Effects of Price Earnings Ratio, Earnings Per Share, Book to Market Ratio and Gross Domestic Product on Stock Prices of Property and Real Estate Companies in Indonesia Stock Exchange

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ABSTRACT

The purpose of this study is to investigate the effects of price earning ratio, earning per share, book to market ratio, and gross domestic product on stock price of the property and real estate sector listed in Indonesia Stock Exchange in 2012 to 2014. A sample of 29 companies and 87 data were used in this research. Purposive sampling technique was used to choose the sample. The data that were used in this research was a secondary data. This research used t-test and F-test for testing the hypotheses. The result showed that partially earnings per share, book to market ratio, and gross domestic products have significant influence on stock prices. On the other hand, price earning ratio has no significant effect on stock price. However, there was a significant effect between price earning ratio, earning per share, book to market ratio, and gross domestic product on stock prices.

JEL Classification: N15; O16; O40.

Keywords: Price Earning Ratio; Book to Market Ratio; Gross Domestic Product; Stock Price.

1. INTRODUCTION

Companies that go public always have a normative goal which is to maximize the economic prosperity and welfare of the shareholders. This is not easy to achieved, because almost every day there are fluctuations in the index stock price representing stocks price changes on the exchange. Indonesia Stock Exchange (IDX) has several sectorial indexes. All sectorial stock indexes that recorded in IDX classified into nine industry sectors according to the classification established by IDX and called as JASICA (Jakarta Industrial Classification). One of the sectors is property and real estate sector. Property sector is one of the important sectors in Indonesia. Property sector is an important indicator to analyze the economic health of a country. This industry is also a sector that gives the first signal of a country being rise and fall. Stock price is one of the indicators to measure the success of company management, where the strength of the market on the stock exchange indicated by the selling and purchasing transactions of the company's stocks in the capital market. Shareholders who are not satisfied with the management performance can sell the stocks held and invested the money to another company. If this is done, it will lower the stock price of a company. The stock price of a company reflects the company's value in public eyes. If a company's stock price is high, then the value of the company in the public eyes is also good and vice versa. Therefore, the share price is very important for the company.

Previous studies showed that financial institutions play a significant role in the macro economies (Michailidis, 2008; Nazlioglu et al., 2009; Rjoub, 2011; Roy, 2012; Saqib & Waheed, 2011; Tanasie et al., 2008; Agu, 2008; Barisik & Tay, 2010; Berument & Dogan, 2011; Dalgin et al., 2012; Elmas, 2009; Hachicha, 2008; Kalim et al., 2012; Gokgoz, 2007; Sodeyfi, 2016; Shaeri et al., 2016; Siddiqui, 2008; Kaushal & Pathak, 2015; Khakimov et al., 2010; Bayram, 2007a; 2007b; Karacaer & Kapusuzoglu, 2010; Sodeyfi & Katircioglu, 2016; Buyuksalvarci & Abdioglu, 2010; Chandio, 2014; Chimobi, 2010; Kuryanov, 2008; Katircioglu & Taspinar, 2017; Waheed & Younus, 2010; Soukhakian, 2007a; 2007b; Fethi & Katircioglu, 2015; Katircioglu et al., 2015; 2007; Gungor et al., 2014; Heidari et al., 2013; Fethi et al., 2013a; 2013b; Katircioglu, 2012; Katircioglu & Feridun, 2011; Gungor & Katircioglu, 2010; Jenkins & Katircioglu, 2010; Adaoglu & Katircioglu, 2010). But, micro level factors affecting performance of companies deserve attention from researchers especially factors that affect the stock price movements are internal factors and external factors. Internal factor, also referred as a fundamental factor, is the factor that comes from within the company and can be controlled by company management. This internal factor related to revenues that can be earned by investors in the form of dividends or capital gains. External factors are non-fundamental factors, usually macro, such as political and security situation, changes in currency exchange rates, fluctuations in interest rates and the rumors that intentionally spread by speculators or those who want to gain profit from the situation. These factors will affect the public demand and supply of stocks traded in the capital

market, also, effect on the stock price of the company, whether there will be an increase in share prices or vice versa. The problem in this study is whether there is a significant effect between the price earnings ratio, earnings per share, book to market ratio, and gross domestic product partially and jointly to the stock price of the property and real estate company in Indonesia Stock Exchange from 2012 -2014. The purpose of this study was to determine the effect between the price earnings ratio, earnings per share, book to market ratio, and gross domestic product partially and jointly to the stock price of the property and real estate company in Indonesia Stock Exchange from 2012 to 2014.

2. THEORETICAL BACKGROUND

Kieso and Weygandt (2007) stated that stock is the residual corporate interest that bears the ultimate risks of loss and receive the benefit of success. According to Nurmayanti (2010), the stock price is the market price, which is the selling price of one investor to another investor. Tandelilin (2010) believed that stock is an assets ownership proof of the company that issued the stocks. Thus, stocks are securities traded on the stock market issued by a limited liability company (PT), where the stocks state the owner of these stocks is also part-owner of the company. Hidayat (2010) classified stock price as follow:

- Nominal Price: Any stocks issued by the company have a price. Nominal price of stocks is the listed price on the stocks issued; this price will be used for accounting purposes which is record full paid capital.

