IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

The Effect Of Working Capital Efficiency And The Level Of Liquidity On Profitability In The Mining Industry Registered In Indonesia Stock Echange

Etty Harya Ningsi

[1]Accounting, Faculty Economic & Business, Battuta University, Jl. Gajah Mada No. 15 M, Medan, 20154, Indonesian

ARTICLE INFO

Keywords:
Working Capital Turnover,
Current Ratio,
Return On Equity

E-mail:
E-mail: ettysumadin@gmail.com

ABSTRACT

Every company aims to seek profitability. To achieve the expected profit, management must be able to take appropriate policies in investing funding sources that are available so that the sufficient liquidity and working capital efficiency will be obtained and ultimately the expected profitability will be obtained as well. The purpose of this study was to determine how much influence the efficiency of working capital and the level of liquidity have on profitability in the mining industry on the Indonesia Stock Exchange. This study took time series data in the form of financial reports for the period 2009 to 2010. The data were analyzed using the classical assumption test, multiple linear regression, and hypothesis testing using the F test and t test. Based on the research results, it is known that there is a significant influence between the efficiency of working capital and the level of liquidity on profitability.

1. Introduction

The growing economic development has led to the emergence of many companies, both in the mining industry and other industries. In general, every company founded by a person or group of people, regardless of its form, must have a goal to increase its sales volume. In order to achieve this goal, it is very necessary to have good management to manage the company's functions so that it can manage production resources more effectively and efficiently.

Working capital management is related to company policy in determining how much assets are needed and how to finance it. The company's policy in managing the amount of capital appropriately will provide benefits, while the result of inaccurate working capital investment will give losses. In order to assess the financial position of a company in completing its obligations, it is necessary to use an analysis tool called the liquidity ratio, which means a ratio that shows the company's ability to pay its short-term obligations. It is expected that through the calculation of this ratio, it will be able to help managers to assess the effectiveness and efficiency of working capital used by the company in running its business. Ratio analysis to the company's working capital is also very necessary to identify and interpret the company's short-term financial position as well as to examine the efficiency and use of working capital in the company.

In the company's operations, the source and use of working capital are usually self-financed and long-term credit. In a company, the manager's ability is needed to face several alternatives in meeting his working capital needs. The alternative chosen must be profitable for the company in meeting the working capital. Usually it is used entirely of its own capital, but often the question arises whether this capital is used in the company's operations entirely. In general, the capital itself is not sufficient to be of working capital because it has been used to finance fixed assets or even to cover the fixed assets of this company must still use the long-term credit. However, if all working capital needs are financed using long-term credit, then this is not profitable because the use of working capital is short-term while the company is bound to a fixed expense to be paid, namely interest.

The determination of the amount of working capital required by companies varies, one of which depends on the type of company. If the company decides to set a large amount of working capital, it is likely that the level of liquidity will be maintained but the opportunity to get a large profit will decrease which in turn has an impact on decreasing profitability. Conversely, if the company wants to maximize profitability, it may affect the company's liquidity level. The higher the liquidity, the better the company's position in the eyes of creditors. Therefore there is a greater likelihood that the company will be able to pay its obligations on time. On the other hand, from the point of view of shareholders, high liquidity is not always profitable because it has the opportunity to create idle funds that can actually be used to invest

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

in projects that benefit the company. So, to find out the level of liquidity and how much the efficiency of the working capital allocated by the company for the company's operations, the current ratio can be used.

There's a research conducted by Dalimunthe (2011), where the research results show that working capital efficiency and liquidity have no effect on profitability, while solvency has an effect on profitability in Telecommunication Companies on the Indonesia Stock Exchange.

The size of the working capital requirement of a company depends on the turnover period of the assets included in the working capital or the working capital bound period and cash disbursements every day. The greater amount of cash expenditure every day, then it needs a greater working capital. In general, companies that are established are not intended to run a one-time business, but for eternity and there are always business activities every day. The need for working capital must be prepared not only as much as what is needed during one turnaround period but also must consider the amount of expenditure each day.

2. Method

2.1 Research Question

Based on the background of the problems above, the main problems in this study are (a) Does the efficiency of working capital partially affect profitability? (b) Does the level of liquidity partially affect profitability? (c) Does the efficiency of working capital and liquidity levels effect simultaneously towards profitability?

