

Analysis of Financial performance affecting Stock Price on Pharmaceutical Industry

RUSKY AVIANDY

**Lembaga Penelitian Semeru
Jl. Tulung Agung 46, Menteng, Central Jakarta
Ph: 021.8009240, Hp: 0811106865**

Accepted on 6th August 2007, Approved 8th September 2007

Abstract: This research is conducted to analyze the influence of stock price of firms in the pharmaceutical industry as listed in the JSX using financial ratios and based on the Gordon model approach. Methodology used in this research was Gordon model to know the stock's intrinsic value from each firm, then the comparison of market stock price, and analysis using regression analysis to know which factors affect stock price and how big the influence is. This research used six research variables; ROA, ROE, payout ratio, book value per share, and debt to equity ratio. The research population was pharmaceutical companies listed on the JSX until the end of 2004. It can be concluded that ROA, ROE, book value per share, and debt to equity has a very weak influence to stock price. Only payout ratio has the significant influence to stock price of firms in the pharmaceutical industry listed on the JSX. There is significant effect from return on asset, return on equity, payout ratio, book value per share and debt to equity ratio altogether to market price of firms in pharmaceutical industry.

Keywords: Gordon, financial ratio, price, pharmaceutical

INTRODUCTION

There has not been a lot of change in the pharmaceutical industry in Indonesia for the last 30 years. In the global market, the pharmaceutical market in Indonesia only reached Rp 15 trillions in 2002 which is below 1% of the world's pharmaceutical market. In the year 2003-2004, Indonesia's pharmaceutical market was predicted to have a 20% growth due to the immense need of medicine. The medicines in Indonesia are still imported thus make the price go high while the purchasing power is still low therefore the investors need to invest a lot in the pharmaceutical industry sector so that the price can be pushed to be affordable for the domestic market. Another phenomenon due to the low purchasing power is the increase demand for over the counter medicine.

The prescribed drugs that can only be purchased with a doctor's receipt are expensive, on the other hand over the counter drugs are more affordable. Therefore during the crisis, as purchasing power decrease significantly, people tend to buy more over the counter drugs to treat their illnesses. This self-medication phenomenon has caused the demand for over the counter drug increase significantly in the domestic market.

The increase in consumers' awareness for a better health has opened a huge opportunity for the pharmaceutical industry to develop fast. This was proven by the huge demand for energy drink and multivitamins. Therefore many pharmaceutical companies race with one another in fulfilling consumer's demand for those kind of over the counter drugs such as influenza, headaches, multivitamins and energy drinks. Some companies such as Dankos Laboratories Tbk successfully had significant increase of 37.7% or Rp 782.2 billions in earnings in the third quarter of 2002 due to the sale of their over the counter drugs. Others also had significant increase of earnings such as PT Bintang Toedjoe with its Extra Joss[®], Irex[®], Joss Kids[®], Waisan[®], Komik[®] products. The subsidiary company of PT Dankos Laboratory, Kalbe Farma, also actively produces OTC (Over The Counter) drugs. The contribution of income from prescribed drugs decreased from 23.4% in 2001 to 18.6% in 2002 therefore most of the increase earnings was due to the increase sale of OTC in drugs and also due to the strengthening of Rupiah against US Dollar. Other pharmaceutical companies such as PT Kimia Farma, and PT Indofarma Tbk also actively and progressively tried to sell OTC drugs though not as active and progressive as PT Dankos Laboratory Tbk.

Some of Indofarma's widely known products in the domestic market are OBH Combi Plus, Indomaag, and Proflu. The relatively stable condition in social politics appeared to have contributed greatly to the increase of domestic investment in Indonesia. There was an increase of 18.6% for foreign direct investment and 30.3% for domestic investment approvals in January-September 2004 compared to the same period in 2003. According to the data taken from "*Badan Koordinasi Penanaman Modal*" (BKPM), the investment invested in the chemical and pharmaceutical industry sector were up to Rp 4,3 billions or 28.2% from the total domestic investment which put the chemical and pharmaceutical industry took the first rank in the domestic and foreign direct investment along the year 2004.

The second place was taken by food industry for a total investment of Rp 3,7 billions or 24.1% of the total domestic investment and 13.3% or US\$ 609.1 millions of the total foreign direct investment. In the year 2004, there were 198 manufacturers in the pharmaceutical industry which consists of 4 state-owned companies, 31 foreign direct investments, and the rest were domestic players. From the total of 198 manufacturers, 60 of them dominates more than 80% of the total market share, while the rest 20% was divided among 140 manufacturers.

