FINANCE | RESEARCH ARTICLE

The Regression Model Effect of Financial Ratio on Construction and Building Stock Price

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Abstract: This study analyzes liquidity, solvency, and profitability of stock prices in construction and building companies listed on the Indonesia Stock Exchange (IDX) for the period 2016-2021. The sample in this study is construction and building companies listed on the Indonesia Stock Exchange (IDX), which is selected based on specific criteria using the Purpose Sampling Method. The analysis used in this study is the Regression Analysis. The results of this study show that liquidity variables have a positive and significant effect on stock prices, and solvency variables have a positive and significant impact on stock prices. In contrast, profitability variables have a positive but insignificant effect on stock prices. The current ratio can be a useful measure of a company's short-term solvency when it is placed in the context of what has been historically normal for the company and its peer group. It also offers more insight when calculated repeatedly over several periods. What makes the current ratio good or bad often depends on how it is changing. A company that seems to have an acceptable current ratio could be trending toward a situation in which it will struggle to pay its bills. Conversely, a company that may appear to be struggling now could be making good progress toward a healthier current ratio.

Keywords: Liquidity Ratio, Solvency Ratio, Profitability Ratio, Stock Price.
JEL Classification Code: E44, E43, E31

1. INTRODUCTION

The current state of the economy is getting faster and more complex over time. This can be seen from the increasing number of trades in almost all commodities. The development of technology used to strengthen economic competitiveness and the rapid flow of information make a company continue to compete to maintain its existence. Fierce competition between companies will bring a powerful influence on the company's performance. Competition between companies requires companies to work efficiently; companies must be able to improve what is done. The company's performance will be monitored by investors who have invested in the company and potential investors who will invest. The capital market is a means to mobilize funds sourced from the public to various sectors that carry out investments. Entering the capital market is a dream of many companies. The primary condition that investors want to be willing to channel their funds through the capital market is a feeling of security for their investments. The capital market serves as an intermediary institution. This function shows the critical role of the capital market in supporting the economy because the capital market can connect parties who need funds with parties who have excess funds. Investors invest their funds in the hope that they will get a profit reward in the form of ownership, capital gains (profits from the sale and purchase of shares), or dividends. Investing in the capital market can encourage the creation of an efficient allocation of funds because, in the capital market, parties who have excess funds (investors) can choose investment alternatives that provide optimal returns, both now and in the future.

According to Saygili et al. (2021)The capital market is a market for various long-term financial instruments that can be traded, both debt securities (bonds), equities (stocks), mutual funds, derivative instruments, and other instruments. The capital market is a means of funding for companies and other institutions (for example, the government) and as a means for investment

activities. Thus, the capital market facilitates various facilities and infrastructure for buying and selling activities and their related activities. The capital market acts as a liaison between investors, companies, and government institutions by trading in long-term financial instruments such as bonds, stocks, and others. Some of the advantages of the capital market are the opportunity to obtain large amounts of funds and an increase in the company's status as a public company so that access to funding becomes larger and broader. Going public is becoming a target of companies and is increasingly being chosen for business financing because companies can get fresh funds (in large quantities) from the financier community. On the other hand, Going Public has consequences for companies to open up to the public.

Investors to invest in the capital market require careful consideration. So information relevant to capital market conditions is something that capital market players are always looking for in making investment decisions. However, not all information is valuable; as a result, capital market participants must correctly choose the information worthy of consideration in decision making. One piece of information available in the capital market is the company's financial statements. From these financial statements, investors can find internal details about the company's financial performance, which is one of the factors investors see to make choices in buying shares. If the financial statements can present information that is relevant to the decision model used by the investor, then the investor can use the information to make the right decision. According to Ozlanski (2019), financial statements are the final result of the accounting process which includes two main reports, namely the balance sheet and the income statement. Financial statements are prepared to provide financial information of a company to interested parties as a consideration in making decisions.

The financial statements consist of a balance sheet, a profit and loss calculation statement, and other financial reports. On the balance sheet, income statement, and cash flow statement still cannot provide maximum benefits for users before users manage further in the form of financial statement analysis such as ratio analysis. This ratio analysis can concern the analysis of liquidity, solvency, profitability, leverage, and productivity or activity. The most specific training in financial analysis is to calculate the financial ratios of an enterprise. The challenge of the analysis is not to calculate the ratio but to analyze and interpret the financial ratios that arise. Ratio analysis is an analysis that is widely used as a decision-making material, both for crediting and buying shares and investments. For companies that issue shares in the capital market, the price of shares traded on the stock exchange is an indicator of a company's success. The higher the share price of a company, the higher the value of the company, which impacts the company owner's greater prosperity. Some factors include the demand and supply of shares on the IDX, changes in a country's economy, and internal company factors that can affect stock prices in the form of financial performance, such as profitability, liquidity, and solvency. According to Ferramosca (2019), economic performance is the determination of specific measures that can measure the success of an organization or company in making a profit. Liquidity provides an overview of the company's ability to meet its short-term obligations (Hazudin et al., 2015). The more significant the liquidity, the more the company can pay off its responsibilities so that the cash turnover in the company is excellent and can provide a positive perception of the company's condition. Liquidity can be calculated using the Current Ratio (CR), dividing current assets by current liabilities. Research conducted by (e.g., Brad et al., 2015; Khomsatun et al., 2021; Teker et al., 2016) obtained liquidity results with a significant positive effect on stock prices, while research conducted by Caporale et al. (2017) stated that liquidity has a negative effect on stock prices.

The next factor that affects the stock price is solvency, or how much capital is financed using debt for the company's operations. Al-Kassar & Soileau (2014) states that solvency can be interpreted as the ability of a company to pay off the company's financial obligations both in the short term and in the long time or a ratio that measures the extent to which the company is paid with debt. Solvency can be measured using the Debt to Equity Ratio (DER), the ratio used to assess debt to equity. This ratio can be calculated by comparing all obligations, including current debt with equity; the more significant the DER, the smaller the profit will be distributed to shareholders to reduce the price of the shares concerned. So solvency management is essential in the company's operations and can be a reference in increasing or decreasing the share price of companies that have

high debt, which will make investors reluctant to invest because it has a higher risk of bankruptcy; this is because the capital owned by the company is not greater than the debt owed. Research, by D'Inverno et al. (2021) found that solvency negatively affects stock prices, while Al-Kassar & Soileau (2014) show that solvency (DER) has a significant positive effect on stock prices. The internal variable that affects the stock price is the size of the profitability generated by the company. Profitability can be measured using Return On Equity, the company's ability to generate profits using its capital. The higher the ROE value, the better the condition of the company, the greater the income earned by the company, and will also increase the share price of the company concerned so that it can increase the value of the company. Ozcelik (2020) found that profitability has a significant positive effect on stock prices, which means that profitability can increase the company; this agrees with research conducted by Ekinci & Poyraz (2019) and Holm & Ax (2020) stated the results that profitability negatively affects stock prices.