2.2 Research Purposes

The objectives of this study are (a) To examine the effect of working capital efficiency on profitability partially, (b) To examine the effect of the level of liquidity on profitability partially, (c) To examine the effect of working capital efficiency and level of liquidity on profitability simultaneously.

2.3 Profitability

Profitability is the company's ability to generate profits in a certain period. Profit is often a measure of a company's performance. Where when the company has high profits, it means that its performance is good and vice versa. For the continuity of a company, it is emphasized on profitability, because without any profit it will be difficult to attract outside capital. Profitability according to Kasmir (2010) is a ratio to assess a company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company. This is indicated by the profit generated from sales and investment income. The point is that the use of this ratio shows the efficiency of the company.

The ratio used to measure profitability in this study is the ratio of *Return on Equity* (ROE). The choice of this ratio is because it describes the company's ability to generate profit after tax. This ratio is the ratio that compares the net profit after tax with own capital. This means what percentage of profits the company gets when measured from its own capital.

2.4 Working Capital Efficiency

According to Hanafi (2005) management or working capital management is very important so that the business continuity of a company can be maintained. Mistakes or mistakes in working capital management will cause the company's financial condition to be bad so that the company's activities can be hampered or stopped altogether. The existence of errors or errors in the management of working capital can lead to excess or deficiency in the provision of working capital.

According to Tunggal (1995) the existence of excess working capital in a company can be caused by:

1. Issuance of debenture bonds / stocks in an amount that is more than necessary.
2. Sale of non-current assets that are not replaced.
3. The occurrence of operating profit which is not used for dividend payments, for the purchase of fixed assets or for other similar purposes.
4. Conversion or change of fixed assets into working capital. Conversion of changes / transformations that are not accompanied by replacement of fixed assets into working capital by way of depreciation, depletion and amortization processes.
5. Due to the accumulation or temporary accumulation of various funds provided for investments and so on

Meanwhile, a lack of working capital can be caused by:

1. Due to business losses, among others caused by:
   a. Insufficient sales volume, so it is too small to cover company costs

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

b. A decrease in selling price due to competition without a decrease in cost of goods sold and cost of sales.
c. There were too many uncollectible accounts receivable.
d. An increase in costs that is not offset by an increase in sales or revenue.
e. Increased costs, while sales or revenue decreased.

2. Due to extraordinary losses. Extraordinary losses are losses that are not caused by routine operations of the company.
3. Poor dividend policy sometimes company leaders decide to continue paying dividends even though the payment cannot be justified.
4. Use of working capital to acquire non-current assets. Lack of working capital is sometimes the result of investing in current assets to acquire non-current assets. This happens when an old asset must be replaced with a new one or if another new fixed asset is purchased or because of the purchase of shares in another company as an investment.
5. An increase in the general price level of a working capital shortage may be due to an increase in price which requires investing large amounts of rupiah to maintain the quantity of inventory and other assets at the same physical level and to finance credit sales at the same sales rate.
6. An increase in the general price level of a working capital shortage can be due to an increase in price which requires investing large amounts of rupiah to maintain the quantity of inventory and other assets at the same physical level and to finance credit sales at the same sales rate.

2.5 Liquidity

The liquidity ratio is an indicator of the ability of companies to pay all short-term financial liabilities at maturity using available current assets. According to Subramanyam and Wild (2011), measuring the level of liquidity uses the *current ratio*. The reasons for the widespread use of the current ratio as a measure of liquidity include its ability to measure:

1. Ability to meet current liabilities
   The higher the amount (multiplication) of current assets against current liabilities, the greater the confidence that these current liabilities will be paid.
2. Loss buffer
   The bigger the support, the less risk. The current ratio shows the level of security available to cover any decline in the value of current non-cash assets when the assets are disposed of or liquidated.
3. Current funds reserves
   The current ratio is a measure of the level of security against uncertainty and surprises on the company's cash flows. Uncertainty and surprises, such as strikes and extraordinary losses, can harm cash flows temporarily and unexpectedly.

At the level of liquidity that will be used in this study is the *Current Ratio* (CR) *ratio*. The choice of this ratio is because it can describe the company's capabilities that can be enhanced by:

1. With certain current debt, an effort is made to increase current assets.
2. With certain current assets, efforts are made to reduce the amount of current debt.
3. Reducing the amount of current debt equals reducing current assets.

2.6 Hypotheses

The hypotheses in this study are (a) H_1: Working capital efficiency has a partial effect on profitability, (b) H_2: Liquidity level has a partial effect on profitability, (c) H_3: Working capital efficiency and liquidity level has a simultaneous effect on profitability.