- Initial Price: The initial price is the price that applies to investors who bought stocks at the time of the public offering. Although the nominal price of the stock has been set, the price of its initial public offering in initial market is not necessarily equal to the nominal price of the stocks. If the initial price is higher than the nominal price, there will be a difference called as agio. Conversely, if the initial price is lower than the nominal price, disagio will happen.

- Opening Price: The opening price is the prevailing stock price when the stock market opens for that day.

- Market Price: The market price is the price of stocks in the stock at the time. The market price is determined by demand and offer that currently traded on the stock exchange. For the stocks that attractive to the investor, movements of the stock market price are usually very fluctuating. In contrast, the stock that less attractive to investors are usually have little movement on the stock exchange.

Price earnings ratio (PER) describes the market's appreciation towards the company's ability to generate earnings (Darmaji, 2006). According to Ang (2007), the price earnings ratio is the ratio between the stock market prices by its earnings per share (EPS) of the stock. High price earnings ratio indicates that investors are willing to pay a premium for the company's stock price. Harahap (2007) believed that the price earnings ratio shows the ratio between the stock price in the market and the initial price offered compared with the income received. Sangaji (2003) explained that the price earnings ratio is the ratio of a company's stock price to earnings per share of the company. Price earning ratio is a ratio that compares the market price per share (market price share) with earnings per share. Price earning ratio is a result of the share price divided by its earnings per share. Price earning ratio approach can be found based on the ratio of the stock market price to its earnings per share. This gives a result of stock price ratio to earnings level. Price earning ratios also provide a benchmark of the stock so it is easier to make estimates that will be used as input in the price earnings ratio (Tandelilin, 2010). High price earnings ratio indicates a company's excellent achievements in the future that can be used by investors as a reference in the planting so that the price earnings ratio can significantly affect stock returns of companies listed on the Stock Exchange.

Larson, et al (2011) reported that earnings per share, also called net income per share, it is the amount of income earned per share of the company's outstanding common stock. This means that earnings per share can be called as net income per share which is the amount of revenue generated from each of the company stocks that usually deposited by the company. Besley and Brigham (2010) stated that "earnings per share are called 'the bottom line', denoting that of all of the items on the income statement. This means that earnings-per-share is called the bottom line which is the conclusion of the overall financial statements. Earnings per share (EPS) are also one way to measure success in achieving benefits for shareholders in the company. The other results states that the most important information for investors and securities analysis is earnings per share (Jogiyanto (2010). Earning, often referred as accounting profits, is the profit or loss of the company's business activities in a period based on the accrual calculation. Total earnings showed accrual accounting measurement to the changes of the company value, which is the shareholder capital such as dividend distribution or issuance of ordinary stocks (Nichols and Wahlen,

2004). EPS is a ratio that indicates how much profit (return) per share is obtained by investors or shareholders (Darmadji, 2001).

According to Simamora (2000), EPS is the net income per share of common stocks outstanding during the period. Earnings per share (EPS) is the ratio between the revenue generated (net income) and the number of outstanding stocks. Earning per share (EPS) illustrates the company's profitability is reflected on each share. Earnings per share figures derived from the financial statements presented by the company. According to Niswonger (2000), earning per share are presented in the income statement because it is difficult to use the absolute amount of net income to evaluate the profitability of the company if there is a significant change in the amount of shareholders' capital. In such cases, the profitability of the company can be expressed by earnings per share. Niswonger (2000) also stated that if a company only has common stocks outstanding, the earnings per share can be determined by dividing net income with the number of ordinary stocks outstanding. However, if there is a preferred stock, net income is reduced by the preferred stock dividends first before divided by the number of ordinary stocks outstanding.

Book-to-market ratio is the ratio between the book value of stocks in a company on the market price per share of the company (Gitman, 2009). If the book to market value ratio is decreased, then this indicates that the value of company stock valued above the book value (Nathaniel, 2008), or in other words the company value in the eyes of investors will increase (Martono 2009). Higher company value will lead to increasing stock market prices so that the stock return will also increase (Nathaniel, 2008). According to Ang (1997), book to market ratio is a ratio that is used as an indicator to measure the performance of the company through its market price. Gi n (2009) explained that market to book ratio is the ratio between the book value of a company compared to the market price per share of the company. At the time of book to market ratio value increasing, then the company's stock price is lower than its book value and stock price will be considered too low (undervalued) when compared to other similar stock price. In such conditions, the investor will purchase stocks. It will create an opportunity for investors to obtain capital gains in the future when the company's stock market value has increased (Margaretha and Damayanti 2008). Therefore, the lower book to market ratio value and the higher stock return will be received by investors.

Book-to-market ratio is a risk factor that must be cons ed by investors, because a high book to market ratio can be an indicator that the company is still undervalued. Book to market equity ratio states the comparison bet n book equity declared with company's market equity (Tandelilin, 2010). Fama and French (1995) defined that book to market equity as book common equity for the fiscal year ending in endar year (t-1), divided by market equity at the end of December of the year (t-1). Book-to-market equity ratio is calculated by dividing the equity share with the December (end of year) closing price to divided company into two which is companies with a low book to market ratio and high book to market ratio.

