

Inter-Relationship between Buffettology and Several Companies in the LQ-45 Index, Period of 2010-2021



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ABSTRACT: This study is intended to investigate whether the Indonesian Reference Index, in this case, the LQ 45, consistently applies the principles of prudent investment, known as the Buffettology principle. Buffettology which is a derivative of its predecessor Benjamin Graham, has several characteristics or yardsticks in investment and financial decisions. Buffettology which requires a careful choice of companies or stocks, in terms of the Debt to Equity ratio, should be below 0.5 and have current assets to current debt ratio above 1.5. Another thing is to choose a company with an undervalued category but has good prospects. This study takes a research sample of 32 companies that are members of the LQ-45 option outside the banking sector that are traded on the Indonesian Stock Exchange for a period from 2010 to 2021. This study finds that the Debt to Equity ratio variable greatly affects stock returns and Net profit margin. with a negative effect. This means that the smaller the value of the D/E ratio, the higher the company's return. The natural Quick ratio variable, which is defined as the ratio of current assets to current liabilities, also significantly affects stock returns. The NPM variable also affects the company's return positively. In this case, investors' expectations of companies that have low D/E are more considered to have prospects as good companies in the future, in addition to the high ratio of Quick ratio and NPM ratio. The managerial implication of this research is the need for financial services authorities to pay attention to excessive company performance in debt expansion.

KEYWORDS: Buffettology, Index LQ-45, Indonesian Stock Exchange

"To invest successfully over a lifetime does not require a stratospheric IQ, unusual business insights, or inside information. The key is to have a sound intellectual framework for making decisions and the ability to keep emotions from corroding that framework."

-Warren Buffett (2003)

"The main point is to have the right general principles and the character to stick to them."

-Benjamin Graham (1963)

1. INTRODUCTION

The impact of the COVID-19 pandemic is that many economic actors reduce activities outside the home, and make their home their economic base camp. Not infrequently many offers from both virtual media and people to invest in various commodities of goods and services. Especially for virtual trading that sticks out are trading in foreign exchange, commodities and stocks. Of the three quantities that are considered safe and secure by economists and risk management practitioners are stock trading. First, stock trading does not necessarily stand alone, but is under the supervision and corridors of institutions related to the financial sector and services. The US with its financial services authority, the UK with its financial services authority. Including Indonesia and its Financial Services Authority (OJK) which oversees and controls all stock trading activities in Indonesia.

OJK in its releases regularly informs the public of all aspects of stock trading conducted by the Indonesia Stock Exchange. All corporate actions of companies that have been listed on the IDX are reported periodically by each company to the OJK. This is an indication of the openness of the entire company. OJK also conducts regular assessments of companies listed on the IDX, and there is no reason to reprimand companies that are stubborn, either lightly to delisting companies from the IDX.

The main purpose of investors investing in the capital market is to maximize wealth through share rewards. Market rewards are seen as the main key in choosing investment opportunities. In order to know this, investors need to be informed of everything about the performance of companies listed on the Stock Exchange. Periodic releases from Issuers and FSA are very much needed

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by investors, including analysis of investment and financial experts who are interested in various types of industries in the capital market. Financial and economic information is crucial for investors to plan their investments. This is what makes IDX can be used as a lesson learned for investors, both beginners and experienced to always be a place of reference for investment. This includes the preparation of an Index issued by the IDX on a regular basis. LQ-45 is an index that is regularly issued by the Indonesia Stock Exchange on a quarterly basis which aims to show the best company performance in the classification of 45 companies from all companies listed on the Indonesia Stock Exchange.

In its journey, the LQ-45 Index is recognized as the best index that reflects the best performance of the companies listed on the Indonesian stock exchange. The question is what is the basis or what factors make LQ-45 the best index on the Indonesian stock exchange?. This research tries to investigate the extent to which the financial and investment adage that has been used so far to see the best company performance is used in sorting shares on the Indonesia Stock Exchange to be included in LQ-45.

History records that not always certain stocks are perched on LQ-45. We still remember the wrong stock that became trending in 2007 – 2009, namely Bumi Resources shares or with the code BUMI which had become a *trendsetter* of the Indonesia Stock Exchange during that period. BUMI has slumped due to poor management of the company, both operational and financial. You can imagine how many investors were trapped in the BUMI drama, so the stock price fell from around 8.000 to only 50 rupiahs, called *gocap* stock.

The phenomenon of falling stock prices caused by poor company performance or even violating the principles of sound and sustainable financial management has become the main study for financial and investment decision-makers at the OJK-authorized institutions. OJK must be at the forefront in supervising and guiding the operations of financial institutions, including the capital market with all its tools.

2. LITERATURE STUDY

In an efficient capital market, security prices fully reflect available information in a rapid and unbiased fashion and thus provide unbiased estimates of the underlying values. One such group believes that price earning (P/E) ratios are indicators of future investment. Proponents of this price ratio hypothesis claim that low P/E will tend to outperform high P/E stocks (Basu, 1977)

For the U.S. market, Gompers et al. (2003) analyze the relationship between corporate governance and long-term equity returns, firm value, and accounting measures of performance. Their results clearly support the hypothesis that well-governed companies outperform their poorly governed counterparts. Well-governed companies have higher equity returns, are valued higher and their accounting statements show a better operating performance. These findings should encourage investors in U.S. companies to consider corporate governance in their investment decisions. Gompers et al. (2003) analyze the impact of 24 governance provisions on stock returns for about 1500 U.S. firms from 1990 to 1999.

Looking at several well-known researchers, there are several benchmarks they have made in the history of financial research throughout the decade the 70s to the 90s. In this case See Basu [1977] prioritized the price-to-earnings ratio, Banz [1981] by prioritizing company size in relation to stock returns, Fama and French [1993] examined size and book-to-market, Lakonishok, Shleifer and Vishny [1994] who emphasized several value measures), and Jegadeesh and Titman [1993] who emphasized the importance of momentum in their research.