This research was conducted on construction and building sub-sector companies listed on the Indonesia Stock Exchange. The construction sector ranked third as a driver of economic growth in the country throughout 2016, with a contribution of 0.51 percent, after the manufacturing and trade sectors. Based on data from the Central Statistics Agency (BPS), Indonesia's economy in 2016 grew by 5.02%, higher than in 2015, which reached 4.88%. The construction sector's contribution to the formation of gross domestic product (GDP) is also quite significant, namely 10.38%. This figure makes it ranked 4th after the agricultural industry and trade sectors.

Table 1: Overview of Stock Prices of Construction and Building Sub-Sector Companies for the 2016-2020 Period

No	Emitten	Share Price					Average
		2016	2017	2018	2019	2020	
1	ADHI	2.080	1.885	1.585	1.522	1.434	1.285
2	DIK	55	58	50	55	67	57
3	PPTPP	3.810	2.640	1.805	1.770	1.665	2.338
4	ASIA	434	515	500	498	488	487
5	TOTAL	765	660	560	554	532	614
6	LANGUAGE	2.360	1.550	1.655	1.631	1.220	1.685
	Total Average	1,584	1.218	1.026	1.010	901	1.147

Source: Indonesia Stock Exchange, 2020

In table 1 of the construction and building sector companies, stock prices experience fluctuations and tend to decline. Average value The share price is 1,147. The value of each of them shows the company's ability to increase its legal price in each period. Based on the background description mentioned above, the formulation of the problem in this study is as follows Does liquidity (Current Ratio), solvency (Debt to Equity Ratio), Does profitability (Return on Equity) affect the Share Price of construction and building companies listed on the Indonesia Stock Exchange (IDX)?

2. Literature Review and Hypothesis Development

2.1. Liquidity Ratio

The company's ability to pay its obligations, especially short-term debt (which is already due), is due to several factors. First, it can be because the company does not have any funds. Or secondly, it could be that the company has funds. Still, when it matures, the company does not have funds (not enough) in cash, so it has to wait for a specific time to disburse other assets, such as collecting receivables, selling securities, or selling preparations or other assets. The leading cause of the company's shortage and inability to pay its obligations is actually due to the negligence of the company's management in carrying out its business (Caporale et al., 2017). Then another reason is that previously the company's administration did not calculate the financial ratio given, so it did not know that the company's assets were actually in a state of incapacity because the value of the debt was higher than its current assets. If the company has analyzed the ratios related to this, the

company can easily find out the actual condition and position. Then the company can try to find a way out. Financial analysis of the company's ability to repay its debts or obligations is known as liquidity ratio analysis. The calculation of the liquidity ratio provides quite a lot of benefits for various interested parties to the company. Therefore, the analysis of the liquidity ratio is beneficial not only for the company but also for parties outside the company. In practice, there are many benefits or objectives of liquidity ratio analysis which include measuring the company's ability to pay obligations or debts that are immediately due at the time of collection, measuring how much cash is available to repay debt, looking at the condition and position of the company's liquidity over time by comparing them for several periods, and to see the weaknesses that the company has, from each component in current assets and current debt.

In general, the primary purpose of financial ratios is to assess the company's ability to fulfill its obligations. However, in addition, to the liquidity ratio, other more specific matters can be known, which are also still related to the company's ability to fulfill its obligations. A measuring instrument is needed to analyze an enterprise's financial condition in calculating the level of liquidity. In this case, the measuring devices used by the author to assess the level of liquidity of the company are:

1. Current Ratio

   According to (Teker et al., 2016), it is argued that the current ratio shows the extent to which current assets cover current liabilities. The greater the comparison of current assets with current debt, the higher the company's ability to protect its short-term liabilities. Ismal (2010) states that the current ratio is a ratio to measure a company's ability to pay short-term obligations or debts that are immediately due at the time of being collected as a whole. In other words, how much current assets are available to cover short-term liabilities soon due. The current ratio is calculated by comparing the total existing assets with the entire current debt. In practice, the current ratio is often used with the standard of 200% or 2: 1, which means that one rupiah of current debt must be guaranteed with two rupiahs of existing assets. It is sometimes considered a reasonably excellent or satisfactory measure for a company. This means that with the results of such a ratio, the company already feels that it is at a safe point in the short term. However, the most essential measure to measure management performance is the industry average for similar companies.

2. Quick Ratio (Quick Ratio)

   Shaverdi et al. (2014) state that inventory posts are not counted in this ratio because inventory is the most illiquid post in current assets. This is due to the length of the stage to become cash. The Quick Ratio measures how well a company can meet its obligations without liquidating or relying too heavily on its inventory. Inventory cannot be wholly relied upon because inventory is not a source of cash that can be obtained and may not even be quickly sold in sluggish economic conditions. This ratio measures the company's ability to meet its debts by not considering inventory. A good ratio is generally 100% or 1: 1, less than that size is considered less good. This ratio is sharper than the current ratio because it only compares highly liquid assets (efficiently disbursed or cashed out) with current debt. If the current ratio is high, but the quick ratio is low, it indicates a substantial investment in inventory.