Gross domestic product (GDP) is the market value of all final goods and services produced in a country within a period of time. However, in the GDP there are some things that are not included such as the value of overall activities that occur outside the market, environmental quality and income distribution. Therefore, GDP per capita is the amount of GDP compared with the population in a country. It is a better tool that can tell us wha ppened on the average population or the living standard of citizens (Mankiw, 2006). Gross domestic product is the most concerned economic statistics because it is considered as the best single measurement of the welfare of the community. The underlying thing is that GDP measures two things at once: total income of everyone in the economy and the total state expenditure for purchasing goods and services results from the economy. GDP can perform measurements of total revenue and expenditure because the overall economic income must be equal to the overall economic spending (Mankiw, 2006).

$$Y = C + I + G + NX \qquad (1)$$

Where GDP, shown as Y, is divided into four components: consumption (C), investment (I), government purchases (G), and net exports (NX). This equation is an identity equation that is certainly true views from how the equations variables elaborated. The components are:

1. Consumption which is expenditures for goods and services by households.
2. Investments which is the purchase of goods that will be used to produce more goods and services.
3. Government purchases which includes expenditures for goods and services by local governments, state, and central (federal).

4. Net export which is equal to the purchase of products in the country by foreigners (exports) minus purchases of products abroad by nationals (import) (Mankiw, 2006).

Stock price is the share value that determines profit value of the company that issued the stocks and changes or movement of the share price determined by the number of requests and offers made on the stock market. Based on the theoretical basis that was discussed earlier regarding investor behavior using the price earnings ratio, earnings per share, book to market ratio, and gross domestic product, a theoretical framework can be described as follows:

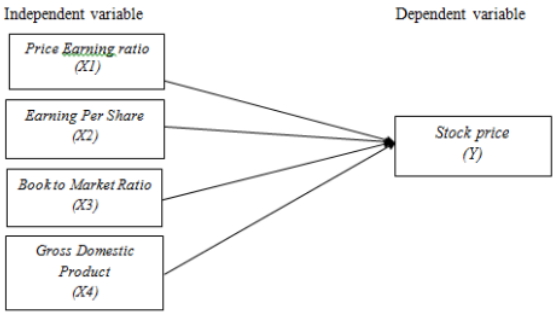

Figure 1.
Research Framework

Figure 1 is explaining the effects of price earning ratio, earning per share, book to market ratio, and gross domestic product as independent variables on stock price. Companies with high growth opportunities have a high price earnings ratio, and it indicates that the market expects earnings growth in the future. Instead, the company with a low growth rate tends to have a low price earnings ratio as well. The lower the price earnings ratio of a stock gets, the cheaper its price to invest. So the lower the price earnings ratio, the cheaper it cost to purchase the stocks and resulted to a better performance per share in generating profits for the company. The better performance per share will affect many investors to buy the stock. The first hypothesis can be developed as follow:

H_1: price earning ratio has effect on stock prices.

EPS is the ratio of after-tax income divided by the number of outstanding stocks. EPS illustrates the company's ability to generate net gain on each share. Increasing EPS indicates that the company able to increase prosperity of the investors and encouraged them to increase the amount of capital invested. The second hypothesis can be developed as follow:

H_2: earning per share has effect on stock prices.

Market ratio reflects investors' assessment for all aspects of corporate performance in the past and expected future (Brigham and Houston, 2009). One of the measurements of the market ratio is the book to market ratio. This ratio is the comparison between the book value of stocks with the stock market price (Gitman, 2009; 394). Book-to-market ratio is viewed as a ratio that can be used to predict stock prices for using in the stock market price measurement. The higher stock market price cause more successful for company in creating value for investors, so, profits received by the investors also increased (Fama and French 1995). The third hypothesis can be developed as follow:

H_3: book to market ratio effect on stock prices.

Increasing GDP is a good signal (positive) for investment and vice versa. Increasing GDP has a positive effect on the consumer purchasing power, thereby increasing the demand for the company's products. An increasing demand for the company's products will increase company profit and could ultimately improve the company's stock price. The fourth hypothesis can be developed as follow:

H_4: gross domestic product effect on stock prices.

In the following sections, we will explain testing the hypotheses in details.

3. RESEARCH METHODS

The dependent variable in this study is stock price, while independent variables in this study are price earnings ratio, earnings per share, book to market ratio, and gross domestic product. The populations used in this study are all property and real estate companies listed on the Indonesia Stock Exchange in 2012 to 2014. For the sample selection, purposive sampling method was used, it is sample selection based on the criteria that have been set.
The criteria used in this study are: 1. property and real estate company that has been listed in the Indonesia Stock Exchange during 2012 to 2014; 2. companies that provide financial statements and disclosure of data concerning the price earnings ratio, earnings per share, book to market ratio in full and successively during 2012 to 2014; 3. the financial statements are presented in units of currency. Data processing techniques will be performed with the SPSS software by conducting classic assumption test to see the feasibility of using the regression model and the feasibility of the independent variables. The classical assumption test including normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test. Hypotheses testing is performed in this study consists of t-test (partial test), F-test, and multiple coefficient of determination test (R2 test). The regression analysis used to test whether the data of the sample is strong enough to describe the population or not, and whether it generalization about a population can be done based on the sample results.