Value investing is an indicator that has become an important reference for investors since the capital market was introduced in the west, starting from the New York, England, and Luxembourg stock exchanges. Value investing has changed according to the trend of time and the circumstances that occurred at the time of the trade. Value investing has changed not because of the changing rules of the game, but rather because of demographic factors and the size of assets that reflect the changing players on the stock exchange. The general public, represented by investors, generally acknowledged that the low P/E and P/B ratios were an indication that the company was undervalued. (Buffet, 2003).

Value investing has always been associated with Benjamin Graham, who is called the father of value investing. As mentioned earlier, Graham Benjamin always recommends investors to look for undervalued companies with low P/E and P/B ratio criteria. At first Warren Buffet strongly adhered to the principles advocated by Benjamin Graham, but along with the increasing market capitalization, the principle of low P/E and P/B is sometimes often violated. This is explained as quoted by George Athanassakos and Julie Cazzin, in their article entitled "What's the difference between Ben Graham and Warrant Buffet when it comes to value investing?. P/E and P/B as yardsticks when the capitalization of stocks such as the Information and Technology industry grows big and high, it becomes irrelevant. So that there is a lot of consensus among economists and researchers who conclude the Bubble economy phenomenon as a result of overvaluing an industry that is not apple to apple with other industries. (Buffet, 2003)

The phenomenon of the bubble economy is unfair when it is associated with the net asset value or valuation of, for example, IT stocks compared to Oil and Gas. To illustrate this, I can say that the assets from Google, for example, do not reach one sub-district

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Source: Yahoo Finance, August, 30 2022

Figure 1. Berkshire's Stock Price

in the South Jakarta area, for example. But the assets of Chevron, Mobile, and the like along with their supporting assets such as Refinery and Offshore and Onshore, can exceed one sub-district and even the entire city of South Jakarta, for example. This unfair assessment caused many stocks of oil gas and the like to be sharply corrected, but on the other hand, IT stocks skyrocketed rapidly. In his journey of Warrant Buffet's Ideas and Creativity in taking Thought and Principles, Ben

Graham gave birth to many fresh ideas on how to invest and make important decisions. Warrant Buffet has thought out of the box from the thoughts of his predecessor, Graham. Today the public and investors know that Buffett's ideas are the development of lessons learned from Graham. The Alpha and Beta jargons voiced by Wall Street are also in line with Buffett's idea of emphasizing risk mitigation factors from investing in the capital market.

Buffet admits that Ben's ideas and thoughts have dominated Buffett's professionalism in making financial and investment decisions until now. Berkshire's portfolio was heavily dominated by Ben's ideas as an investment mentor at first.

On another occasion, Buffett acknowledged Ben Graham's generosity. Ben is recognized as his teacher, his worker, and his friend. Buffet and Bill Gates are recognized as the world's largest aidgiver billionaires. In 2006, Buffett announced his donation to the Melinda Gates Foundation. In his remarks during the handover of aid, Buffett quoted the phrase "Walter Lippmann spoke of men who plant trees that other men will sit under. Ben Graham was such a man." This means that Buffett recognizes the generosity of Ben Graham who is recognized not only as a mentor and teacher but also as an example in his life.

Beckshire's stock, which is the holding of Buffett's warrant portfolio, has experienced a significant increase since its inception. The graph shows that BRK-B's stock has skyrocketed since the early 2000s, despite experiencing turbulence in 2009 and 2020. We all understand that almost all stocks in those two moments experienced very sharp corrections in all world stock exchanges. But BRKB has passed both moments with brilliant corporate actions, as evidenced by its subsequent rise.

The author calls these two years a honeymoon in the capital market industry, where the fall of the capital market in almost all industrial sectors is always followed by price corrections afterwards. (Bhakti, 2020) For investors who understand this situation, it will be a land of luck. This is proof that risk or danger in Chinese writing is always followed by the word opportunity as a necessity. Writing risk as a combination of two words in this case danger and opportunity must be a valuable lesson for all investors.

Berkshire's portfolio performance throughout 2022 has been a remarkable achievement. The significant increase of BRK-B can be seen from the position of 331 Billion USD last year to 364 Billion USD. A significant increase in BRK-B's portfolio was obtained from the 3 largest stocks, in this case Apple Inc., Bank of America and American Express.

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Looking at Berkshire's portfolio, it can be concluded that ownership is above 5% of the shares listed on the NYSE, respectively Apple Inc (APPL) at 42.79%, Bank of America (BAC) at 11.45%, American Express (AXP) at 7.80%, Chevron Corp (CVX) at 7.13% and Coca Cola at 6.82%. (See Appendix 1). All of these shareholdings are accredited shares in Fortune 500 companies, and have very good investment and financial criteria. In the last 2 decades. Referring to the five companies with ownership of more than 5% of Berkshire's investment shows that the reference to the investment criteria applied by Benjamin Graham and Warrant Buffet is very important. (See Appendix 1)

The top five companies owned by Berkshire have financial ratios in terms of Current ratios which have always been above 1.1 in the last 2 decades, excluding the years of falling stock prices, which were due to the Global Financial crisis in 2008-2009 and the year due to the Covid-19 Pandemic, in 2020. -2021 ago. This shows that Buffett's reference to the current ratio criteria above 1.5 is a necessity for the company to continue to provide investors with positive expectations of the company's performance. The performance of financial ratios that refer to profitability, in this case Return on Equity and Net profit margin, is also strongly held by Berkshire's investment decisions regarding its portfolio choices, especially for the five companies (AAPL, BAC, APX, CVX and KO). for return on equity, the five companies recorded ratios above 15%, while for profit margins they were always above 20%. (See Appendix 1)

These yardsticks have made Berkshire's investment the best investment choice today. This can be seen from the increase in Berkshire's market capitalization in the last decade, where the surge in the market capitalization of BERK_P has become the belle of the US and European capital markets.