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

The formulation of the hypothesis can be seen in the schema model below:

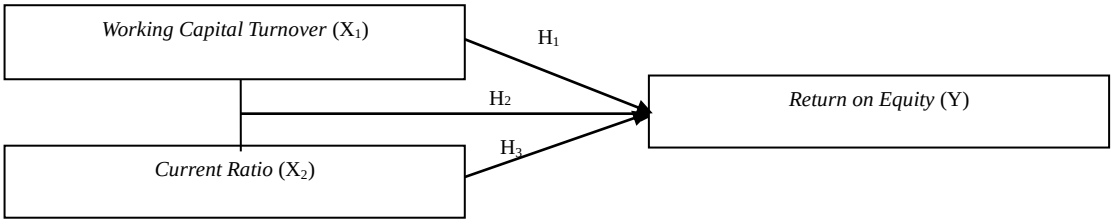

Figure 1
Conceptual Framework

The type of data used in this study is quantitative data. In the process of examining a particular population or sample, sampling techniques are generally carried out randomly, data collection carried out by using research instruments, quantitative or statistical data analysis with the aim of testing predetermined hypotheses.

The type of data source used in this study is secondary data. The data were obtained by using a literature study conducted on several books and obtained based on records related to the research. Besides that, the researchers also used data obtained from the internet. Particularly the Mining Industry financial report data that are listed on the Indonesia Stock Exchange at the website: www.idx.co.id

The data analysis technique that is being used in this research is the descriptive statistical test, which is a statistical technique used to provide an overview of information about the characteristics of a group of data, such as the mean, mode and median.

The data analysis method that is being used itself is the multiple regression analysis with classical assumption testing. Consisting of normality test, multicollinearity test, autocorrelation test, heteroscedasticity test and hypothesis testing in this study, using a simultaneous test (F-test) and partial test (t-test), as well as testing the coefficient of determination (R2).

3 .Research Result

3.1 Descriptive Analysis

TABLE 1
DESCRIPTIVE STATISTICS

	N	Mean	Std. Deviation	Minimum	Maximum
ROE	44	15.3289	14.11988	-6.74	54.10
WCT	44	2.3527E2	264.44406	-255.70	977.20
CR	44	1.5688E2	155.79659	1.04	710.76

Source : Descriptive Statistical Analysis Result of SPSS

Based on the data from the table above, it can be explained as follows:

1. The *Working Capital Turnover* (X_1) Variable has a sample (N) of 44 with a minimum (smallest) value of -255.70 and a maximum (biggest) value of 977.20. Mean (average value) of the WCT for 2.3527E2 and standard deviation of the WCT of 264.44406.
2. The *Current Ratio* (X_2) Variable has a sample (N) of 44 with a minimum (smallest) value of 1.04 and a maximum value (biggest) of 710.76. Mean (average value) of CR at 1.5688E2 and standard deviation of CR at 155.79659.
3. The *Return On Equity* (Y) variable has a sample (N) of 44 with a minimum value (smallest) -6.74 and a maximum value (biggest) of 54.10. Mean *average value) of the ROE is 15.3289 and standard deviation of ROE 14.11988

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

3.2 Multiple Linear Regression Analysis

TABLE 2
COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
		B	Std. Error	Beta	Tolerance	VIF
1	(Constant)	8.190	3.239			
	WCT	.008	.008	.145	.988	1.012
	CR	.034	.013	.374	.988	1.012

Source : Multiple Linear Regression Analysis of SPSS result

Based on the table above, the multiple linear regression equation in this study is:

Ln ROE = 8.190 + 0.008 Ln WCT + 0.034 Ln CR + e

The interpretations of this equation are as follows:

1. α = 8.190
   The constant value (α) is 8,190, meaning that if there are no independent variables consisting of *Working Capital Turnover* (WCT) and *Current Ratio* (CR) that affect *Return On Equity* (ROE), then *Return On Equity* will decrease by 8,190.
2. b_1 = 0.008
   The regression coefficient value of b_1 is 0.008, which means that for every 1 unit increase in *Working Capital Turnover* (WCT), the *Return on Equity* (ROE) will increase by 0.008, assuming other independent variables are considered constant or equal to zero. This means that between WCT and ROE shows a positive relationship, meaning that each increase in WCT will be followed by an increase in ROE, on the other hand, a decrease in WCT will result in a decrease in ROE.
3. b_2 = 0.034
   The regression coefficient value of b_1 is 0.034, which means that for each increase in the *Current Ratio* (CR) of 1 unit, the *Return on Equity* (ROE) will increase by 0.034, assuming other independent variables are considered constant or equal to zero. This means that between CR and ROE shows a positive relationship, meaning that each increase in CR will be followed by an increase in ROE, on the other hand, a decrease in CR will result in a decrease in ROE.