4. RESULTS AND DISCUSSION

The test results of classical assumptions that have been done concluded that the regression model used in this study is feasible because the regression model has been free from the normality problem, no multicollinearity, no autocorrelation, and also no heteroscedasticity. Furthermore, multiple linear estimation tests can be tested and interpreted in Table 1.

Table 1. Simple Regression Result

Coefficients[a]		Unstandardized Coefficients		Standardized Coefficients
Model		B	Std. Error	Beta
1	(Constant)	1166.862	544.166	
	PER	.118	.200	.013
	EPS	8.898	.348	.890
	Book to Market Ratio	10.249	3.823	.089
	PDB	218.989	97.741	.053

a. Dependent Variable: Stock price

Based on the output linear regression above, the multiple regression analysis model used in this study can be formulated as follows:

Stock Price = 1166.862 + 0.118 PER + 8.898 EPS + 10.249 Book to Market Ratio + 218.989 PDB (2)

From the regression equation, it can be expressed:

a) Constant number of 1166.862 shows that if there are no independent variables of price earnings ratio, earnings per share, book to market ratio, and gross domestic product that effect on the stock price, Then, stock price will show a figure by 1166.862.

b) Price earning ratio is 0.118, indicates that if earnings per share, book to market ratio, and gross domestic product stay constant, any increase in price earning ratio would increase the share price by 0.118.

c) Earnings per share is 8.898, showed that if the price earnings ratio, book to market ratio, and gross domestic product stay constant, any increase in earnings per share will increase the share price by 8.898.

d) Book-to-market ratio is 10.249, indicates that if the price earnings ratio, earnings per share, and gross domestic product of are constant, any increase in book to market ratio increase the share price by 10.249.

e) Gross domestic product is 218.989, indicates that if the price earnings ratio, earnings per share, and book to market ratio is constant then any increase in the value of gross domestic product increase the share price by 218.989.

Hypotheses testing of the study aims to prove the influence of the price earnings ratio, earnings per share, book to market ratio and gross domestic product on stock price. The testing has been done by using pooled data either together or partially against each studied variable. Regression analysis with α = 5% of variables is presented in Table 2.

Table 2. Hypothesis Test Results

Coefficients[a] Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1166.862	544.166		-2.144	.035
	PER	.118	.200	.013	.589	.557
	EPS	8.898	.348	.890	25.566	.000
	Book to Market Ratio	10.249	3.823	.089	2.681	.009
	PDB	218.989	97.741	.053	2.240	.028

a. Dependent Variable: Stock price

Based on Table 3, the partial test of price earnings ratio to stock price gives p-value of 0.557 which is greater than 5% significance level ($\propto = 0.05$). This shows that the price earnings ratio to stock price has no significant effect by its population. Partial testing of earnings per share on stock price gives p-value of 0,000 which is less than the 5% significance level ($\propto = 0.05$), suggesting that the influence of earnings per share to the share price is significant. Partial test for book to market ratio to stock prices resulted in p-value of 0.009 which is less than the 5% significance level ($\propto = 0.05$), it means that the book to market ratio gives significant influence to the share. Gross domestic product to the stock price yield p-value of 0.028 which is less than the 5% significance level ($\propto = 0.05$), it indicates that the influence of the gross domestic product on the share price has a significant influence.

The purpose of F-test is to determine whether there is a significant effect between the price earnings ratio, earnings per share, book to market ratio and gross domestic product simultaneously on stock price of the property and real estate company listed in the Indonesia Stock Exchange during the period 2012 to 2014. Hypotheses testing is done by using multiple linear regression analysis with SPSS 22.0. To test simultaneously, analysis of each regression coefficient was conducted. The results of multiple linear regression analysis can be seen as follows.

Table 1. F-Test Statistic Result

Model[a]		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	295746255.927	4	73936563.982	513.895	.000[b]
	Residual	11797730.923	82	143874.767		
	Total	307543986.851	86			

a. Dependent Variable: Stock price, b. Predictors: (Constant), GDP, PER, Book to Market Ratio, EPS

Based on the results in Table 4, p-value is 0,000 which is less than the 5% significance level ($\propto = 0.05$). This shows that the influence of variable price earnings ratio, earnings per share, book to market ratio, and gross domestic product on stock price simultaneously gives significant influence. It also means that the null hypothesis (Ho) is rejected, meaning that the hypothesis that there is no influence between variable price earnings ratio, earnings per share, book to market ratio, and gross domestic product on stock price was rejected and the alternative hypothesis (Ha) is accepted, so, the hypothesis is supported by empirical evidence.

Correlation coefficient (R) is used to determine how strong the relationship is between two or more independent variables, which is the price earnings ratio, earnings per share, book to market ratio, and gross domestic product on dependent variable. Coefficient values is ranging from -1 to 1, if the coefficient value is -1 or 1, means that the relationship between two or more variables is getting stronger. Conversely, if the value is close to 0 means the relationship between two or more variables is getting weaker. A positive value indicates that the relationship is in

the same direction, while negative values indicate inverse relationship. The result of the correlation coefficient (R) can be seen in Table 4.