Based on the aforementioned condition, and looking at the good prospective of pharmaceutical industry in Indonesia, it is not a surprise that a lot of investors were willing to invest their money in this sector. However, before deciding to invest in a stock, investors must do the fundamental analysis in order to determine the fair price of a stock. The price used to be compared with the market price whether it is undervalued and suitable to be acquired or overvalued. The importance of this assessment whether technical or fundamental, has drawn the attention to do a research in analysis of financial performance that affect stock prices in the pharmaceutical industry listed in the Jakarta Stock Exchange.

METHODS

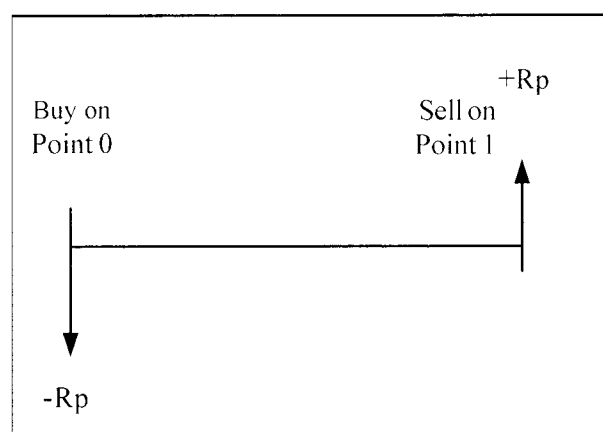
Principally the marketable securities can be defined to have money value. The value can be stated by the market or rules or procedure of accountancy. There are four concepts of value that are commonly known:

Going Concern Value, where the company's value is related to its capability to generate future income, dividend distribution, and indefinite future growth; Liquidation Value, where a company is valued by its assets after being sold and deducted; Market Value,

which is the market perception of a company's bond and stock: Book Value, which is based on a standardized accounting technique. The book value is identical with the par value or the nominal value. This ratio is used to compare stock price according to the market to the stock price based on the book value.

The intrinsic value of a security is determined after weighing the factors influencing the value. In other words, it is the real value of a marketable security that is different with the market value. The financial manager is able to estimate the intrinsic value carefully by considering the fundamental factors that affect security value such as: Value of the Firm's Assets; Likely Future Interest and Dividend; Likely Future Earnings; Likely Future Growth Rate. It is a process of comparing the real value of a security with the market value.

The fundamental factors that affect the value usually change slower than the market. In a market that is characterized as imperfect, an analyst can hope to localize variances between intrinsic value and market demand. The main objective of intrinsic value is to choose or separate companies or stocks that are overvalued and undervalued. The intrinsic value analysis can not always be done accurately due to three limitations: Market place is slow to recognize real value: Stocks of highly speculative firms: High-growth stocks. The second technique of security assessment that is often used is the assessment by considering the individual stock prices compared with other indicators in the market. There are three main factors in this approach: Depressed overall market: Industry comparison and Cyclical lows. Capitalization method is a method to change future income to be present value or security intrinsic value. Common stock offers potential for future income growth, and this has to be revealed in an intrinsic value analysis. The investment rate of return basically is a return over a single period of time which is usually a year.



The formula can be written as follow:

$$E(tpn)_1 = \frac{N1 - N0 + Cash1}{N0}$$

Where:

$E(tpn)_1$ = rate of return after period 1 expected

N_1 = security value at the end of period 1

N_0 = beginning value on point 0

$Cash_1$ = all received cash since point 0 until the end of period 1.