3. Cash Ratio

   In addition to the two ratios discussed above, companies sometimes want to measure how much money is ready to be used to pay off their debts. This means that in this case, the company does not need to wait to sell or collect other current debts, namely by using the current ratio. A cash ratio is a tool used to measure how much money is available to repay debt. The availability of cash can be indicated by the availability of cash funds or those equivalent to money, such as current accounts or savings accounts in banks (which can be withdrawn at any time). It can be said that this ratio shows the actual ability of the company to repay its short-term debts. The solvency or leverage ratio is a ratio to assess a company's ability to pay off all its obligations, both short-term and long-term, with a guarantee of assets or wealth owned by the company until the company closes or is liquidated (Boisjoly et al., 2020; Brad et al., 2015; D'Mello & Miranda, 2014). How much debt burden the company

bears will be compared with its assets. Solvency Ratio has another name, Leverage Ratio, but it differs from the profitability ratio. Long-term debt is the obligation to repay loans whose maturity is more than one year. The difference between the Solvency Ratio (Leverage Ratio) and the Liquidity Ratio lies in the loan term (liabilities). The Solvency Ratio measures the company's ability to meet long-term obligations. Meanwhile, the liquidity ratio measures a company's ability to meet short-term liabilities. The Solvency Ratio compares the overall debt burden of a company against its assets or equity. This ratio exposes the number of company assets owned by shareholders compared to assets owned by Creditors (lenders). If the company's assets are more owned by the holder, the company is less leveraged. If the creditor or lender (usually the bank) has the assets predominantly, then the company has a high level of leverage. The solvency ratio makes it easier for management and investors to understand the level of risk of capital structures in the company through notes to financial statements. In this case, the measuring instruments used by the author to assess the level of solvency of the company are:

4. Debt to Equity Ratio

   This ratio describes the relative portion between equity and debt used to finance the company's assets. The Debt to Equity Ratio (DER) compares total liabilities and equity. Debt should not be more outstanding than capital so that the company's burden does not increase. A low ratio level means that the company's condition is getting better because the portion of the debt to capital is getting smaller (Ullah et al., 2020). This ratio shows that loan funds that are immediately due will be collected compared to the capital owned. This ratio calculates how many parts of the capital are, including the definition of capital and the type of capital that guarantees current debt. The smaller this ratio means the company's condition is improving because the capital to secure the current deficit is still quite (large). The lowest limit of this ratio is 100% or 1: 1. The Debt Ratio assesses how much a company relies on debt to finance its assets. This ratio compares total debt (total liabilities) with total assets owned (Vătavu, 2015). Assets and equities are different, so you have to know in advance about assets and equities. Assets are resources obtained from transactions or other activities in the past so that they become the company's property. Meanwhile, equity is a residual right to the company's assets after deducting all liabilities according to the nature of accounting. This ratio also shows the company's ability to obtain new loans as additional capital with collateral for fixed assets. If the level of this ratio is higher, the guarantee in the form of existing assets and money provided by creditors in the long term is more guaranteed. This ratio's presentation is a minimum of 100% or 1: 1, meaning that RP 1 long-term debt can be secured by IDR 1 fixed assets owned by the company. The debt calculated in this case is all the company's short-term and long-term debts. Creditors usually prefer a low debt ratio because the company's condition is safe (it will not go bankrupt). The low ratio level makes the company's situation safer (solvable) (Semaw Henock, 2019).

5. Times Interest Earned Ratio

   This ratio measures the company's ability to pay off interest expenses in the future. Times Interest Earned Ratio is also called Interest Coverage Ratio. This ratio compares profit before tax and interest to Interest Costs per the accounting principles.

2.2. Profitability Ratio

The ultimate goal that a company wants to achieve is to obtain maximum profit or profit. Therefore, the management of the company in practice is required to be able to meet the targets that have been set. This means that the amount of profit must be achieved as expected and does not mean the origin of profit. To measure an enterprise's profit level, a profit ratio or profitability ratio is used, also known as the rentability ratio. Yagi & Kokubu (2018)mentioned that rentability or profitability shows the company's ability to make a profit during a specific period. The rentability of a company is measured by the success of the company and the ability to use its assets productively. Thus, the rentability of a company can be known by comparing the profit obtained in a period with the number of assets or the company's capital amount. According to (Caporale et al., 2017),

profitability ratios are a group of ratios that show the combined influence of liquidity, asset management, and debt on operating results. From the above understanding, it can be said that rentability/profitability is a ratio that measures the extent to which the business carried out by a company can recreate the return of a certain amount of capital in a certain period. The use rentability ratio is carried out using a comparison between the various components in the financial statements. Measurements can be made for several periods of operation to show the company's development in a certain period of time, either decrease or increase, as well as looking for the cause of the change.

The results of these measurements can be used to evaluate management performance, whether they have worked effectively or not. They are said to have succeeded for several periods if they successfully reach the predetermined target. However, on the contrary, if it fails or does not manage to achieve predetermined targets, this will be a lesson for management for the period ahead. Like other ratios, the rentability ratio also has goals and benefits that are not only for the business owner or management but also for parties outside the company. The purpose of using the rentability ratio is, among others, to measure or calculate the profit earned by the company in a certain period, assess the company's profit position in the previous year with the current year, and assess the development of profit over time. In accordance with the goals to be achieved, several types of rentability ratios can be used. Every kind of rentability ratio is used to assess as well as measure the financial position of the company in a certain period or for several periods (Boisjoly et al., 2020). The liquidity ratio describes the company's ability to settle its short-term obligations. These ratios can be calculated through sources of information about working capital, namely current asset posts and current debt.

Financial analysis relating to the company's ability to repay its debts or obligations is known as liquidity ratio analysis. The solvency or leverage ratio is a ratio to assess a company's ability to pay off all its obligations, both short-term and long-term, with a guarantee of assets or wealth owned by the company until the company closes or is liquidated. How much debt burden the company bears will be compared with its assets. Solvency Ratio has another name, Leverage Ratio, but it differs from the profitability ratio. Long-term debt is the obligation to repay loans whose maturity is more than one year. The difference between the Solvency Ratio (Leverage Ratio) and the Liquidity Ratio lies in the loan term (liabilities). The Solvency Ratio measures the company's ability to meet long-term obligations. Meanwhile, the liquidity ratio measures a company's ability to meet short-term liabilities. (Ramsbottom et al., 2015)mentioned that rentability or profitability shows the company's ability to make a profit during a specific period. The rentability of a company is measured by the success of the company and the ability to use its assets productively. Thus, the rentability of a company can be known by comparing the profit obtained in a period with the number of assets or the company's capital. Based on the theory that has been put forward and previous research, a conceptual framework can be compiled in this study as presented in the following figure:
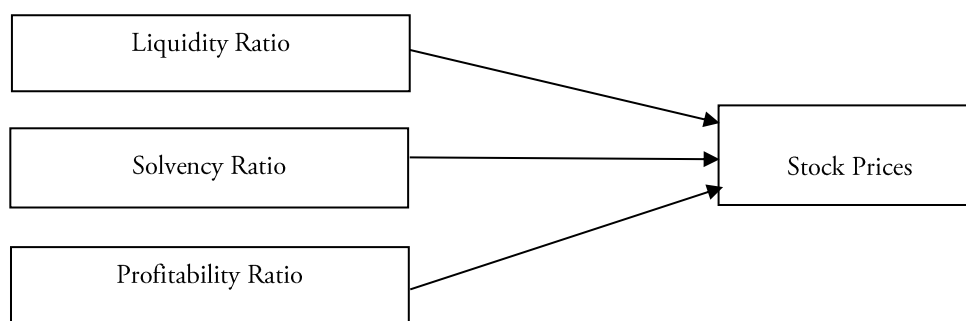