Almost every country uses a benchmark or investment reference in its capital market trading. The New York Stock exchange, which has been trading for more than a century in the US, also uses the benchmark index as an investment reference for investors. The Dow Jones, Nasdaq and S & P indexes each have their own reference index in their investment. Fortune 500 or better known as the S & P 500 makes the US 500 selected companies on a list that has various criteria. Benjamin graham as Warrant Buffet's teacher at the end of the 1930s had warned investors to be careful before entering the capital market industry. Provision of technical knowledge is not necessarily useful if it is not accompanied by fundamental knowledge of the company to be purchased.

Indonesia is no exception, since its establishment in 1978, the Indonesian Stock Exchange authority has presented several benchmarks for investors who will seek their fortune on the stock exchange floor. The LQ-45 index, Kompas 100, etc. are evidence of the concern of the stock exchange authorities in Indonesia in maintaining the continuity of stock trading in Indonesia. The problem is that the criteria or yardstick used as a reference for the index must be transparent and accountable.

Looking at the S&P 500 Index, it can be seen that the Index reflects the performance of companies that are members of the Fortune 500 and have relatively good performance from similar companies in their fields. The S&P 500 index covers a broad spectrum of US financial performance reflected by these companies. In its development, this Index ranks the performance of 500 companies on a regular basis in a transparent, accountable and fair manner. The index itself is the original name for the Standard & Poor Index, which was created in 1957 by the Standard & Poor's agency. The S&P 500 index is actually easy to calculate with its straightforward calculations.

The existence of the S&P 500 index has helped many investors who need data or sources of information about the company to be purchased, in addition to macro variable data which is no less important. Once again the S&P 500 Index is a direct or shorthand expression of the company's current presence.

The declaration of the relationship between macroeconomic variables and stock market returns has resulted in a better understanding of the dynamics of stock market developments in various countries. Intensive research on the relationship between markets in emerging and advanced countries, plus the use of Vector error correction techniques and co-integration techniques, makes a country's index more weighty in considering many things. The FTSE 100 (London Stock Exchange) and S&P 500 (New York Stock Exchange) indices are the best examples of this phenomenon. Macroeconomic variables included in the Index formation model include Industrial Production Index, short-term interest rate, exchange rate, consumer price index, unemployment rate, as well as Broad money (M3) which includes Exogenous Variables). The events that have an international influence are captured with the Dummy variable.

The stages of forming the FT-100 and S&P500 indices above have made the two countries of the UK and the United States experience relatively better economic growth and equilibrium compared to other countries. Many studies say that the Industrial Production index, short-term interest rate and unemployment rate have no causal relationship with FT-100 for the short term. Likewise, the Industrial production index and the exchange rate have no significant effect on the S&P500 index.

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The number of domestic companies listed on the Nasdaq increased each year since 2018, but the New York Stock Exchange (NYSE) has seen some fluctuations over this period. While the NYSE has generally had around 1,800 to 1,850 listed domestic companies, October 2020 saw a spike up to 2,363. In total, as of June 2022, the NYSE had a combined total of 2,584 listed domestic and international companies, while the Nasdaq had a much higher 3,790. Despite this, the NYSE has a higher market capitalization than the Nasdaq. (Statista Research Department July 2022) This paper explores the relationship between financial ratios and market stock returns of 32 Indonesian listed firms non-Bank from 2010 to 2021. The results of Weighted Least Square (WLS) show that Debt to Equity ratio, Net Profit Margin and Current Ratio have a significant relationship with market stock returns. The implications will be for policymakers of government in selecting and deciding their policies. It will also be for investors and managers to make better decisions.

3. MARKET TODAY

The financial performance of the property sector shown by the companies PT Ciputra development Tbk (CTRA) and PT Sumarecon (SMRA) shows the ups and downs of the influence of Net Profit Margin, Debt to Equity Ratio and Current Ratio. The two companies show that from 2011 to 2021 the performance of 2 companies is very fast, which is indicated by the high NPM Ratio, in this case in the range of 20 to 30 percent. The stretching of the property industry this year is indeed supported by the government's policy through Bank Indonesia to facilitate the distribution of funds for the property sector in the country. Both companies are also able to hold the D/E ratio in the range of 0.5 to 1, so that both companies are financially strong. The current ratio for both companies is also quite good, where the ratio of Current Assets to Current Liabilities is in the range of 1.5 times. (See Appendix 2)

The performance of the two companies in 2015 was shaken by the fall in the value of NPM as a result of the sluggish property market that year. For 2020, the fall of NPM was due to the influence of the Covid-19 pandemic that hit almost all countries. and the property sector, which has been worst affected by the pandemic since the beginning of the pandemic. Entering 2021, the performance of the two companies, in this case PT Ciputra Development Tbk and PT Sumarecon Tbk, began to show improved performance. Uniquely, the D/E ratio and the current ratio for both companies (CTRA and SMRA) both meet the Warrant Buffet criteria, where the D/E ratio stands in the range of 0.5 and the Current ratio is above 1 time. (See Appendix 2)

The company's performance in the Infrastructure sector, which happens to be all three state-owned companies, in this case PT Wijaya Karya Tbk (WIKA), PT Waskita Karya Tbk (WSKT), PT Pembangunan Perumahan Tbk (PTPP). The current financial ratios for the three infrastructure companies during the study period (2010-2021) showed good performance where the ratio of current assets to current debt was always above 1 time. This shows that the company's ability to manage debt in the short term is very well supported by the company's ability to produce good current assets. (See Appendix 3)

Profit margin values for the three companies are relatively small, just under 10 percent during the study period. Especially for PT Waskita Karya, the company's performance in generating profit margins is very small, even minus above 10 percent in 2020 and 2021. In other words, PT Waskita Karya is greatly affected by the Covid-19 Pandemic where the company's performance in generating profits is nil. The specialty of these three infrastructure companies is the amount of capital expenditure that erodes the company's assets and increases the debt burden. As a result, the D/E ratio for the three companies is in the leveraging category, where debt far exceeds equity during the study period. (See Appendix 3)