Zero Growth Dividends

$$PV = \frac{PMT}{i} \text{ and can be rewritten as follows :}$$

$$N_0(\text{Value}_0) = \frac{DPS_1}{Ke(\text{minimum})}$$

Because DPS_1 = Dividends per company stock in period 1 and every period in the future will be zero growth or similar. To determine the minimum rate of return, the rate of growth (g) is determined as follow:

$$g = \frac{EPS}{Mkt Pr} (\%RE)$$

In order for the growth to be 0, the percentage of retained earning has to be 0. Therefore, all EPS are paid as DPS and the stock value is stated as:

$$N_0(\text{Value}_0) = \frac{DPS_1}{Ke(req)} = \frac{EPS_1}{Ke(req)}$$

The third approach in the common stock valuation is by considering the earnings and dividends grow in a constant growth. The formula is as follow:

$$\text{Dividend payout} = \frac{DPS}{EPS}$$

or can be rewritten as follow:

$$N_0(\text{Value}_0) = \frac{DPS_1}{Ke(req) - g}$$

The Gordon model was first developed by Gordon an expert in corporate finance. Some considerations were put into the model so that mathematically it can be used in determining intrinsic value of the stock. There are three main factors that are the focus of his attention in the model design: Shareholder's Return-Single Variable. In Gordon's model, the shareholder's return is only future dividend, not capital gain.

The model was developed by comparing the normal rate of return or the minimal rate of return with actual

rate of return. The rate of returns are divided into required return (Ke), actual return and inclusion of a growth factor. The effect of variable growth can be seen in table 1.

After comprehending the components in the Gordon Model, then formula can be modified as follow:

$$\text{Intrinsic value} = \frac{Div_1}{Ke(req) - [Ke(akt)] [\%RE]}$$

where:

Div_1 = Dividend in the form of cash in the current year (now)

$Ke(req)$ = Normal equity rate of return that the market wants accordingly to the stock risk.

$Ke(akt)$ = Actual corporate equity rate of return (actual)

$\%RE$ = Percentage of corporate EPS that might be retained by the corporate.

Validity of Gordon's model is backed up in table 2. The change in dividend payout will affect the performance or alter the intrinsic value; however it depends on the relationship between actual rate of return and minimal rate of return.

Basically the stock price is affected by demand and supply; however for a better stock price valuation, company's operational data such as audited financial report, company's future performance and economic condition are required. In general there are two approaches in stock valuation: the fundamental approach, which focuses on the intrinsic value, which is company's future capability, by looking at its asset,

Table 1. Growth Factor in Gordon Model

EPS/Mkt Pr Actual	Retained Earnings (%)	Growth	Explanation
0	0	None	No retained earnings
0.05	0	None	All profits are distributed as dividend.
0.05	x 0.050	= 0.025	Growth increase as profit increase Growth increase as retained earnings higher.
0.10	x 0.50	= 0.050	
0.10	x 0.60	= 0.060	

Table 2. Intrinsic Value by Gordon Model for different ROR and dividend

	Minimal Rate of Return Capitalization Rate Required		
	8 percent	10 percent	12 percent
30% dividend payout	Rp 0.60 ----- = Rp 60 8% - (10% x 70%)	Rp 0.60 ----- = Rp 20 10% - (10% x 70%)	Rp 0.60 ----- = Rp 12 12% - (10% x 70%)

Table 2. (continue) Intrinsic Value by Gordon Model for different ROR and dividend

	Minimal Rate of Return Capitalization Rate Required		
	8 percent	10 percent	12 percent
50% dividend payout	Rp 1 ----- = Rp 33.3 8% - (10% x 50%)	Rp 1 ----- = Rp 20 10% - (10% x 50%)	Rp 1 ----- = Rp 14.3 12% - (10% x 50%)
70% dividend payout	Rp 0.60 ----- = Rp 60 8% - (10% x 30%)	Rp 0.60 ----- = Rp 20 10% - (10% x 30%)	Rp 1.4 ----- = Rp 15.56 12% - (10% x 30%)
100% dividend payout	Rp 2 ----- = Rp 25 8% - (10% x 0%)	Rp 0.60 ----- = Rp 60 10% - (10% x 0%)	Rp 0.60 ----- = Rp 16.67 12% - (10% x 0%)

Example: All data was taken from a company with EPS = Rp 2 ROE of 10%.

production, and marketing, and the technical approach which focuses on charts which is short time analysis, used to predict the future price based on the movement of stock in the past. The needed information is trade volume and capital gain. Next in order to derivate factors that can affect stock price, the Gordon Model of dividend discounted model is used (Jogiyanto 1998:76).

$$P_o = \frac{ROA \times (1 + Debt / Equity) \times BV \times (b)}{r - ROE(1 - b)}$$

r (Required Rate of Return can be calculated by using CAPM model $r = r_f + \beta(r_m - r_f)$)

therefore

$$\text{Stock Price (Po)} = f(\text{ROA, ROE, b, BV, DER, r})$$

Where:

- ROA = Return on Asset (%)
- ROE = Return on Equity (%)
- b = Payout ratio → Dividend / Earning per Share (%)
- BVS = Book Value Equity per Share (%)
- DER = Debt to Equity Ratio (%)
- r = Stock Return (%)

Some hypothesis testing models that were used to see factors that affect stock price are in pharmaceutical industry:

H1 : There is no significant effect from return on asset to market stock price of firms

H2 : There is no significant effect from return on equity to market stock price of firms

H3 : There is no significant effect from payout ratio to market stock price of firms

H4 : There is no significant effect from book value to market stock price of firms

H5 : There is no significant effect from debt to equity ratio to market stock price of firms

H6 : There is no significant effect from return on asset, return on equity, payout ratio, book value per share and debt to equity ratio altogether to market stock price of firms.

This research was conducted to know the intrinsic value condition and factors affecting stock price thus their effect toward stock price. The research design was qualitative research using data and concepts or theories of value, valuation, approaches to valuation. This research uses library research.

The quantitative data such as firm's financial data were acquired from firms' publication to society or through JSX Capital Market reference centre, and other mass media. There are two steps in this research: First analysing the stocks using Gordon model to know the stock's intrinsic value from each firm, second comparing it with market stock price, and analysing it using correlated research method or using regression analysis to know which factors affect stock price and how big the influence is. The variables in this research are in table 3.

Table 3. Variables and Measurements

Variable	Sub Variable	Measurement Scale
Dependent	Stock Price	Individual stock price of pharmaceutical company
Independent	Return on Asset	a. Net Income
		b. Total asset
	Return on Equity	a. Net Income
		b. Total asset
Pay out Ratio	a. Dividend	
	b. Earning per Share	

This research used six research variables: ROA, ROE, Payout ratio (this ratio is used to know how much portion of dividend from firm's net income. Payout ratio can be calculated by dividing dividend with EPS), BVS (Book Value per Share), and DER (Debt to Equity Ratio). The research population was pharmaceutical companies listed on the JSX until the end of 2004. This research also used the judgmental sampling that is the non probability sampling technique.

Based on the technique, the eligible sample is pharmaceutical industry companies listed on the JSX until December 2004 and companies, that have distributed dividends to their stockholders. Therefore there were seven eligible companies.

Data analysis method in this research was done by calculating and using the Gordon model formula to know the stock's intrinsic value and other data analysis method using correlation analysis significant correlation from the two variables by using double regression formula.

The correlation analysis was needed to know the relationship of independent and dependent variables. The used analysis in this research is the Pearson correlation. The usage of determination coefficient formula is to measure the contribution of independent variables. The used regression model in this research was acquired by derivation factors that can affect stock price by using Gordon approach of dividend discount model with the equation of:

$$Po = \frac{Dividend(D)}{(r - g)}$$

By doing substitution the above model, detail of the equation can be: Stock Price (Po) = f (ROA, ROE, b, BV, DER, r)

Therefore the regression model used in this research is:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$$

Where:

Y = Stock price with proxy of pharmaceutical company individual stock price.

x₁ = ROA proxy of pharmaceutical company ROA ratio value.

x₂ = ROE proxy of pharmaceutical company ROE ratio value.

x₃ = Payout ratio of pharmaceutical company individual stock return value.

x₄ = Book value per share proxy of pharmaceutical company BVS ratio value.

x₅ = DER proxy of pharmaceutical company DER value.

a = constant

b = Regression Coefficient.

RESULT AND DISCUSSION

Return on asset (ROA). High ROA gives a perspective that a company can effectively runs its asset to get high profit and low ROA gives a perspective that a company cannot effectively runs its asset to get high profit. Based on table 4, it can be seen that ROA from the seven companies in the pharmaceutical industry fluctuated every year. The highest average ROA for the year 2001–2004 was gained by PT Merck Tbk 20.40%, and the lowest was gained by PT Indofarma Tbk 3.8%. High ROE gives a perspective that a company can effectively runs its equity to get high profit and low ROE gives a perspective that a company cannot effectively runs its equity to get high profit.

Based on table 5, it can be seen that ROE from the seven companies in the pharmaceutical industry fluctuated every year.