Figure 1: Conceptual Framework

From the conceptual framework and theoretical basis that have been stated previously, the hypotheses put forward are as follows:

1. Liquidity (Current Ratio) has a positive and significant effect on the Share Price of construction and building companies listed on the Indonesia Stock Exchange (IDX)

2. Solvency (Debt to Equity Ratio) has a positive and significant effect on the Share Price of construction and building companies listed on the Indonesia Stock Exchange (IDX)
3. Profitability (Return on Equity) positively and significantly affects the Share Price of construction and building companies listed on the Indonesia Stock Exchange (IDX)

3. Research Method and Materials

Information that supports the research is needed to obtain the expected research results. For this purpose, the author uses a data collection method in the form of : Field Studies; the data used in this study is secondary data, namely data obtained from other parties related to this study, such as data issued by the Indonesia Stock Exchange (IDX). The population used by the authors in this study is construction and building companies listed on the Indonesia Stock Exchange (IDX) from 2016-2020, which consists of:

- Adhi Karya Tbk, (ADHI)
- Nusa Konstruksi Ejinering Tbk, (DGIK)
- Indoor Tbk, (IDPR)
- Surya Semesta Internusa Tbk, (SSIA)
- Total Persada Building (TOTL)
- Nusa Raya Cipta Tbk, (NRCA)

The sampling technique used in this study is purposive sampling, a data source sampling technique with specific considerations. Some of the criteria set for obtaining include: A Public Listed Company engaged in construction and buildings listed on the Indonesia Stock Exchange for the 2016-2020 period Construction and Building companies that regularly publish their company financial statements as of December 31. This research helps determine the relationship between the independent variable (X) and the dependent variable (Y). Therefore, to determine the relationship between the independent variable (X) and the dependent variable (Y), the multiple regression equation is used as follows :

$$Y = a + b1X1 + b2X2 + b3X3 + e$$

Description:
Y   = Stock price
a   = Constants
b1, b2, b3 = coefficient x1, x2, x3, x4
X1   = Liquidity Ratio
X2   = Solvency Ratio
X3   = Profitability Ratio
e   = error

Testing of the hypotheses carried out in this study was carried out in the following way:
i. F-statistical
The F-statistical test shows whether all the independent variables included in the regression model have a joint influence on the dependent variable (Ghazali, 2009:88) after F-regression found the results, then compared with the F-estimated. To determine the F-estimated, the significance level used is = 5% with degrees of freedom df = (NK) where n is the number of observations, k is the number of variables including intercepts. If F-calculated > F-estimated, then H0 is rejected. This means that the independent variable is able to explain the dependent variable simultaneously/together. On the other hand, if F-calculated < F-estimated, then HO is accepted. This means that the independent variables together cannot explain the dependent variable (Hanaysha, 2016).
ii. T-statistical
The t-test on statistics shows how far the influence of the independent variables individually in explaining the variation of the independent variables. To determine the value of the t-table statistic, a significant level of 5% was determined with degrees of freedom df = (nk-1), where n is the number

of variables including intercepts. If t-calculated > t-estimated, Ho is rejected, and Ha is accepted, meaning that the independent variable can explain the dependent variable. Conversely, if t-calculated < t-estimated, HO is accepted and Ha is rejected, meaning that the independent variable does not define the dependent variable individually.

iii.   Coefficient of Determination (R^2)

The multiple regression test was also analyzed. The magnitude of the regression coefficient (R^2) essentially measures how far the regression model can explain variations in the dependent variable or dependent variable. R^2 is used to measure the best accuracy of multiple analyses. If R^2 is close to 1, it can be said that the stronger the ability of the independent variable in the regression model is to explain the variation in the dependent variable. Conversely, if R^2 is close to zero, the independent variable's weaker defines the dependent variable (Taghipour & Dejban, 2013).

iv.   Classical Assumption Test

The regression model was obtained from the method of least squares. Usually, ordinary least squares (OLS) is a regression model that produces the best unusual linear estimator. This condition will occur if several classical assumptions are fulfilled, which consist of:

1) Normality. The normality test is used to determine whether the variables are normally distributed or not; it can be seen from the standard probability plot graph. If the distribution is normal, the plot spread will be around and along the 45oline. Based on the average probability plot graph, the variables are normally distributed. Sarstedt et al. (2014), the basis for normality decision making if it meets the following conditions:
   a) The data spreads around the diagonal line and follows the direction of the diagonal line, or the histogram graph shows a normal distribution pattern. The regression model fulfills the assumption of normality.
   b) The data spreads far from the diagonal line or does not follow the direction of the diagonal line, or the histogram graph does not show a regular distribution pattern. The regression model does not meet the assumption of normality.

2) Multicollinearity. This assumption test aims to show a linear relationship between the independent variables in the regression model and to indicate the presence or absence of a high degree of collinearity between the independent variables. Guidelines for a regression model free of multicollinearity are: Having a variance influence factor (VIF) value < 10 and a tolerance number above 10%. It can also be said that there is no multicollinearity if the correlation coefficient between independent variables is less than 0.80 (r < 0.80). The coefficient between the independent variables must be weak (below 0.5). There will be a multikol problem.

3) Autocorrelation Test. A good regression equation does not have autocorrelation problems. If there is autocorrelation, then the equation is not good or suitable for prediction. The new autocorrelation problem arises if there is a linear correlation between the confounding error of period-t (was) and the confounding error of period t-1 (previous). One measure in determining whether there is an autocorrelation problem is the Durbin-Watson (DW) test, with the following conditions:
   a) There is a positive autocorrelation if DW is below -2 (DW<2)
   b) There is no autocorrelation if the DW value is between -2 and +2 (-2DM+2)
   c) There is a negative autocorrelation if the DW value exceeds +2 (DW > 2).