3.3 Partial Test (t test)

The t test was carried out to test the effect of the *Working Capital Turnover* (WCT) and *Current Ratio* (CR) variables partially affecting *Return On Equity* (ROE).

TABLE 3
COEFFICIENTS[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.190	3.239		2.529	.015
	WCT	.008	.008	.145	1.012	.317
	CR	.034	.013	.374	2.619	.012

Source : Partial Test of SPSS Result

Based on the table above, the WCT variable obtained t_{count} of 1.012 while the t_{table} value was 1.68. This shows that $t_{count} <$ from t_{table} so that it can be concluded that the efficiency of working capital has no significant effect on profitability, while in the CR variable, the t_{count} is 2,619 while the t_{table} value is 1.68. This shows that $t_{count} > t_{table}$ so it can be concluded that the level of liquidity has a significant effect on profitability.

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

3.4 Simultaneous Test (Test F)

The F test is carried out to determine whether the independent variables included in the model have a simultaneous influence on the dependent variable.

TABLE 4
ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1480.788	2	740.394	4.280	.021[a]
	Residual	7092.162	41	172.980		
	Total	8572.949	43			

a. Predictors: (Constant), CR, WCT

b. Dependent Variable: ROE

Source : Simultaneous SPSS Test Results

Based on the table above, the $_{calculated}$ F value is 4,280 while the F $_{table}$ value is 2.018082. This proves that F $_{count}$ > from F $_{table,}$ so it can be concluded that the efficiency of working capital and the level of liquidity simultaneously have a significant effect on profitability.

3.5 Coefficient of Determination

In this study, the coefficient of determination used is the *adjusted R square* because this study uses multiple regression.

TABLE 5
MODEL SUMMARY[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.416[a]	.173	.132	13.15217	1.356

Source : SPSS Result of Determination Coefficient

Based on the table above, the value of the coefficient of determination (*Adjusted R Square*) is 0.132 or 13.2%. case shows that the variable *working capital turnover* and the *current ratio* have a relationship that was to *return on equity*.

3.6 Finding and Discussion

Based on the results of data analysis, it shows that the efficiency of working capital has no significant effect on profitability in the mining industry which is listed on the Indonesia Stock Exchange. This shows that companies use debt more than their own capital. High debt will cause high interest expense to be borne, so that it will have an impact on decreasing profitability.

Based on the results of data analysis, it shows that liquidity has a positive and significant effect on profitability in the mining industry which is listed on the Indonesia Stock Exchange. This shows that the *current ratio* is satisfactory for the company or is considered good. The high *current ratio is* because current assets are able to cover current debts so that the company is able to meet its short-term obligations where the proportion of current assets is quite profitable.

4. Conclusion

Based on the research results previously described, the conclusions obtained are as follows: (a) Efficiency of working capital has no partial effect on profitability, (b) The level of liquidity has a partial effect on profitability, (c) Efficiency of working capital and level of liquidity have an effect simultaneously to profitability. Suggestions that can be put forward are (a) It is better if research is needed on other factors that have a greater influence on profitability so that it can be seen which factors have the most influence in efforts to increase profitability (b) It is better if research using more samples with characteristics which is more diverse from various industrial sectors, so it is known the effect of working capital efficiency and liquidity on profitability when applied to different industries.

5. References

[1]. Astuti, Herlina Fuji. *Pengaruh Modal Kerja dan Perputaran Modal Kerja Terhadap Return On Equity Pada Perusahaan Makanan dan Minuman di BEI.* Semarang: Universitas Negeri Semarang. http://unnes.ac.id. 2005.

[2]. Dalimunte, Dini Pratiwi. *Analisis Pengaruh Efisiensi Modal Kerja, Likuiditas, dan Solvabilitas*

IOCSPUBLISHER

Enrichment: Journal of Management

journal homepage: www.enrichment.iocspublisher.org

Terhadap Profitabilitas Pada Perusahaan Telekomunikasi di BEI. Medan: Universitas Muhammadiyah Sumatera Utara. 2011.