Table 2. Correlation Coefficient Test Result

Model[b]	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981[a]	.962	.960	379.30827

a. Predictors: (Constant), GDP, PER, Book to Market Ratio, EPS, b. Dependent Variable: Stock price

Based on Table 4, the R value is 0.981. This shows that there is a strong and positive correlation relationship between price earnings ratio, earnings per share, book to market ratio, and gross domestic product variables on the stock price. The determination coefficient test (adjusted R-square) aims to measure how far the ability of the model to explain the dependent variable variations. The determination coefficient value is between zero and one. The coefficient of determination (adjusted R-square) with its value approaching one indicates that the price earnings ratio, earnings per share, book to market ratio, and gross domestic product variables can provide almost all the information to predict stock prices. While if the value of determination coefficient (adjusted R square) is small means that the ability of the price earnings ratio, earnings per share, book to market ratio, and gross domestic product variables for predicting stock prices is very limited. The determination coefficient (adjusted R-square) is as follows:

Table 3. Determination Coefficient Test (R^2)

Model[b]	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981[a]	.962	.960	379.30827

a. Predictors: (Constant), GDP, PER, Book to Market Ratio, EPS, b. Dependent Variable: Stock price

Table 5 shows that the determination coefficient (adjusted R-square) has a value of 0.960. This shows that 96.0 percent of predicted stock price can be explained by the four independent; price earnings ratio, earnings per share, book to market ratio, and gross domestic product while the remaining 4 percent is explained by other factors outside the regression model.

5. CONCLUSION

The purpose of this study is to determine the effect of price earning ratio, earning per share, book to market ratio, and gross domestic product on stock price of the property and real estate sector listed in Indonesia Stock Exchange in 2012 to 2014. The results of multiple linear regression analysis showed that the price earnings ratio, earnings per share, book to market ratio, and gross domestic product simultaneously effect on stock prices in the real estate and property sector. Assessment of the price-earnings ratio effect on stock price showed no significant effect. It can be seen from the results of t-test analysis; on price earnings ratio variables it produces significant t-value greater than the significance value (0.557> 0.05). So, it can be concluded that the price earning ratio variables do not have effect on stock prices significantly. The effect of earnings per share on stock price testing showed a significant effect. It can be seen from the results of the t-test at earning per share variable which resulted in significant t-value is less than the significance value (0.000 <0.05), it can be concluded that earning per share variable has significant influence on stock prices.

Testing the influence of book to market ratio on the stock price showed a significant effect. It can be seen from the results in the t-test of book to market ratio variable that produces sig t smaller than the significance value (0.009 <0.05), which can be concluded that book to market ratio variables have a significant effect on stock prices. Gross domestic product effect on to stock price, test also showed a significant effect. It can be seen from the results of the t-test on the gross domestic product variable that generates sig value t-value is less than the significance value (0.028 <0.05), which can be concluded that the variable gross domestic product effect on stock prices significantly. The R value of 0.981 point shows that there is a strong and positive correlation relationship between the price earnings ratio, earnings per share, book to market ratio, and gross domestic product on the stock price. Adjusted R-square of 96.0% indicates that 96.0% of the price earnings ratio, earnings per share, book to market ratio, and

gross domestic product can be explained by the independent variables used in this study, while the remaining 4% is explained by other factors. Earnings per share variable have the most significant effect in this study compared with the book to market ratio and gross domestic product variables. There are several limitations that are listed as follow:

1. The period of observation for further research should be longer than the observation period in this study. It aims to strengthen the research results.

2. This research only select property and real estate sector. For further research, we recommended to select sample companies in other sectors listed on the Stock Exchange.
3. This study only uses price earnings ratio, earnings per share, book to market ratio, and gross domestic product growth as an indicator of stock price index of the property sector, although there are still many other factors that could effect on stock price. Conditions of price earning ratio, earnings per share, and book to market ratio tends to fluctuate, even some companies experienced a negative trend. Companies need to increase the company's revenues, so, investors are interested in investing and stock price will gets higher value.

REFERENCES

Adaoglu, C. and Katircioglu, S. (2013), Foreign Investor Flows and "Blue Chip" Stock Returns, International Journal of Emerging Markets, 8 (2): 170-181.

Agu, C. (2008), Does the Policy Reaction Function of the Central Bank of Nigeria Follow Any Benchmark?, International Journal of Economic Perspectives, Volume 2, Issue 2, pp. 104-123.

Almummani, Mohammad A. (2014). "Determinants of Equity Share Prices of the Listed Banks in Amman Stock Exchange: Quantitative Approach". International Journal of Business and Social Science. Vol. 5, No.1 Jan, pp: 91-104.

Ang, Robert. (2007). Buku Pintar Pasar Modal Indonesia (The Intelligent Guide to Indonesian Capital Market). Edisi Pertama. Mediasoft Indonesia. Jakarta.

Arshad, Zeeshan et al. (2015). "Determinants of Share Prices of listed Commercial Banks in Pakistan". IOSR Journal of Economics and Finance. Vol. 6, No. 2 Mar, pp: 56-64.

Barisik, S. & Tay, A. (2010), An Analysis of Financial Crisis by Early Warning Systems Approach: The Case of Transition Economies and Emerging Markets (1994-2006 Period Panel Logit Model), International Journal of Economic Perspectives, Volume 4, Issue 2, pp. 403-426.