4) Heteroscedasticity. A test is used to determine whether there is an inequality of variance in the regression model from one observation residual to another statement. If the disagreement from the residual of one message to the observation remains, it is called homoscedasticity, and if it is different, it is called heteroscedasticity. A good regression model has homoscedasticity or no heteroscedasticity. The way to approach the existence of heteroscedasticity can be done by looking at the graph, where the X-axis is the residual and the Y-axis is the predicted Y value. If there is no clear pattern and the points are spread

above and below the 0 axis on the Y axis, it means no heteroscedasticity occurs in the regression model (Ghozali, 2013).

4. Results and Discussion

4.1. Description Analysis

Liquidity ratio is a financial ratio that measures an enterprise's ability to meet its short-term obligations. The liquidity variable in this study was proxied with the current ratio (CR). Here is the current ratio (CR) formula.

Table 2: Description of Liquidity Variables

Research Samples	Liquidity Ratio [X1] in Million Rupiah		
	Current Assets	Current Debt	Current Ratio (%)
ADHI 2016	14,691,152,497	9,414,462,014	1.560487734
ADHI 2017	16,792,278,617	12,989,623,750	1.292745574
ADHI 2018	24,817,671,201	17,633,289,239	1.407432888
ADHI 2019	25,386,859,425	18,934,699,447	1.34075851
ADHI 2020	30,315,155,278	24,493,176,968	1.237697965
DGIK 2016	1,426,308,919	911,756,253	1.564353317
DGIK 2017	814,107,488	681,236,918	1.195043114
DGIK 2018	969,613,539	898,961,831	1.078592556
DGIK 2019	1,106,143,697	984,292,306	1.12379594
DGIK 2020	797,368,420	559,177,625	1.425966248
IDPR 2016	913,681,133	291,028,424	3.139491052
IDPR 2017	949,722,994	362,765,570	2.61800753
IDPR 2018	961,973,354	363,167,786	2.648839988
IDPR 2019	917,294,028	376,885,334	2.433880932
IDPR 2020	1,015,025,778	466,632,444	2.175214756
SSIA 2016	2,899,771,134	1,856,796,353	1.561706608
SSIA 2017	3,380,678,959	1,896,353,464	1.782726176
SSIA 2018	5,085,678,959	2,640,028,081	1.926373055
SSIA 2019	3,458,662,374	2,033,129,970	1.701151636
SSIA 2020	4,057,603,566	1,713,172,966	2.368472797
TOTL 2016	2,236,105,051	1,777,039,950	1.258331334
TOTL 2017	2,284,941,431	1,784,172,230	1.280673128
TOTL 2018	2,513,966,565	1,994,003,155	1.260763584
TOTL 2019	2,670,409,421	1,945,591,346	1.372543842
TOTL 2020	2,282,964,040	1,604,772,681	1.422608988
NRCA 2016	1,502,011,245	813,409,554	1.846562089
NRCA 2017	1,624,970,715	875,549,581	1.855943684
NRCA 2018	1,973,798,989	1,013,940,915	1.946660757
NRCA 2019	1,983,250,911	957,671,673	2.070909025
NRCA 2020	2,204,426,011	1,138,448,895	1.936341649

Based on table 2 above, it is known that the highest liquidity acquisition value is 3.139491052, and the lowest is 1.078592556. While the average liquidity is 1.727802. Solvency is a financial ratio that demonstrates the company's ability to meet short-term and long-term obligations. The solvency variable in this study was proxied with the Debt to Equity Ratio (DER).

Table 3: Description of Variable Solvency

Research Samples	Solvency Ratio [X2]		
	Debt	Capital	DER
ADHI 2016	11,598,931,718	5,162,131,796	2.246927
ADHI 2017	14,594,910,199	5,442,779,962	2.681518
ADHI 2018	22,463,030,586	5,869,917,425	3.826805
ADHI 2019	23,806,329,077	6,285,271,896	3.787637

Research Samples	Solvency Ratio [X2]		
	Debt	Capital	DER
ADHI 2020	29,681,535,534	6,834,297,680	4.343026
DGIK 2016	1,010,467,912	1,083,997,714	0.932168
DGIK 2017	796,318,130	758,704,489	1.049576
DGIK 2018	1,034,401,162	786,397,677	1.315367
DGIK 2019	1,063,438,648	664,387,385	1.60063
DGIK 2020	665,045,457	671,154,631	0.990898
IDPR 2016	388,793,896	992,332,170	0.391798
IDPR 2017	440,819,956	1,106,749,980	0.398301
IDPR 2018	633,591,878	1,211,586,173	0.522944
IDPR 2019	701,284,265	1,222,793,413	0.57351
IDPR 2020	780,919,733	1,204,083,145	0.64856
SSIA 2016	3,125,923,913	3,337,999,551	0.936466
SSIA 2017	3,842,621,248	3,352,827,079	1.146084
SSIA 2018	4,374,602,549	4,476,834,418	0.977164
SSIA 2019	3,019,160,765	4,385,006,334	0.688519
SSIA 2020	3,614,266,973	4,478,179,841	0.807084
TOTL 2016	1,979,837	866,314	2.285357
TOTL 2017	2,007,949	942,610	2.130201
TOTL 2018	2,232,994	1,010,099	2.210668
TOTL 2019	1,766,072	1,052,110	1.6786
TOTL 2020	1,886,089	1,076,904	1.751399
NRCA 2016	908,458,231	1,086,633,153	0.83603
NRCA 2017	992,553,991	1,141,659,803	0.869396
NRCA 2018	1,139,310,048	1,202,856,795	0.94717
NRCA 2019	1,046,474,842	1,208,236,923	0.866117
NRCA 2020	1,241,648,295	1,221,164,716	1.016774

Based on table 3 above, it is known that the highest solvency gain value is 4.343026, the lowest is 0.391798, and the average solvency is 1.48189. Profitability ratio is a financial ratio that shows the company's ability to make a profit during a specific period both by asset sales and own capital profit and loss. Profitability in this study was proxied with *Return on Equity* (ROE).