The performance of mining companies, in this case PT Antam Indonesia Tbk (ANTM), PT Bukit Asam Tbk (PTBA) and PT Adaro Indonesia (ADRO) have similarities with each other. The ratio of current assets to current debt (Current Ratio) for the three mining companies clearly meets Buffettology's criteria, where the three ratios are consistently above or even more than 2 times. This shows that the mining sector during the study period showed good performance in managing the company so as to produce an excellent Current ratio. This is understandable considering that these three mining companies enjoyed high prices of mining commodities during the research period in the international market, where the company's revenue was based on Dollars, while the company's operating costs were based on Indonesian Rupiah. This is also what the government and environmentalists have to criticize, for where is the area; former mining operations usually leave natural damage that is difficult to replace. In this case, the government should charge the cost of recovering the former mining operation area to be a top priority, in addition to maintaining the continuity of the company's operations properly. (See Appendix 4)

The performance of the companies PT Astra Internasional Tbk (ASII) and PT Tjiwi Kimia Tbk (TKIM), both of which represent large industrial sectors, is interesting to watch. Both companies have substantial assets of over 50 trillion Rupiah. The uniqueness of the two is that they are players in an industry that is almost characterized by monopoly. Specifically regarding PT Indofood as a company that produces many ready-to-eat foods, including the Indomie brand, which is the bestselling noodle in Indonesia. Indomie's market share is almost unwavering for almost 4 decades. This is mainly due to the fact that on the upstream side or the basic ingredient for noodles, which is wheat, is imported by the sole brand holder, PT Berdikari. PT Berdikari itself is actually a long arm of PT Indofood. So you can imagine, on the supply side, Indofood controls the import channel (Monopsony), on the demand

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side PT Indofood controls the distribution channel. This is what causes Indomie's share in the Noodle industry to approach 90 percent or even more for 4 decades. (See appendix 4)

PT Astra Internasional Tbk (ASII) as the sole brand holder of Toyota, Honda, Daihatsu and other well-known brands has dominated the car market in Indonesia for almost 4 decades. This makes PT Astra very strong in asset based and market share which has dominated the vehicle market in Indonesia.

PT Tjiwi Kimia (TKIM) as part of Asia Pulp & Paper (APP) Sinar Mas, headquartered in Jakarta, Indonesia, is one of the world's leading pulp, paper and packaging producers. Since its founding in 1972, Asia Pulp & Paper (APP) Sinar Mas has grown to market its products in more than 150 countries on six continents, with an annual conversion capacity of over 20 million tonnes. Currently, Asia Pulp & Paper (APP) Sinar Mas employs more than 30,000 people in countries such as Indonesia, the United States, the United Kingdom, Singapore and Hong Kong.

As one of the most integrated and scalable pulp and paper production facilities in the world, Sinar Mas Asia Pulp and Paper (APP) is committed to delivering exceptional quality amid the growing demand for quality paper products worldwide. Sinar Mas' Asia Pulp and Paper (APP) products are available in various forms, including sturdy multipurpose corrugated cardboard.

Looking at the three companies above, in this case PT Astra Internasional, PT Indofood and Tjiwi Kimia gave birth to financial ratios in this case the Current Ratio is above 1 time. This shows that the performance of the three companies' current assets is very strong in financing short-term debt. The three companies also have fairly low D/E ratios and high NPM ratios. Once again these three companies are very consistent in upholding Buffettology's financial principles.

4. HYPOTHESIS AND DATA

Based on the phenomena relating to the theory and behavior of capital market investors above, it can be made several hypotheses as follows

H1: Current Ratio as the Liquidity Variable of the Company influences investors' choices in their investment decisions.

There is no doubt that almost all companies that are included in the FT-100 category in the UK, S&P 500 on the New York Stock Exchange, as well as those included in the LQ-45 category have characteristics of a strong Current Ratio. The high current ratio as required by Warren Buffet is very consistent in maintaining this rule. The survey proves that companies that are included in the Main Index in a country must have a high legitimate Current ratio. Looking at the data of companies that are included in the LQ-45 Index, such as large industrial sectors, in this case, PT Indofood, PT Astra Internasional, and Tjiwi Kimia, the current ratio is above 1.5 times. This shows the company's ability to manage short-term debt is very good and safe. In other words, almost all companies that are included in the Blue-Chip company have a prerequisite for a high ratio of Current Assets to Current Liabilities above 1.5. This ensures the continuity of the company, both in terms of operations, investment and financing. Looking at the phenomenon where companies are included in the Blue Chip category and categorized in the leading index of a country, it can be hypothesized that the high current ratio is very decisive and affects the company's return.

H2: A vigilant profile of a company manager which is indicated by the lower leveraging Finance becomes an important factor in investor choice of a company.

The company's performance is very much determined by top management in this case the company's CEO. A very leveraging company policy, on the one hand, supports company expansion, on the other hand, it burdensome the company if it is not supported by good management. The phenomenon of bankruptcy that occurred before the global financial crisis that began in the US is caused by a lack of careful financial policy and poor corporate governance. Investor choice for cautious companies is one factor in investment decisions for investors worldwide. Well-known US economist Emmanuel Derman and British Economist Paul Willmott (Derman and Willmott, 2007) along with other world derivative economists gathered in New York, in the aftermath of the world financial crisis and made mass repentance of several financial models as well as an incorrect review of derivative financial practices. This is a precedent that the immersion of a model is not a perfect prerequisite for an investment manager or investor. They must also be equipped with other knowledge that is more holistic. As of this writing, the Corona Virus case that hit all of the worlds reminds the writer of the Black Swan theory (Thaleb, 2010) which states the importance of improvable predictions. The Corona Virus Case, the World Financial Crisis, and other extreme cases are black swan phenomena that were not initially expected by ordinary people. Is the wisdom behind the black Swan theory. Thaleb responded by increasingly understanding the phenomenon of Black Swan, when extreme circumstances occur then predictions of the situation in the future will be better to anticipate.