Bayram, T. (2007), Emergence of a Monetary Euro Block: A Dynamic Model Analysis, International Journal of Economic Perspectives, Volume 1, Issue 3, pp. 128-147.

Bayram, T. 2007), Balassa-Samuelson Model Revisited : Growth Productivity Effect and Capital Accumulation, International Journal of Economic Perspectives, 2007, Volume 1, Issue 1, pp. 29-44.

Berument, H. & Dogan, N. (2011), Stock Market Return and Volatility Relationship: Monday Effect, International Journal of Economic Perspectives, Volume 5, Issue 2, pp. 175-185.

Besley, Scott and Brigham, Eugene F. (2010). Essential of Managerial Finance, 14th Edition, Cengage Learning. Brigham, Eugene F. & Houston, Joel F. (2009). Financial Management (Twelfth Edition). Book One. Jakarta: Erlangga.

Buyuksalvarci, A. & Abdioglu, H. (2010), The Causal Relationship between Stock Prices and Macroeconomic Variables: A Case Study for Turkey, International Journal of Economic Perspectives, Volume 4, Issue 4, pp. 601-610.

Chandio, J. A. (2014), Finance-Growth Nexus: Empirical Evidence from Pakistan, International Journal of Economic Perspectives, Volume 8, Issue 1, pp. 22-31.

Chimobi, O. P. (2010), Causality between Money and Inflation in the Nigerian Economy, International Journal of Economic Perspectives, Volume 4, Issue 1, pp. 363-370.

Dalgin, M. H., Gupta, K., & Sraiheen, A. (2012), Testing CAPM for the Istanbul Stock Exchange, International Journal of Economic Perspectives, Volume 6, Issue 3, pp. 224-234.

Darmadji Tjipt no dan Hendry M Fakhruddin. (2006). Capital Markets at Indonesia, Jakarta: Salemba Empat.

Elmas, F. (2009), World-Systems Analysis and Unequal Exchange: The Turkish Economy during the Trade and Financial Liberalization Process, International Journal of Economic Perspectives, Volume 3, Issue 3, 159-165.

Fabozzi, Frank J. (2002). Investment Management, Edition Indonesia, Jakarta: Salemba Empat.

Fama, E.F., and French, K.R. (1995). The Cross Section of Expected Stock Returns, Journal of Finance, 47, pp: 247-265.

Fethi, S. and Katircioglu, S. (2015), The Role of the Financial Sector in the UK Economy: Evidence from a Seasonal Cointegration Analysis, Economic Research - Ekonomska Istraživanja, 28 (1): 717-737.

Fethi, S., Katircioglu, S., and Caglar, D. (2013a), the Role of the Financial Sector in the Turkish Cypriot Economy: Evidence from Bounds and Causality Tests, Turkish Studies, 14 (3), 540-563.

Fethi, S., Katircioglu, S., and Khadem, S. (2013b), The Determinants of the Real Exchange Rate and Their Role in the New Zealand's Economy, Ekonomista, 16 (2): 259-280.

Ghozali, Imam. (2011). Application of Multivariate Analysis with IBM SPSS Semarang Program: BP UNDIP.

Gitman, J.L. (2009). Principles of Managerial Finance, 12th edition. USA: Pearson Education Inc.

Gokgoz, F. (2007), Testing the Asset Pricing Models in Turkish Stock Markets: CAPM vs Three Factor Model, International Journal of Economic Perspectives, Volume 1, Issue 2, pp. 103-117.

Gujarati, Damodar. (2003). Fundamentals of Econometrics. Jakarta: Erlangga.

Gungor, H. and Katircioglu, S. (2010), Financial Development, FDI and Real Income Growth in Turkey: An Empirical Investigation from the Bounds Tests and Causality Analysis, Actual Problems of Economics, 11 (114): 215-225.

Gungor, H., Katircioglu, S. T., and Mercan, M. (2014), Financial Development, FDI, and Real Income: The Turkish Experience, Acta Oeconomica, 64 (1), 73-89.

Hachicha, A. (2008), Does Financial Innovation of Credit Derivatives Make Bank Riskier?, International Journal of Economic Perspectives, Volume 2, Issue 1, pp. 1-4.

Hair, Joseph F. Jr, et al. (2003), Marketing Research: within a Changing Information Environment, 3rd edition, Mc GrawiHill International edition, New York.

Harahap, Sofyan Syafri. (2007). Accounting Theory. PT. Raja Grafindo Persada. Jakarta.

Heidari, H., Katircioglu, S., and Bashiri, S. (2013), Inflation, Inflation Uncertainty and Growth in the Iranian Economy: an Application of BGARCH-M Model with BEKK Approach, Journal of Business Economics and Management, 14 (5): 819-832.

Hidayat, Taufik. (2010). Smart Book of Investment. Jakarta: Indonesia Media.

Husnan, Suad. (2010). Fundamentals of Portfolio Theory and Secure Analysis. Third edition. UPP AMP YKPN. Yogyakarta.

IAI. (2012). Statement of Financial Accounting Standards. Jakarta: Salemba Four.

Jenkins, H. P. and Katircioglu, S. (2010), The Bounds Test Approach for Cointegration and Causality between Financial Development, International Trade and Economic Growth: The Case of Cyprus, Applied Economics, 42 (13): 1699-1707.