Table 4. Return on Asset

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Dankos Laboratories Tbk	15.75	12.56	11.62	10.17	12.525
PT Indofarma Tbk	0.06	-5.78	9.11	11.94	3.8325
PT Kalbe Farma Tbk	10.91	11.71	10.71	5.54	9.7175
PT Kimia Farma Tbk	4.68	4.06	2.66	10	5.35
PT Merck Tbk	19.81	17.72	16.67	27.39	20.3975
PT Bristol Myers Squibb Indonesia Tbk	14.29	11.52	7.1	-13.33	4.895
PT Tempo Scan Pacific Tbk	12.97	13.81	15.02	19.05	15.2125

Table 5. Return on Equity

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Dankos Laboratories Tbk	29.81	26.8	30.57	27.78	12.525
PT Indofarma Tbk	0.15	-11.43	16.51	18.79	3.8325
PT Kalbe Farma Tbk	28.87	36.42	51.11	35.49	9.7175
PT Kimia Farma Tbk	6.71	6.07	4.04	14.31	5.35

Table 5. (continue) Return on Equity

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Merck Tbk	24.71	23.03	19.59	34.96	20.3975
PT Bristol Myers Squibb Indonesia Tbk	23.53	18.81	13.75	33.96	4.895
PT Tempo Scan Pacific Tbk	12.97	13.81	15.02	19.05	15.2125

The highest average ROE for the year 2001–2004 was gained by PT Kalbe Farma Tbk 37.97%, and the lowest was gained by PT Indofarma Tbk 6.01%. The smaller the payout ratio gets, the less interesting the company's stock will be. Occurs because investor will see that the company is less interesting because it cannot give the high return on investment. The higher this ratio gets, the more interesting the company's stock will be. This occurs because investor will see that the company will give high return on investment. However it should be accompanied by good company performance.

Based on table 6, it can be seen that payout ratio from the seven companies in the pharmaceutical industry fluctuated every year. The highest average payout for the year 2001–2004 was gained by PT Merck Tbk 411.278%, and the lowest was gained by PT Kalbe Farma Tbk 1%, as BV per share gets higher, the demand gets high as well. BVS depicts historical establishment cost and company's physical asset. A company that has a good performance will

be able to gain relatively high earnings because of the competitive product cost so that it tends to have higher market value or at least similar with its physical asset book value.

Based on table 7, it can be seen that book value per shares from the seven companies in the pharmaceutical industry fluctuated every year. The highest average payout for the year 2001–2004 was obtained by PT Tempo Scan Pacific Tbk 3215.5, and the lowest was obtained by PT Bristol Myers Squibb Tbk 6.25.

The smaller DER ratio gets, the better it will be because investor will perceive that the risk of failure in fulfilling company's liability will be smaller because it is backed up by its equity. High DER ratio means investor will perceive that the risk of failure in fulfilling company's liability will be higher. This will make investor to be careful with companies such as these.

Based on table 8, it can be seen that debt to equity ratio from the seven companies in the pharmaceutical industry fluctuated every year.

Table 6. Payout Ratio

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Dankos Laboratories Tbk	0.11	0.37	0.44	0.32	0.31
PT Indofarma Tbk	0	0	0.75	0.68	0.3575
PT Kalbe Farma Tbk	0.01	0.03	0	0	0.01
PT Kimia Farma Tbk	0.32	0.23	2.2	0	0.6875
PT Merck Tbk	746.67	589.47	308.97	0	411.2775
PT Bristol Myers Squibb Indonesia Tbk	956.34	78.15	0	0	258.6225
PT Tempo Scan Pacific Tbk	0.67	0.69	0.51	0.57	0.61

Table 7. Book Value per Shares

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Dankos Laboratories Tbk	302	203	148	222	218.75
PT Indofarma Tbk	84	113	174	155	131.5
PT Kalbe Farma Tbk	285	189	111	72	164.25
PT Kimia Farma Tbk	142	136	120	127	131.25
PT Merck Tbk	8	7	7	5	6.75
PT Bristol Myers Squibb Indonesia Tbk	12	10	8	-5	6.25
PT Tempo Scan Pacific Tbk	3.687	3.309	3.042	2.824	3215.5

Table 8. Debt to Equity Ratio

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Dankos Laboratories Tbk	0.88	1.12	1.61	1.7	1.3275