Looking at the companies that are members of the LQ-45, FT-100 and S&P-45, most of them are led by the Company Leaders who have the principle of prudence. APPLE, Chevron, Bank of America, GE and Coca Cola all have relatively small D/E ratios in the range of 0.5.

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Thus, it is not surprising that the authors hypothesize that the D/E ratio in the range of 0.5 makes the company healthy and grow more sustainably.

H3: Healthy Company which is indicated by increasing Net Profit Margin (NPM) is an investment choice factor for investors in the Indonesian capital market.

Almost all well-known indices such as the FT100, S&P 500 and LQ 45 in Indonesia include the financial ratios of Net Profit margin as the index reference. Large companies such as Apple, IBM, Chevron, Bank of America have NPM ratios that are always above 10 percent in their financial statements in the last 5 years, before Indes included it. Raso NPM is a necessity for successful company operations in corporate governance and finance. The LQ45 index, which is the reference for investors in the country, often makes revisions to companies that are always perched on the LQ-45 list. The reference taken in determining LQ-45 requires the company to be profitable in the last 3 years of its financial statements. Even if there are years that cause companies to suffer losses, for example the influence of the Covid-19 pandemic has forced several large companies to restructure their finances. Several large companies whose share is close to monopoly, such as PT Indofood, Astra International, PT Antam, and PTBA, have NPM ratios above 20 percent. The amount of the NPM ratio received by the Company increasingly makes the company free to add Capex and expand the market.

From the hypothesis above, the equation model that can be written is as follows

$$\text{LOGPRICE} = a_0 + a_1 \text{DERATIO} + a_2 \text{QUICKRATIO} + a_3 \text{NPM} + E$$

LOGPRICE, is the logarithm of the stock return of each company, in this case 32 companies are listed as LQ-45

DERATIO, is the logarithm of the ratio of debt to capital which is the vigilant variable of 32 companies in the LQ-45 index

QUICKRATIO, Logarithma which refers to the Ratio of Current Assets to Current Liabilities of 32 companies listed in the LQ-45 Indeks Index

NPM, refers to the Net Profit Margin ratio of 32 companies included in the LQ-45 index

5. RESULT AND ANALYSIS

	Mean/Prop.	Freq.	SD	Min.	Max.	IQR	Median
Logprice	7.79		1.20	4.19	10.48	1.76	7.73
D/E ratio	1.24		1.19	.13	9.90	.88	.87
Quick Ratio	1.75		1.01	.28	7.43	.97	1.53
NPM	9.42		10.12	57.37	33.40	10.17	9.55

Table 2.

Fixed Effect (Within regression)		No. Observation : 224			
R-sq Within : 0.2126		No. of Group : 32			
		F(3.189) : 17.01 Prob > F : 0.0000			
LOGPRICE	Coefficient	Standard error	t	P>(t)	
LOGDERATIO	-.3674999	.131210 4	-2.80	0.006	
QUICKRATIO	.1394	.0668032	2.09	0.038	
NPM	.01901	.0044712	4.25	0.00	
-CONS	7.3239	.1283	57.05	0.00	
Sigma_u	1.178				

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Sigma-e	.4801			
rho	.8576	(fraction of variance due to u_i)		
F Test that $u_i = 0$	F (31, 189) = 35.63	Prob > F = 0.0000		

Sources: Appendix 6

The results of regression using panel data on 32 companies listed on the Indonesia Stock Exchange with the LQ-45 category during the 2010-2021 period show the following results. The variable Debt to Equity ratio affects stock returns, with a negative coefficient. This is reinforced by the magnitude of the T-Stat value of -2.8 and p value of 0.006. It means that with a significance of 5% the D/E ratio variable affects stock returns. The Quick Ratio variable affects stock returns as shown by T-stat and P value below 5% significance. While the variable NPM or Net Profit Margin also affects the Stock return indicated by the amount of T-stat and P value.

The results of the regression above further negate that the D/E ratio which reflects the company's prudence which also describes corporate governance is the main concern in the LQ-45 index pooling. In this case, OJK as the institution that released the LQ-45 Index makes the D/E ratio the most important variable that describes the health of the company in carrying out its operations. This is shown in the performance of companies that are members of the LQ-45 Index. Large private companies such as PT Indofood Tbk, PT Astra International Tbk, PT Telkom Tbk, then mining companies such as PT Antam Tbk, PT Bukit Asam Tbk, PT Adaro Tbk are the best examples that illustrate how the company's operations and finances are managed with good governance in prudent principles. Be careful in anticipating debt. Once again the D/E ratio negates that the Buffettology Principle which requires companies to keep their D/E always below 0.5 becomes a necessity.

Another principle of Buffettology to keep the Current Ratio always above 1.5 is also strongly held in companies that are included in the LQ-45 index. In addition to the 6 companies mentioned above as holders of the precautionary principle, the current ratio above 1.5 is also held by state-owned companies PT Gas Negara Tbk (PGAS), PT Uniliver Tbk, PT AKR Corporindo, almost all property companies, such as PT BSD, PT Ciputra Development, PT Agung Podomoro and PT Sumarecon. The principle of the Current ratio being maintained at around 1.5 is also held by media companies such as PT Surya Citra Tbk (SCMA), the holder of the Indosiar broadcasting license, RCTI and SCTV, as well as PT MNCN Tbk. This further confirms that the Current Ratio in the range of 1.5 is a yardstick for the company to stay within the LQ-45 Index.

The last component that is assessed in this study is the ratio of net profit margin (NPM). As a company that is included in the LQ-45 Index, it must be categorized as healthy and profitable. Almost all companies that are included in the LQ-45 index have NPMs above 10%, there are even stable ones above 20 percent such as PT Bukit Asam Tbk, PT Adaro, PT JPFA, PT Charoen Phokhan Tbk and several media companies such as PT SCMA and MNCN Tbk. . Again, this is a logical consequence of well-run companies making good profits.