Jogiyanto, Hartono. (2010) Portfolio Theory and Investment Analysis: 7th Edition. Yogyakarta: BPFE Yogyakarta.

Kalim, R., Ali, L., Shahbaz, M. (2012), On Foreign Direct Investment and Stock Market Relation: A Case of Pakistan, International Journal of Economic Perspectives, Volume 6, Issue 1, pp. 98-116.

Karacaer, S. & Kapusuzoglu, A. (2010), Investigating Causal Relations among Stock Market and Macroeconomic Variables: Evidence from Turkey, International Journal of Economic Perspectives, Volume 4, Issue 3, pp. 501-507.

Katircioglu, S. (2012), Financial Development, International Trade and Economic Growth: The Case of Sub-Saharan Africa, Ekonomista, 15 (1): 117-127.

Katircioglu, S. T. & Taspinar, N. (2017), Testing the Moderating Role of Financial Development in an Environmental Kuznets Curve: Empirical Evidence from Turkey, Renewable & Sustainable Energy Reviews, 68 (1): 572-586.

Katircioglu, S., Kahyalar, N. and Benar, H. (2007), Financial Development, Trade and Growth Triangle: The Case of India, International Journal of Social Economics, 34 (9): 586-598.

Katircioglu, S.T., Sertoglu, K., Candemir, M., and Mercan, M. (2015), Oil price movements and macroeconomic performance: Evidence from twenty-six OECD countries, Renewable & Sustainable Energy Reviews, 44: 257-270.

Kaushal, L. A. & Pathak, N. (2015), The Causal Relationship among Economic Growth, Financial Development and Trade Openness in Indian Economy, International Journal of Economic Perspectives, Volume 9, Issue 2, pp. 5-22.

Khakimov, O. A., Erdogan, L., & Uslu, N. C. (2010), Assessing Monetary Policy Rule in Turkey, International Journal of Economic Perspectives, Volume 4, Issue 1, pp. 319-330.

Khan, Nauman and Amanullah. (2012). Determinants of Share Prices at Karachi Stock Exchange „" International Journal of Business and Management Studies, Vol, 4, No 1, pp: 111-120.

Kieso, Donald E., Jerry J. Weygandt dan Terry D. Warfield. (2007). Intermediate Accounting. 12th Edition. USA: John Wiley and Sons, Inc.

Kuncoro, Mudrajad. (2001). Quantitative Research Methods. Yogyakarta: UPP AMP YKPN.

Kuryanov, A. (2008), Monetary Policy and Innovation Economy in Russia, International Journal of Economic Perspectives, Volume 2, Issue 3, pp. 168-174.

Larson, Ken. (2001). Hart's E&P (74th edition). Michigan: Hart Publications.

Malhotra and Tandon. (2013). "Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies". International Journal of Research in Management & Technology (IJRMT), Vol. 3 No.3, Jun: 2249-9563. pp: 86 – 95.

Mankiw, Gregory N. (2006). Principles of Economics. Introduction to Macro Economics. Third Edition. Chriswan Sungkono. Salemba Four. Jakarta.

Margaretha, F., dan Damayanti, I. (2008). Influence of Price Earning Ratio, Dividend Yield, and Market to Book Ratio to Stock Return at Indonesian Stock Exchange, Business and Accounting Journal, 10 (3), pp: 149-160.

Martono, N.C. (2009). Effect of Fundamental Factor of Companies and Exchange Rate on Stock Return on Companies Listed on BEI (Case on Manufacturing Company Period Year 2003-2007).

Michailidis, G. (2008), Examining the Unconditional and Conditional CAPM for the Athens Stock Exchange for the Period 1997 to 2003, International Journal of Economic Perspectives, Volume 2, Issue 3, pp. 176-189.

Nathaniel, N. (2008). "Analysis of Factors Influencing Stock Return (Study on Real Estate and Property Stocks in Indonesia Stock Exchange Period 2004-2006". PhD Thesis, UniversitasDiponegoro. Semarang.

Nazlioglu, S., Yalama, A., & Aslan, M. (2009), Financial Development and Investment: Cointegration and Causality Analysis for the Case of Turkey, International Journal of Economic Perspectives, Volume 3, Issue 2, pp. 107-119.

Nichols, D.C dan J.M. Wahlen. (2004). How Do Earnings Number Related to Stock Return? A Review of Classic Accounting with Update Guidance, Accounting Horizons, Vol. 18, Desember, pp: 263-286.

Niswonger, Warren, (2000). Principles of Accounting, Ninth Edition. Second Volume. Erland, Jakarta.

Nurmayanti, Poppy. (2010). Fundamentals of Investment and Portfolio analysis. Palembang: Citrabooks Indonesia.

Priatinah, Denies and Kusuma, Prabandaru A. (2012). "The Influence of Return on Investment (ROI), Earning Per Share (EPS), and Dividend Per Share (DPS) Against Stock Price of Mining Companies Listed on Indonesia Stock Exchange (BEI) Period 2008-2010". Nominal Journal, Vol 1 No. 1, pp: 50-64.