Table 8. (continue) Debt to Equity Ratio

Pharmaceutical Company	Year				Average 2001-2004
	2004	2003	2002	2001	
PT Indofarma Tbk	1.46	0.96	0.8	0.56	0.945
PT Kalbe Farma Tbk	1.44	1.84	3.41	4.97	2.915
PT Kimia Farma Tbk	0.43	0.49	0.52	0.43	0.4675
PT Merck Tbk	0.25	0.22	0.18	0.28	0.2325
PT Bristol Myers Squibb Indonesia Tbk	0.65	0.64	0.94	-3.55	-0.33
PT Tempo Scan Pacific Tbk	0.2	0.2	0.24	0.31	0.2375

The highest average debt to equity ratio for the year 2001- 2004 was obtained by PT Dankos Laboratories Tbk 312.75%, and the lowest was obtained by PT. Bristol Myers Squibb Tbk -33%. The main objective of intrinsic value analysis is to select or separate firms thus separate the overvalued and undervalued stocks.

Based on table 9, it can be seen that stock price in the market for companies in the pharmaceutical industry is overvalued. The market price for PT Dankos Laboratories Tbk was Rp 600 while the intrinsic value was Rp 76.58 which is overvalued. The most overvalued stock price belongs to PT Merck Tbk with market value of Rp 20300 and intrinsic value of Rp 8945.97 which is overvalued.

The least overvalued stock price belongs to PT Indofarma Tbk with market value of Rp 170 and intrinsic value of Rp 168.45 which is overvalued.

The Pearson correlation shows that the ROA as independent variable has strong correlation (0.604) with market price as dependent variable. ROE variable has weak correlation (0.196) to market price as dependent variable, payout ratio variable has very strong correlation (0.977) with market price as dependent variable, book value per share variable has very weak correlation and reverse (-0.138) to market price as dependent variable which means that every 1% book value per share will give a decrease of 138%, debt to equity ratio variable has fair correlation (0.456) to market price as dependent variable. (table 10)

Table 9. Stock Price Comparison

Pharmaceutical Company	Market Value	Intrinsic Value	Information
PT Dankos Laboratories Tbk	600	76.58	Overvalued
PT Indofarma Tbk	170	168.45	Overvalued
PT Kalbe Farma Tbk	415	8.79	Overvalued
PT Kimia Farma Tbk	165	100.88	Overvalued
PT Merck Tbk	20300	8945.97	Overvalued
PT Bristol Myers Squibb Indonesia Tbk	10500	4316.19	Overvalued
PT Tempo Scan Pacific Tbk	6900	1540.65	Overvalued

Table 10. Correlations analysis of factors affecting stock price.

		Stock Price	ROA	ROE	PAYOUT	BVS	DER
Pearson Correlation	Stock Price	1.000	.604	.196	.977	-.138	-.456
	ROA	.604	1.00	.505	.458	.306	-.122
	ROE	.196	.505	1.000	.197	-.050	.551
	PAYOUT	.977	.458	.197	1.000	-.305	-.425
	BVS	-.138	.306	-.050	-.305	1.000	-.245
	DER	-.456	-.122	.551	-.425	-.245	1.000
Sig. (1-tailed)	Stock Price	.	.076	.337	.000	.384	.152
	ROA	.076	.	.124	.151	.252	.397
	ROE	.337	.124	.	.336	.458	.100
	PAYOUT	.000	.151	.336	.	.253	.171
	BVS	.384	.252	.458	.253	.	.298
	DER	.152	.397	.100	.171	.298	.
N	Stock Price	7	7	7	7	7	7
	ROA	7	7	7	7	7	7

Table 10. Correlations analysis of factors affecting stock price.

		Stock Price	ROA	ROE	PAYOUT	BVS	DER
N	ROE	7	7	7	7	7	7
	PAYOUT	7	7	7	7	7	7
	BVS	7	7	7	7	7	7
	DER	7	7	7	7	7	7

Table 11. Model Summary (b)

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin-Watson
1	1.000 (a)	1.000	.998	132.12784	1.142

a. Predictors: (Constant), DER, ROA, BVS, ROE, PAYOUT

b. Dependent Variable: Market stock price

Table 12. ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68236864	5	13647372.790	781.737	.027(a)
	Residual	17457.765	1	17457.765		
	Total	68254322	6			

a. Predictors: (Constant), DER, ROA, BVS, ROE, PAYOUT

b. Dependent Variable: Market stock price

Table 13. Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std.Error	Beta		
1	(Constant)	-302.217	122.290		-2.471	.245
	ROA	105.833	13.578	.198	7.794	.081
	ROE	-46.781	8.810	-.158	-5.310	.119
	PAYOUT	20.015	.613	1.003	32.642	.019
	BVS	.364	.071	.127	5.142	.122
	DER	340.762	99.349	.112	3.430	.181

a. Dependent Variable: Market stock price

From table 11, it can be seen that 100% market price as dependent variable can be explained by variation of ROA, ROE, payout ratio, book value per share and debt to equity ratio.