Table 4: Description of Profitability Variables

Research Samples	Profitability Ratio [X3]		
	Capital	Profit	ROE
ADHI 2016	5,162,131,796	465,025,548	9.008401304
ADHI 2017	5,442,779,962	315,107,783	5.789463936
ADHI 2018	5,869,917,452	517,059,848	8.808639171
ADHI 2019	6,285,271,896	645,029,449	10.26255442
ADHI 2020	6,834,297,680	665,048,421	9.731042634
DGIK 2016	1,083,997,714	4,680,484	0.431779877
DGIK 2017	758,704,489	-386,844,114	50.98745554
DGIK 2018	786,397,677	15,467,633	1.966897087
DGIK 2019	664,387,385	146,308,895	22.02162448
DGIK 2020	671,154,631	1,223,668	0.182322813
IDPR 2016	992,332,170	22,779,042	2.295505748
IDPR 2017	1,106,749,980	120,413,914	10.87995628
IDPR 2018	1,211,586,173	114,258,186	9.43046302
IDPR 2019	1,222,793,413	31,180,315	2.549925005
IDPR 2020	1,204,083,145	-3,509,738	-0.29148634
SSIA 2016	3,337,999,551	383,182,228	11.47939723
SSIA 2017	3,352,827,079	100,854,847	3.008053938
SSIA 2018	4,476,834,418	1,241,357,001	27.72845464
SSIA 2019	4,385,006,334	89,833,255	2.048645958
SSIA 2020	4,478,179,841	136,311,060	3.043894279
TOTL 2016	866,314	191,292	22.08113917

Research Samples	Profitability Ratio [X3]		
	Capital	Profit	ROE
TOTL 2017	942,610	211,287	22.41510275
TOTL 2018	1,010,099	231,269	22.89567656
TOTL 2019	1,052,110	204,418	19.42933724
TOTL 2020	1,076,904	175,502	16.29690297
NRCA 2016	1,086,633,153	198,307,255	18.24969673
NRCA 2017	1,141,659,803	101,091,266	8.854762665
NRCA 2018	1,202,856,795	153,443,549	12.75659327
NRCA 2019	1,208,236,923	117,967,950	9.763643848
NRCA 2020	1,221,164,716	101,155,011	8.283486222

Based on table 4 above, it is known that the highest profitability earned value is 27.72845, the lowest is -0.294186, and the average profitability is 8.347147. The share price referred to in this study is the closing stock price at the end of December 31 with the research period from 2015 – 2019, each of which is stated in the financial statements of construction and building companies in this study. Rupiah units measured the stock price data in this study. The following is the data on the *Closing Price* Of Stock Price:

Table 5: Description of Variable Stock Price

No	Research Samples	Share Price	No	Research Samples	Share Price
1	ADHI 2016	2140	16	SSIA 2016	710
2	ADHI 2017	2080	17	SSIA 2017	434
3	ADHI 2018	1885	18	SSIA 2018	515
4	ADHI 2019	1585	19	SSIA 2019	500
5	ADHI 2020	1195	20	SSIA 2020	688
6	DGIK 2016	85	21	TOTAL 2016	615
7	DGIK 2017	55	22	TOTAL 2017	855
8	DGIK 2018	58	23	TOTAL 2018	688
9	DGIK 2019	50	24	TOTAL 2019	545
10	DGIK 2020	50	25	TOTAL 2020	429
11	IDPR 2016	1340	26	NRCA 2016	625
12	IDPR 2017	1120	27	NRCA 2017	330
13	IDPR 2018	1050	28	NRCA 2018	380
14	IDPR 2019	890	29	NRCA 2019	386
15	IDPR 2020	368	30	NRCA 2020	384

Table 5 above shows that the highest share Harag earned value is 2,140, the lowest is 50, and the average company value is 743.5.

4.2. Description of Statistical Variable Research

This statistical description provides an overview of the research variables. The statistical report is focused on your mini-value, maximum value, mean value, and standard deviation value. The description data can be seen in the following table:

Table 6: Statistical descriptions of variable Liquidity, Solvency, Profitability, and Share Price in Construction companies and collaterals listed on the Indonesia Stock Exchange.

	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity	30	1,08	3,14	1,7278	,51891
Solfabillitas	30	,39	4,34	1,4819	1,04603
Profitability	30	-50,99	27,73	8,3471	13,68180
Share Price	30	50	2140	734,50	587,175
Valid N (listwise)	30				

Based on table 6 above, liquidity is obtained as measured by CR (Current ratio), which is a comparison between current assets and current debt, the average liquidity value is 1.7278% with a

standard deviation of 0.51891%, so it can be stated that fluctuations in the liquidity value in this company are relatively small, judging from the average value of its decommissioning which is smaller than the average value. The minimum liquidity value of 1.08% and the maximum value of 3.14%, with an average value of 1.7278%, stated that most of the companies sampled have a current asset value that is greater than their current debt, companies that have an existing asset value more extraordinary than their current debt, meaning that the company can finance its debt well. Solvability is measured by debt to equity ratio (DER), which is a comparison between total debt and capital (equity) on average solvency of 1.4819% with a deviation standard of 1.04603%, so it can be stated that fluctuations in solvency values in this company are relatively small, judging from the standard weight of its deviation which is smaller than the average value, the minimum value of solvency of 0.39% and the maximum value of 1.4819%, with an average value of 1.4819% states that most of the companies sampled have a total value of debt more outstanding than equities, Profitability is measured by return On Equity (ROE), a comparison between net profit and equity at X 100%. The average profitability value of 8.3471% with a standard deviation of 13.68180%, so it can be reported that the fluctuation in the profitability value in this company is quite large, as seen from the traditional value of its deviation, which is greater than the average value, the minimum value of profitability is -50.99% and the maximum value of 27.73%, with an average value of 8.3471% stating that most of the companies sampled have a net profit value that greater than equities. The share price has an average value of 734.50%, with a standard deviation of 587.175%, so it can be stated that the fluctuation in the stock price in this company is relatively small, judging from the standard deviation which is smaller than its average value. The minimum value of the share price is 50%, while the maximum value of the share price is 2,140%, with an average value of 734.50%, stating that the share price can provide benefits for the company that the sample is intended to be used,