Ratih, D. Apriatni E.P, Saryadi. (2013). "Effect of EPS, PER, DER, ROE on Stock Price in Mining Sector Companies Listed on IDX Year 2010-2012". Diponegoro Journal of Social and Politics, Dec.

Reeve, James M., Carl S. Warren dan Jonathan E. Duchac. (2012). Principles of accounting. 24th Edition. Ohio: Thomson South-Western.

Rjoub, S. A. M. AL (2011), Business Cycles, Financial Crises, and Stock Volatility in Jordan Stock Exchange, International Journal of Economic Perspectives, Volume 5, Issue 1, pp. 83-95.

Roy, A. G. (2012), U.S. Foreign Indebtedness, Monetary Policy, and Economic Growth, International Journal of Economic Perspectives, Volume 6, Issue 2, pp. 196-205.

Sandy, Kurniawan. (2007). "Effects of Macroeconomic Factors on the systematic risk of stocks of Manufacturing companies in JSX ". Journal of Finance and Business.Vol. 5, March 1, pp: 24-40.

Sangaji, Joko. (2003). "Factors Affecting Stock Prices; Case Study P.T. Kimia Farma ". Journal of Economics and Business Indonesia, Vol. 10, No. 2. pp: 145-159.

Saqib, N. & Waheed, A. (2011), Financial Sector Reforms and Macroeconomic Performance: Policy Simulations Based on Financial Macroeconomic Model for Pakistan, International Journal of Economic Perspectives, Volume 5, Issue 3, pp. 241-260.

Shaeri, K., Adaoglu, C., and Katircioglu, S. (2016), Oil Price Risk Exposure: A Comparison of Financial and Non-Financial Subsectors, Energy, 109, 712-723.

Siamat, Dahlan. (2005). Management of Financial Institutions; Monetary Policy and Banking. Fifth Edition. Jakarta: Institute of Penebit Faculty of Economics University of Indonesia.

Siddiqui, M. A. (2008), Banking Sector Reforms in Pakistan and Banking Stock Volatility In KSE, International Journal of Economic Perspectives, Volume 2, Issue 4, pp. 200-220.

Simamora, Henry. (2000). Accounting (Base of Business Decision Making). Jakarta: Salemba Four.

Sitompul, A. (2000). Capital Market: Public Offering and the Issue. PT Citra Aditya Bakti.

Sodeyfi, S. (2016), Review of Literature on the Nexus of Financial Leverage, Product Quality, & Business Conditions, International Journal of Economic Perspectives, Volume 10, Issue 2, pp. 146-150.

Sodeyfi, S. and Katircioglu, S. (2016), Interactions between Business Conditions, Economic Growth, and Crude Oil Prices, Economic Research - Ekonomska Istraživanja, 29 (1): 980-990.

Son, Gede A.P., Yaniartha, P. D. (2014) "The Influence of Leverage, Inflation, and GDP On Insurance Company Stock Prices". E-Journal of Accounting Udayana University 9.2. pp: 449-464.

Soukhakian, B. (2007), Financial Development, Trade Openness and Economic Growth in Japan: Evidence from Granger Causality Tests, International Journal of Economic Perspectives, Volume 1, Issue 3, pp. 118-127.

Soukhakian, N. (2007), Financial Development and Economic Growth in Iran: Evidence From Co-Integration and Causality Tests, International Journal of Economic Perspectives, Volume 1, Issue 2, pp. 56-63.

Srinivasan, P. (2012). "Determinants of Equity Share Prices in India: A Panel Data Apporach". The Romanian Economic Journal. Vol. 15 No. 46, pp: 205-228.

Suhardi, Deddy A. (2007). "Stock Price Movement of Jakarta Stock Exchange Property Sector Based on Profitability, Interest Rate and Beta Stock". Journal of Organization and Management Vol. 3 No. 2 Page 89-103. Jakarta.

Sujarweni, V. Wiratna. (2007). Easy Guide to Using SPSS, Cet. First, Ardana Media, Yogyakarta.

Syahrul dan Nizar, M.A. (2000). Accounting Dictionary. Citra Harta Prima.

Tanasie, A., Tanasie, R. T., & Fratostiteanu, C. (2008), A Fuzzy Clustering Algorithm Application for Monetary Unions, International Journal of Economic Perspectives, Volume 2, Issue 4, pp. 246-253.

Tandelilin, Eduardus. (2010). Portfolio and Investment: Theory and Applications. Issue 1 Yogyakarta: Kanisius.

Tse, Raymond Y.C. (2002). "Price Earnings Ratios, Dividend Yield and Real Estate Stock Prices", Journal of Real Estate Portfolio Management.

Umar, Muhammad S dan Musa, Tijjani B. (2013). "Stock Prices and Firm Earning Per Share in Nigeria". JORIND Vol. 11 No. 2 Des, pp: 187-192.

Waheed, A. & Younus, N. (2010), Effects of Financial Sector's Development and Financial Sector's Efficiency on Economic Growth: Empirical Evidence from Developing and Developed Countries, International Journal of Economic Perspectives, Volume 4, Issue 2, pp. 449-458.

Zuliarni, Sri. (2012). Influence of Financial Performance on Stock Price at Mining and Mining Service Company in Indonesia Stock Exchange (BEI). Journal of Business Applications, Vol. 3 No. Oct 1, pp: 36-48.

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