From the result of ANOVA test on table 12, F is 781.737 with the significant level of 0.027, which means that regression model can be used to predict the dependent variable of market stock price or it can be said that the independent variables of ROA, ROE, payout ratio, book value per share, and debt to equity ratio affect market stock price.

The regression linear test provides result: Constant -302.217 which means that if all independent variables are zero, then market stock price is -302.217; ROA coefficient of 105.833 states that every 1% increase will add stock price of 105.833 with the ceteris paribus assumption of; ROE coefficient of -46.781 states that every 1% decrease will decrease the stock price of 46.781 with the ceteris paribus assumption; Payout ratio coefficient of 20.015 states that every 1% increase will increase the stock price of 20.015 with

the ceteris paribus assumption of; Book value per share coefficient of 0.364 states that every 1% increase will increase the stock price of 0.364 with the assumption of ceteris paribus. Debt to equity ratio coefficient of 340.762 states that every 1% increase will increase the stock price of 340.762 with the ceteris paribus assumption of.

CONCLUSION

This research was conducted to analyze the influence of several factors affecting stock price of firms in the pharmaceutical industry that are listed in the JSX by using financial ratios and based on the Gordon model approach. From the data and the analysis, it was concluded that ROA, ROE, book value per share, and debt to equity has a very weak influence to stock price.

Only payout ratio had the significant influence to stock price of firms in the pharmaceutical industry listed on the JSX.

It was also concluded the hypotheses that: There is no significant effect from return on asset to market stock price of firms in pharmaceutical industry. There is no significant effect from return on equity to market price of firms in pharmaceutical industry. There is no significant effect from payout ratio to market stock price of firms in pharmaceutical industry. There is no significant effect from book value to market stock price of firms in pharmaceutical industry. There is no significant effect from debt to equity ratio to market stock price of firms in pharmaceutical industry. There is significant effect from return on asset, return on equity, payout ratio, book value per share and debt to equity ratio altogether to market stock price of firms in pharmaceutical industry.

REFERENCE

- Bodie, ZVI. Kane. Alex. and Marcus, Alan, J. 2002. Investments. 5th ed. Boston: McGraw Hill.
- Gujarati, Damodar. 1997. Basic Econometrica. Jakarta. Erlangga.
- Gitman, Joehnk, 1996. Fundamentals of Investing. 6th ed. Harper Collins Publishing.
- Horne, Van. James, C. 1997. and Wavhowicz. Principles of Financial Management. Indonesia Edition. New Jersey: Prentice Hall.
- Horne, Van. James, C. 2002. Financial Management and Policy. 12th ed. New Jersey: Prentice Hall.
- Jogiyanto. 2003. Portofolio Theoy and Investment Analysis. 3rd ed. Yogyakarta: BPFE.
- Komputer, Wahana. 2004. Calculating Statistic Data with SPSS 12. 1st ed. Yogyakarta. Andi.
- Munawir, S. 1999. Financial Report Analysis. Jakarta. Liberty.
- Santoso, Singgih. 2004. Marketing Research: Application Concept Using SPSS. 1st ed. Jakarta: Elex Media Computindo.
- Sartono, Agus. 1996. Financial Management Theory and Application. 3rd ed. Yogyakarta: BPFE.
- Siahaan, Hinsa. 2003. Stock Analysis Using Gordon Model.
- Subiantoro, Edi. 2003. Analysis of Factors Affecting Stock Price.
- Suharsimi, Arikunto. 2002. Research Procedure A Practice Approach. 5th rev ed. Jakarta: Rineka Cipta.
- Sunariyah. 1997. Introduction Knowledge to Capital Market. 1st ed. UPPAMP YKPN. Yogyakarta.