The results of panel data regression above show that the variable Debt to Equity ratio is the biggest factor affecting stock returns, as indicated by the coefficient of negative -0.367. Negative coefficient shows that the value of the D/E ratio is inversely proportional to stock returns. This further strengthens Warrant Buffet's postulation on the performance of companies with a prudent classification. This also shows that almost all companies listed on the IDX and selected in the LQ45 have healthy performance, in terms of the risk of bankruptcy is very far. Refers to the Warrant Buffet which requires the choice of a company with a Debt to Equity ratio performance below 0.5 . Based on this reference, it shows that almost all companies listed in the LQ-45 category have this category. The same thing is also shown by the Quick ratio and NPM variables which have the same effect on stock returns significantly as strengthened by the value of t and the probability of t. Overall, the panel data model above shows that all variables in the system affect the dependent variable significantly. This is indicated by the F-Test value of 35.63 and the Probability > F significant at 0.000.

The theoretical implication of the importance of using prudent financial management is very important considering the strong relationship between the micro and macro sectors which greatly determines the landscape of structuring economic and financial development in a country. The managerial implications of this research have an important meaning for decision-makers in the financial sector, in this case, investors. Investors crave and need guidance in financial governance and investment portfolios. Other managerial implications are increasingly attracting investors, both beginners and experienced, to always follow the development of a healthy capital market because it provides services in the form of a list of companies displayed by the LQ-45 Index as the best companies with good financial performance.

Inter-Relationship between Buffettology and Several Companies in the LQ-45 Index, Period of 2010-2021

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Inter-Relationship between Buffettology and Several Companies in the LQ-45 Index, Period of 2010-2021