[3]. Hanafi M. Muhammad dan Abdul Halim. *Analisa Laporan Keuangan.* Yogyakarta: UUP AMP YKPN. 2005.

[4]. Hernawati, Ima, *Analisis Pengaruh Efisiensi Modal Kerja, Likuiditas, dan Solvabilitas Terhadap Profitabilitas Pada Perusahaan Manufaktur di BEI,* Semarang: Universitas Negeri Semarang http://unnes.ac.id. 2007.

[5]. Horne, James C. Van dan Jhon M. Machowicz. *Prinsip-prinsip Manajemen Keuangan,* buku I, edisi pertama, penerjemah Dewi Fitriasari dan Deno A. Kwary. Jakarta: Salemba Empat. 2005.

[6]. Ghozali, Imam dan Fuad. *Aplikasi Analisis Multivariate dengan Program SPSS*, edisi tiga, Semarang: Undip. 2005.

[7]. Ghozali, Imam. *Aplikasi Analisis Multivariate Dengan Program SPSS.* BP-Universitas Diponogoro, Semarang. 2007.

[8]. Kasmir. *Pengantar Manajemen Keuangan*. Edisi pertama, Cetakan ke-2. Jakarta: Kencana. 2010.

[9]. Mahfudliyah, Ita. *Analisis Pengaruh Efisiensi Modal Kerja Terhadap Tingkat Likuiditas Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia*. Surabaya: Sekolah Tinggi Ilmu Ekonomi Perbanas. 2010.

[10]. Martono, Cyrillius. *Analisis Pengaruh Profitabilitas Industri, Rasio Leverage Keuangan Tertimbang dan Investasi Modal Tertimbang serta Pangsa Pasar Terhadap ROA dan ROE Pada Perusahaan Manufaktur di BEI*. Malang: Universitas Muhammadiyah Malang. htpp://umm.ac.id. 2002.

[11]. Nachrowi, Nachrowi J. *Penggunaan Teknik Econometrika*. Jakarta. PT. Raja Grasindo. 2002.

[12]. Nugroho, Elfianto. *Analisis Pengaruh Likuiditas, Pertumbuhan Penjualan, Perputaran Modal Kerja, Ukuran Perusahaan, dan Leverage Terhadap Profitabilitas pada perusahaan Manufaktur yang Terdaftar di BEI.* Semarang: Universitas Diponegoro Semarang. 2011.

[13]. Riyanto, Bambang. *Dasar-dasar Pembelanjaan Perusahaan*. Edisi empat, Yogyakarta: BPFE. 2001.

[14]. Santosa, Debora Setiati. *Analisis Pengaruh Current Ratio, Total Asset Turnover, dan Debt to Equity Terhadap Return on Equity Pada Perusahaan Manufaktur di BEI.* Semarang: Universitas Negeri Semarang. http://unnes.ac.id. 2009.

[15]. Siwi, Nurgraeni. *Analisis Pengaruh Efisiensi Modal Kerja, Likuiditas, dan Solvabilitas Terhadap Profitabilitas Pada Perusahaan Property dan Real Estate yang Go Publik di BEJ.* Universitas Sumatera Utara. 2005.

[16]. Sugiyono. *Metode Penelitian Kualitatif*. Bandung: Alfabeta. 2005.

[17]. Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta. 2008.

[18]. Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta. 2009.

[19]. Tulasi, Daniel. *Cash Flow Ratios Analysis sebagai Metode Pengukuran Kinerja Keuangan Perusahaan.* Manajemen Usahawan Indonesia (Oktober) hal 48 -54. 2006

[20]. Tunggal, A. Wijaya. *Dasar-dasar Analisis Laporan Keuangan*. Cetakan Pertama. Jakarta: PT. Rineka Cipta. 2005.

[21]. Tunggal, A. Wijaya. *Dasar-dasar Budgeting*. Jakarta: Rineka Cipta. 1995

[22]. Weston, J. Fred dan Thomas E. Copeland. *Manajemen Keuangan,* Terjemahan oleh Jaka Wasana dan Kibrandoko, 1997, Edisi Kesembilan, Jilid Satu, Binarupa Aksara, Jakarta. 1996.

[23]. Wild, Jhon J dan Subramanyam K. R. *Analisis laporan Keuangan.* Buku 2. Edisi 10. Penerbit: Salemba Empat. Jakarta. 2011.