4.3. Normality Test

A normality test is performed to see whether, in the regression model, the bound variables and the free variables both have a normal distribution or not. A good regression model is a normally distributed regression model. How to detect normality is carried out by looking at *the histogram* graph. Based on the histogram chart above, it can be concluded that it gives a distribution pattern close to normal; this is evidenced by seeing that the graph forms symmetrical and follows diagonal lines. However, these histogram chart results are not very accurate, especially when the number of samples used is small. A reliable method is to look at the *normal probability of the plot.* In the normal graph of the plot, it can be seen that the dots are spreading around the diagonal line, and the spread follows the regional line. Based on the normal graph of the probability plot, it can be seen that the points spread around the diagonal line, and the spread follows the diagonal line, so it can be said that the distribution pattern is normal. Looking at the two graphs above, it can be concluded that the regression model in this study can be used because it meets the assumption of normality.
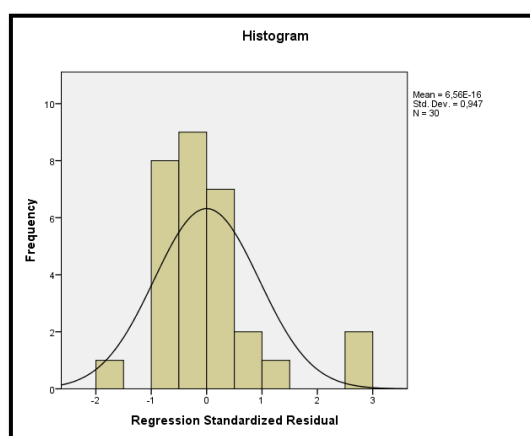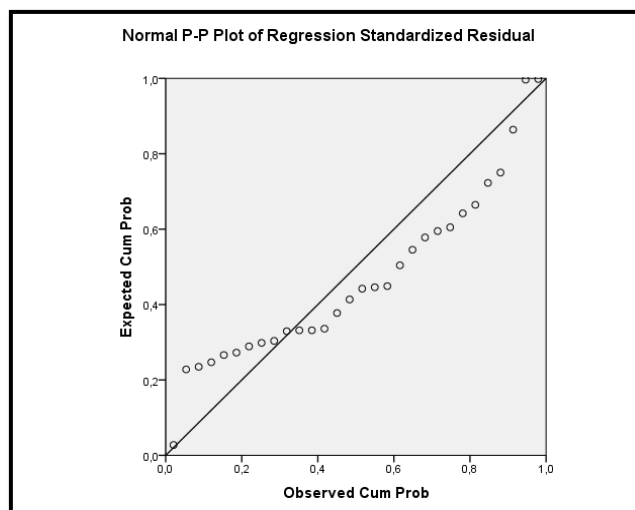

Figure 2: Histogram Chart

Figure 3: Normal Probability plot

4.4. Heteroskedasticity Test

Heteroskedasticity suggests that variable variance is not the same for all observations. If the variance from the residual of one statement to the observance of another remains, then it is called homoskedasticity. A good regression model is a homoskedasticity or heteroskedasticity that does not occur because *cross-section* data represent various sizes (small, medium, and large). The charting method is used to detect the presence of Heteroskedasticity (*Scatterplot* diagram): If there is a pattern of listed dots, the existing ones form a particular irregular pattern (wavy, widened, then narrowed), then heteroskedasticity occurs. If there is a clear pattern and dots spreading up and below 0 on the Y axis, then it does not happen Heteroskedasticity
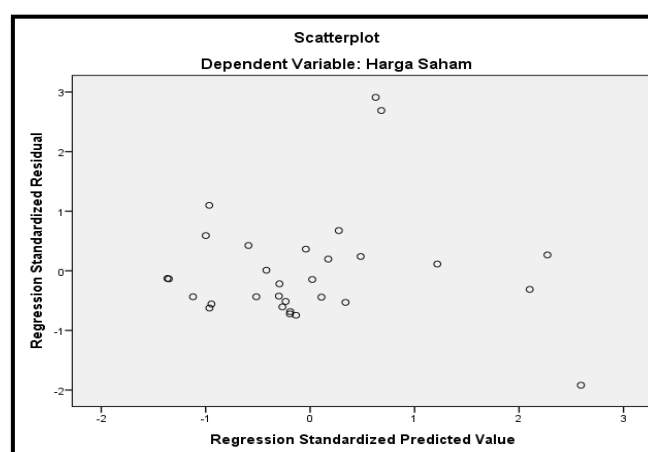

Figure 4: Scatterplot Diagram

Based on the diagram above, it can be seen that the data is scattered randomly and does not form a particular pattern; this shows that there is no heteroskedasticity. Thus it can be concluded that the occurrence of differences in variance from residual from one observation to another.

4.5. Multicollinearity Test

The Multicolinearity Test aims to test the existence of correlations between independent variables in the regression model. In a good regression model, there should be no correlation

between variables. The presence or absence of multicollinearity in the regression model can be seen from the tolerance value and its opponent by looking at the variance inflation factor (VIF). The commonly used cut-off value is the tolerance value of 0.01. One way to test for multicollinearity can be seen from the Variance Inflation Factor (VIF). If the VIF value >10, then multicollinearity occurs.

Table 7: Multicolinearity Test

Variable	Test Result	Information
Liquidity (X1)	1,652	No Multicholinearity
Solvency (X2)	1,719	No Multicholinearity
Profitability (X3)	1,058	No Multicholinearity

Based on table 7 above, it can be concluded that the regression model for independent variables submitted by the researcher for the study is free from multicollinearity. This can be proven by looking at the table above, which shows the VIF value of each independent variable <10 and can be used to determine its effect on the stock price.

4.6. Multiple Linear Regression Analysis

From the results of multiple linear regression analysis with the help of SPSS, the Coefficients table was found, which contains information on endless numbers and coefficients of research variables.

Table 8: Regression Analysis Test

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error				Tolerance	VIF
1	(Constant)	-1516,972	402,169		-3,772	,001		
	Liquidity	826,840	176,360	,731	4,688	,000	,605	1,652
	Solfabillitas	560,243	89,251	,998	6,277	,000	,582	1,719
	Profitability	-,882	5,352	-,021	-,165	,870	,945	1,058
(Dependent Variable: Share Price, Source: SPSS Output, 2021)								

Based on table 8, the regression equation can be written as follows:

$$Y = -1516.972 + 826.840x_1 + 560.243x_2 + 0.882x_3$$

The above simple linear regression equation can be described in detail as follows:

a. Constanta (a)

The constant is -1516.975; this means that if there is no change in the free variables, namely liquidity, solvency, and profitability, the value of the company will decrease by 1516.97

b. Liquidity Ratio (X1)

The value of the regression coefficient for profitability in this study was 826,840. In this study, it can be stated that liquidity has a positive effect on the stock price; it shows that when there is an increase in liquidity, it will have an impact on increasing the stock price by 826,840

c. Solvency Ratio (X2)

The value of the regression coefficient for solvency in this study was 560,243. In this study, it can be stated that solvency positively affects stock prices. This shows that when there is an increase in solvency, it will have an impact on increasing the stock price by 560,243

d. Profitability Ratio (X3)

The value of the regression coefficient for profitability in this study was -882. In this study, it can be stated that profitability positively affects stock prices.

4.7. Partial T-Test

A partial test is used to determine whether each independent variable (X) significantly affects the dependent variable (Y). The test was carried out with a significance level of 0.05.

