 1974.

[3] Clark, D. T, "A Study of the Relationship Between Firm Age- at-IPO and Aftermarket Stock Performance", Retrieved from https://archive.nyu.edu/jspui/bitstream/2451/25959/2/clark.pdf, 2002.

[4] Gordon, D., Alexander, J., Edwards, A. K., Ferri, M. G., Aggarwal, R., Conroy, P., Sokobin, J, "The determinants of trading volume of high-yield corporate bonds", Journal of Financial Markets, 3, 177–204, 2000.

[5] Haque, S., & Faruquee, M, "Impact of Fundamental factors on stock price : A Case based approach on pharmaceutical companies listed with Dhaka stock exchange",International Journal of Business and Management Invention, 2(9), 34–41, 2013.

[6] Hassan Al and Tamimi, H. A., & Mohammed Al and Mazrooei, F,"Banks' risk management: A comparison study of UAE national and foreign banks",The Journal of Risk Finance, 8(4), 394–409, 2007.

[7] Mehr-un-Nisa, & Nishat, M, "The Determinants of stock prices in Pakistan",Asian Economic and Social Society, 1(4), 276– 291, 2011.

[8] Tran Thi Minh, Vu Minh Thao, "Phân tích tác động của các nhân tố kinh tế vĩ mô đến thị trường chứng khoán Việt

Nam", Tạp chí Phát triển và Hội nhập, 2013.
[9] Pham Minh Tuan, "Các nhân tố ảnh hưởng đến sự thay đổi của giá cổ phiếu: Các bằng chứng từ Sở giao dịch chứng khoán TP. Hồ Chí Minh", Tạp chí Khoa học Trường ĐH Cần Thơ, 2014.