APPENDIX 1

Berkshire Hathaway Portfolio as of March 2022

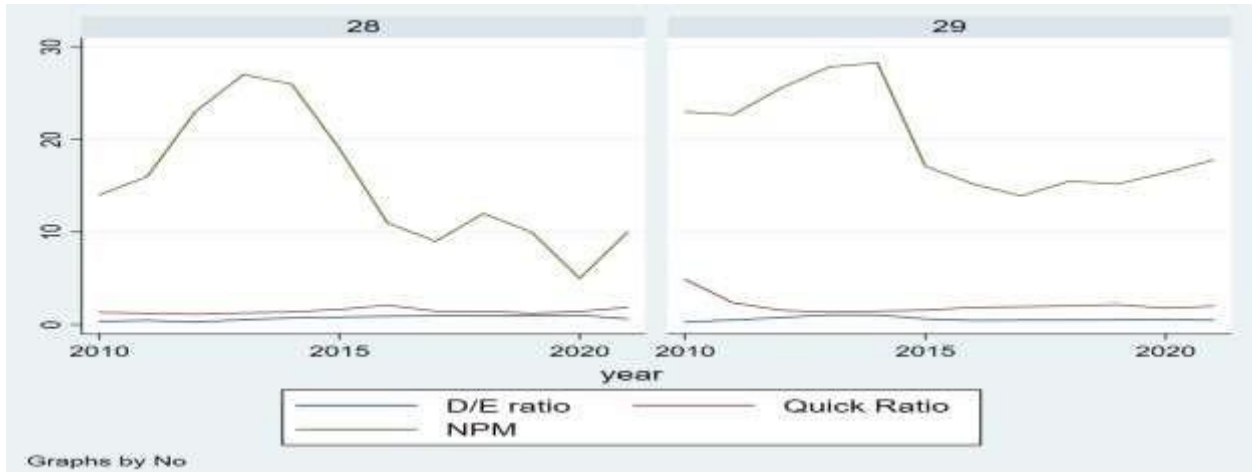
Entity	Market Value as of 03/31/2022	Shares as of 03/31/2022	% of holding 03/31/2022	Market Value as of 12/31/2021	Shares as of 12/31/2021	% of holding 12/31/2021
Apple Inc. (AAPL)	\$155,564,138,000	890,923,410	42.79%	\$157,528,660,000	887,135,554	47.60%
Bank of America (BAC)	\$41,636,348,000	1,010,100,606	11.45%	\$44,939,376,000	1,010,100,606	13.58%
American Express (AXP)	\$28,351,201,000	151,610,700	7.80%	\$24,803,511,000	151,610,700	7.49%
Chevron Corp (CVX)	\$25,918,973,000	159,178,117	7.13%	\$4,488,055,000	38,245,036	1.36%
Coca Cola (KO)	\$24,799,999,000	400,000,000	6.82%	\$23,684,001,000	400,000,000	7.16%
Kraft Heinz Co. (KHC)	\$12,826,755,000	325,634,818	3.53%	\$11,690,290,000	325,634,818	3.53%
Moody's (MCO)	\$8,323,829,000	24,669,778	2.29%	\$9,635,522,000	24,669,778	2.91%
Occidental Petroleum (OXY)	\$7,737,804,000	136,373,000	2.13%			
US Bancorp (USB)	\$6,719,111,000	126,417,887	1.85%	\$7,100,894,000	126,417,887	2.15%
Activision Blizzard (ATVI)	\$5,152,292,000	64,315,222	1.42%	\$975,205,000	14,658,121	0.29%
DaVita Healthcare (DVA)	\$4,082,770,000	36,095,570	1.12%	\$4,106,232,000	36,095,570	1.24%
HP Inc. (HPQ)	\$3,792,480,000	104,476,035	1.04%			
Bank of New York Mellon Corp (BK)	\$3,591,100,000	72,357,453	0.99%	\$4,202,522,000	72,357,453	1.27%
Kroger Co. (KR)	\$3,326,615,000	57,985,263	0.92%	\$2,779,549,000	61,412,910	0.84%
Citigroup Inc. (C)	\$2,945,319,000	55,155,797	0.81%			
Liberty SiriusXM Group (LSXMA) (LSXMK)	\$2,899,607,000	63,415,971	0.80%	\$3,224,703,000	63,415,971	0.97%
Verisign Inc (VRSN)	\$2,850,961,000	12,815,613	0.78%	\$3,252,859,000	12,815,613	0.98%
General Motors (GM)	\$2,713,886,000	62,045,847	0.75%	\$3,517,800,000	60,000,000	1.06%
Paramount Global (PARA)	\$2,606,915,000	68,947,760	0.72%			
Charter Communications (CHTR)	\$2,088,764,000	3,828,941	0.57%	\$2,496,355,000	3,828,941	0.75%
Visa Inc. (V)	\$1,840,128,000	8,297,460	0.51%	\$1,798,143,000	8,297,460	0.54%
Amazon.com Inc. (AMZN)	\$1,738,531,000	533,300	0.48%	\$1,778,204,000	533,300	0.54%
Aon plc (AON)	\$1,431,470,000	4,396,000	0.39%	\$1,321,261,000	4,396,000	0.40%
Mastercard Inc. (MA)	\$1,424,748,000	3,986,648	0.39%	\$1,432,482,000	3,986,648	0.43%
Snowflake Inc. (SNOW)	\$1,403,507,000	6,125,376	0.39%	\$2,074,971,000	6,125,376	0.63%
Celanese Corp (CE)	\$1,125,958,000	7,880,998	0.31%			
McKesson Corp (MCK)	\$894,504,000	2,921,975	0.25%			
NU Holdings (NU)	\$826,957,000	107,118,784	0.23%	\$1,004,774,000	107,118,784	0.30%
RH Inc. (RH)	\$707,615,000	2,170,000	0.19%	\$973,561,000	1,816,547	0.29%
T-Mobile US (TMUS)	\$672,811,000	5,242,000	0.19%	\$607,968,000	5,242,000	0.18%
Globe Life Inc. (GL)	\$639,185,000	6,353,727	0.18%	\$595,471,000	6,353,727	0.18%
Markel Corp (MKL)	\$620,034,000	420,293	0.17%			
Liberty Media Formula One (FWONK)	\$539,336,000	7,722,451	0.15%	\$133,989,000	2,118,746	0.04%
Store Capital (STOR)	\$431,283,000	14,754,811	0.12%	\$839,882,000	24,415,168	0.25%
Ally Financial (ALLY)	\$389,990,000	8,969,420	0.11%			
Floor & Décor Holdings (FND)	\$387,180,000	4,780,000	0.11%	\$109,691,000	843,709	0.03%
StoneCo Ltd. (STNE)	\$125,137,000	10,695,448	0.03%	\$180,325,000	10,695,448	0.05%
Verizon Communications (VZ)	\$70,303,000	1,380,111	0.02%	\$8,252,525,000	158,824,575	2.49%
Marsh & McLennan (MMC)	\$69,005,000	404,911	0.02%	\$70,382,000	404,911	0.02%
Royalty Pharma plc (RPRX)	\$58,299,000	1,496,372	0.02%	\$344,633,000	8,648,268	0.10%
Johnson & Johnson (JNJ)	\$579,200	327,100	0.02%	\$55,957,000	327,100	0.02%
Procter & Gamble (PG)	\$48,193,000	315,400	0.01%	\$51,593,000	315,400	0.02%
Liberty LiLAC Group (LILA) (LILAK)	\$37,832,000	3,914,812	0.01%	\$45,313,000	3,914,812	0.01%
Mondelez Intl. (MDLZ)	\$36,287,000	578,000	0.01%	\$38,327,000	578,000	0.01%
Vanguard S&P 500 Index (VOO)	\$17,852,000	43,000	0.00%	\$18,773,000	43,000	0.01%
SPDR S&P 500 ETF (SPY)	\$17,795,000	39,400	0.00%	\$18,713,000	39,400	0.01%
United Parcel Service (UPS)	\$12,739,000	59,400	0.00%	\$12,732,000	59,400	0.00%
AbbVie Inc. (ABBV)			0.00%	\$410,744,000	3,033,561	0.12%
Bristol-Myers Squibb (BMY)			0.00%	\$324,387,000	5,202,674	0.10%
Wells Fargo & Co (WFC)			0.00%	\$32,389,000	675,054	0.01%
Grand Total	\$363,553,518,000			\$330,952,724,000		

Source: Berkshire Hathaway Portfolio

Inter-Relationship between Buffettology and Several Companies in the LQ-45 Index, Period of 2010-2021