Table 9: Partial T-test

Variables	Sig.<α	Information	Hypothesis
Liquidity Ratio (X1)	0,000<0,05	Significant	Accepted
Solvency Ratio (X2)	0,000<0,05	Significant	Accepted
Profitability Ratio (X3)	0,870>0,05	Insignificant	Rejected

Based on table 11 above, a partial test will be described for each independent variable in this study. Based on the partial test results, it is known that the value of Sig. of liquidity is 0.000. The value is less than the significance level (0.000<0.05). This indicates that liquidity has a significant influence on stock prices. Thus, this study's first hypothesis (H1) is accepted. Based on the partial test results, it is known that the value of Sig. of solvency is 0.000. The value is less than the significance level (0.000<0.05). This indicates that solvency has a significant influence on stock prices. Thus the second hypothesis (H2) proposed in this study is accepted. Based on the partial test results, it is known that the value of Sig. of profitability is 0.870. The value is greater than the level of significance (0.870>0.05). This indicates that profitability has an insignificant influence on the stock price. Thus, this study's third hypothesis (H3) was rejected.

4.8. Determination Test

Coefficient of determination analysis is used to determine the percentage of the magnitude of the influence of independent variables on dependent variables.

Table 10: Determination Test

Model	R	R Square	Adjusted R Square	Std. The error in the Estimate	Durbin-Watson
1	,786ª	,618	,574	383,412	,895
(a. Predictors: (Constant), Profitability, Liquidity, Solfabillity, b. Dependent Variable: Stock Price					

Based on the results of the determination coefficient test above, the amount of R square for each bound variable will be described in this study. The R square value for the stock price is 0.618, which indicates that the share price in this study was able to be explained by liquidity, solvency, and profitability of 61.8%, and the remaining 38.2 of the stock price was described by other variables that were not included in this study.

4.9. Discussion

1. The Effect of Liquidity Ratio on Stock Price

Liquidity measures an enterprise's ability to meet its short-term obligations. A company's liquidity can describe its ability to fulfill its short-term obligations to short-term creditors; the more significant the comparison of cash to debt, the better. The liquidity ratio that represents the company's financial performance in terms of liabilities can affect the assessment of the public, especially investors, to give confidence to the company to invest. Suppose the company still has an excellent ability to fulfill its short-term obligations (one-year period) by using current assets. In that case, the company can be said to be liquid, so investors do not have to worry about investing their funds if one day something undesirable happens. Based on multiple linear regression analysis, it is known that liquidity has a positive regression coefficient. This means that increased liquidity will have an impact on inflating stock prices. These results support the statement that a good company has the company's ability to meet its short-term obligations or pay dividends to shareholders on time. Timely payment of dividends requires the availability of funds, in this case, the cash owned by the company. Companies with high profits may not necessarily be able to pay dividends to shareholders because there are no funds in the treasury to pay dividends. Furthermore, based on the results of partial tests, it is known that liquidity significantly influences stock prices. This means that liquidity is a determining factor in the rise and fall of stock prices. This is since most of the

construction and building companies sampled for the study have a high level of liquidity. A high Current Ratio (CR) means that the company's short-term obligations can be fulfilled so that the company's operational activities will not be disrupted, for which the opportunity to achieve significant profits can be achieved. The more investors interested in investing, the more it can cause the stock price to increase, which impacts improvement.

2. The Effect of Solvency Ratio on Stock Prices

Solvency indicates the ability of the company to fulfill obligations both for the short and long term. A company is said to be unsolvable if the company's total debt is greater than the total assets owned by the company; the higher the solvency aspect shows, the greater the funds provided by creditors. Based on the analysis of multiple linear regression, it is known that solvency has a positive regression coefficient. This means that increasing solvency will have an impact on inflating stock prices. Significant solvency can make it easier for companies to compile their share prices. The stock price compares the amount of debt and equity capital the company uses to maximize the stock price. Furthermore, based on the results of partial tests, it is known that solvency has a significant influence on stock prices. This means that solvency is a determining factor in the rise and fall of stock prices. This is because a high amount of capital will increase confidence, causing an increase in the stock price. The capital increase will lead to a rise in the stock price; with the market response that will increase if there is a capital increase, management can exercise control over the market valuation, especially in assessing the company's assets.

3. The Effect of Profitability on Stock Prices

Profitability is a helpful ratio for the company's ability to profit during a specific period, both with asset sales and own capital profit and loss. Profitability in this study was proxied with ROE. Based on the analysis of multiple linear regression, it is known that profitability has a positive regression coefficient. This means that increased profitability will have an impact on boosting stock prices. The results of this study follow the perspective of a signal theory which explains that the increase in profitability is listed in the financial statements to provide positive signals to investors related to the company's performance and the growth of business prospects in the future. This effort can build positive sentiment from investors, affecting the increase in stock prices in the capital market. The rise in stock prices in the eyes of investors. Nonetheless, based on partial tests, it is known that profitability does not significantly influence the price of the same; this means that profitability is not a determining factor for the rise and fall of the stock price. This is due to the small profitability of construction and building enterprises that became research samples during the observation period. It was even noted that two research sample companies suffered losses during the observation period. This insignificant result means that it is likely to perceive a decrease in the net profit level of the company.

5. Conclusion

A ratio under 1.00 indicates that the company's debts due in a year or less are greater than its assets—cash or other short-term assets expected to be converted to cash within a year or less. A current ratio of less than 1.00 may seem alarming, although different situations can negatively affect the current ratio in a solid company. In theory, the higher the current ratio, the more capable a company is of paying its obligations because it has a larger proportion of short-term asset value relative to the value of its short-term liabilities. However, though a high ratio—say, more than 3.00—could indicate that the company can cover its current liabilities three times, it also may indicate that it is not using its current assets efficiently, securing financing very well, or properly managing its working capital. The current ratio can be a useful measure of a company's short-term solvency when it is placed in the context of what has been historically normal for the company and its peer group. It also offers more insight when calculated repeatedly over several periods. What makes the current ratio good or bad often depends on how it is changing. A company that seems to have an acceptable current ratio could be trending toward a situation in which it will struggle to pay its bills. Conversely, a company that may appear to be struggling now could be making good progress toward a healthier current ratio. Other similar liquidity ratios can supplement a current

ratio analysis. In each case, the differences in these measures can help an investor understand the current status of the company's assets and liabilities from different angles, as well as how those accounts are changing over time.

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