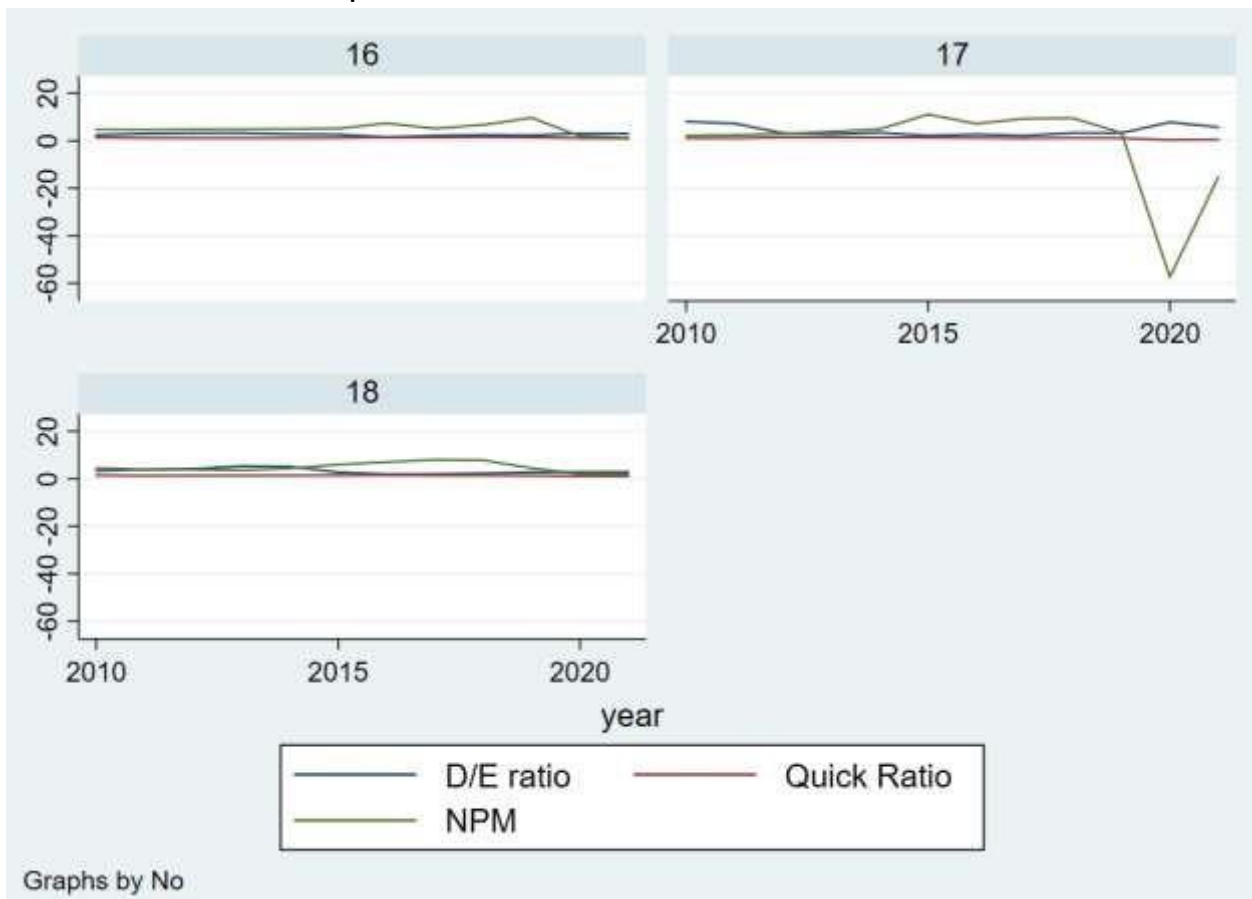
APPENDIX 2

Financial Ratios PT Ciputra Developmen Tbk (CTRA) and PT Sumarecon Tbk (SMRA) (Property Sector)



APPENDIX 3

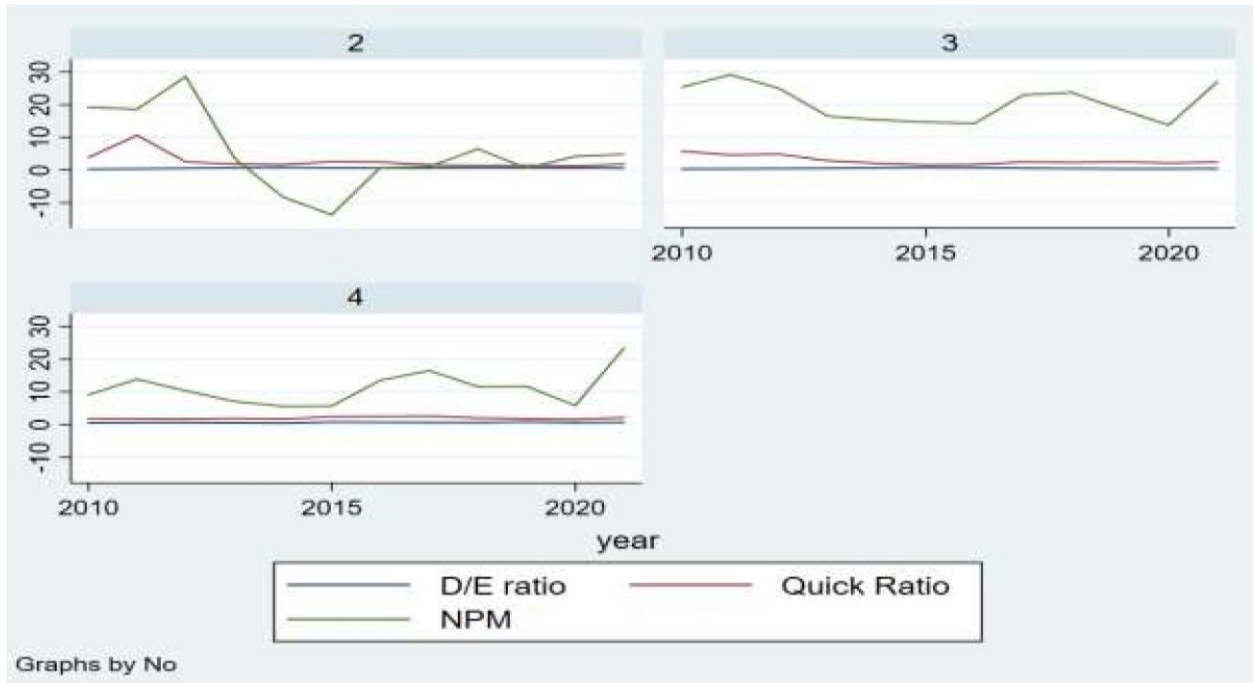
Financial Ratios PT Waijaya Karya Tbk (WIKA), PT Waskita Karya Tbk (WSKT) and PT Pembangunan Perumahan Tbk (PTPP). Infrastructure and State Owned Enterprises



Inter-Relationship between Buffettology and Several Companies in the LQ-45 Index, Period of 2010-2021

APPENDIX 4

Financial Ratios PT ANTM, PTBA and ADRO (Mining Sector)



APPENDIX 5

Financial Ratios PT Astra Internasional Tbk (ASII) , PT Telkom Tbk (TLKM) dan PT Indofood Sukses Makmur Tbk (INDF)

