

# Effectiveness and Efficiency of Working Capital Use in Industrial Sector Companies Exchange in 12<sup>th</sup> Year

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## Abstract

Working capital is the capital used to finance a business's activities while it is in operation. This study's objective is to estimate the level of effectiveness and efficiency in the utilization of working capital by industrial sector companies listed on the Indonesia Stock Exchange (IDX) for the 12<sup>th</sup> Year (Period 2010–2021). Purposive sampling is used as the sampling technique, while descriptive quantitative research is employed as the methodology. Using the ratio of profitability of own capital and the ratio of working capital turnover, the level of effectiveness and efficiency of the use of working capital is determined to be 36 percent and five times the standard ratio, so that companies in the industrial sector on the Indonesia Stock Exchange (IDX) between 2010 and 2021. It was successful because the company had low working capital but achieved maximum profits. It was inefficient because it was affected by a shortage of working capital—however, the company's incapacity to manage minimum working capital to grow sales.

**Keywords:** effectiveness, efficiency, working capital.

## 1. Introduction

In the current era of globalization, economic competition between companies is intensifying, necessitating that all companies have reliable financial resources. A corporation has healthy finances if it can meet its obligations on schedule and manage its resources effectively, particularly its working capital. The internal parties of the organization are necessary to have a thorough understanding, particularly managers and financial management. The disputed agreement concerns the sources of funds to be used.

The source of this cash is the manager's or financial management's responsibility to increase the company's working capital. According to Megalia & Situmorang, B. (2021), working capital is the capital needed to finance a company's operations while it is active. The company's issued funds are used to finance daily operations and long-term investments. The company needs working cash so that its operations can function effectively and fulfill its objectives.

Companies tend to underestimate their working capital management, putting them in jeopardy of failing to optimize their use of working capital and competing effectively in the marketplace. Using enough working capital will influence the management of adequate working capital, which will boost the company's profitability. Given the importance of working capital to the firm, sufficient working capital funds should be accessible in line with the company's demands to run economically, effectively, and efficiently and prevent the working capital shortage and excess. The lack of working capital threatens the company's income, profitability, and ability to meet its short-term

obligations on schedule. Additionally, excess working capital negatively affects the organization, beginning with the formation of unproductive money and even leading to losses.

However, the advantages of employing substantial working capital include protection from the company's crisis caused by a decline in the value of current assets and the ability to maintain a balance between the company's needs and working capital. The Industrial Sector is one of the 12 IDX-IC sectors, and also its scope is the sale of products and services to the industrial sector as a customer. This industry's production consists solely of completed goods and services. Hence, processed goods are unnecessary (Megalia & Situmorang, B., 2021).

In contrast to measuring working capital's effectiveness and efficiency using the profitability ratio of own capital and the working capital turnover ratio. This formula determines a company's working capital by subtracting its current assets from its liabilities. Working capital is deemed to be good if it increases every period. However, working capital that drops every period is considered to be poor. After analyzing the net working capital of industrial sector companies listed on the IDX by subtracting current liabilities from current assets, it was determined that the net working capital of all companies fluctuated.

Because the quantity of working capital tends to change annually, twenty-nine enterprises in the industrial sector experience volatility. PT Kabelindo Murni Tbk's operating capital fluctuated from Rp.2,000,000,000 in 2010 to Rp.26,000,000,000 in 2011, Rp.11,000,000 in 2012 to Rp.16,000,000,000 in 2013, and so on till 2021. This example provides an overview of the state of fluctuating working capital. Relevant prior research by Suci Astina titled "Analysis of the Effectiveness and Efficiency of Working Capital Use Case Study at PT. Indonesian Telecommunication Infrastructure Employee Cooperative Sumbagteng Area for 2018-2020." The research is quantitative, and the study's outcomes include PT's working capital utilization. For 2018-2020, the Indonesian Telecommunication Infrastructure Employee Cooperative Sumbagteng Area is classified as either effective or inefficient.

In addition, according to the findings of Megalia and Burnok Situmorang's research titled "Analysis of the Efficiency and Effectiveness of Working Capital Use in Various Electronics Industry Subsector Companies Listed on the Indonesia Stock Exchange (IDX) between 2017 and 2019," The style of research employed is quantitative and distinct from the findings of Suci Astina's (2022) research, namely that the effective and efficient use of working capital in various industrial subsector organizations is declared. In addition, the findings of a study titled "Analysis of Efficiency and Effectiveness of Capital Use in Village Credit Institutions (LPD) Pakraman Sapat Village, Tegallalang, Gianyar" by Dewa Ayu Rumini and Ni Luh Ayu Teges Aryastuti (2019) are presented. The type of research employed is quantitative and distinct from the findings of Suci Astina (2022) and Megalia and Burnok Situmorang (2021), namely the use of working capital at Village Credit Institutions (LPD) of Pakraman Sapat Village, Tegallalang, Gianyar, which is deemed highly effective and highly efficient.

Then, the findings of a study by Reykard S.Lalu, Ivonne S.Saerang, and Sri Murni titled "Analysis of the Efficiency of Working Capital Use in Cement Companies Listed on the

IDX from 2010 through 2014" are presented. Quantitative analysis was conducted, and the results indicate that the utilization of working capital in cement businesses listed on the IDX over 2010-2014 could be more efficient since the company has yet to maximize its profit. The findings of Kadek Surya Febriantari's (2020) study titled "Analysis of the Efficacy of Working Capital Use in the Republic of Indonesia Employee Cooperative (KPRI) "SEDIA" Klungkung Regency Regional Government. "The quantitative research indicates that working capital utilization in the Employee Cooperative of the Republic of Indonesia (KPRI) "SEDIA in 2011-2016 could have been more effective.

Based on the preceding descriptions, it is required to investigate the long-term formation of efficiency and effectiveness. Previous studies only studied a maximum of five or six years. However, this study collected data for the 12<sup>th</sup> year from twenty-nine companies in the industrial sector. Then it is intriguing to learn the outcome.

## 2. Literature Review

Working capital comprises current assets in gross working capital, and net working capital is produced from current assets after deducting current debt (Sujarweni, V.W., 2018). To determine whether a company is efficient and reasonably lucrative, an investor, for instance, will first examine the company's working capital by subtracting current assets from current liabilities; the result is the working capital's value. The source of cash is related to the utilization of working capital. This indicates that working capital is utilized by issuing several fees required for the business's everyday operations (Fahmi, I. 2014, Lyngstadaas, H., & Berg, T. 2016, Bhattacharya, H. 2021).

Utilization of working capital results from a rise in assets and a decrease in liabilities. Based on an understanding of working capital and its application, it can be concluded that working capital is used to measure a company's financial strength. If a company can manage its working capital effectively, its finances are strong, attracting investors' attention. Good working capital management will enable the company to operate effectively despite poor economic conditions. Additionally, the company's increased sales will impact its increased working capital. Therefore, companies wishing to enhance their working capital can increase profitability (Deloof, M. 2003, Oladipupo, A. O., & Okafor, C. A. 2013, Seth, H., Chadha, S., Sharma, S. K., & Ruparel, N. 2021).

Financial statements describe a company's financial situation, which may also be used to paint a picture of the company's financial performance (Fahmi, I. 2014). This means that financial statements contain financial information about transactions occurring within a firm and are given to internal and external stakeholders. The internal parties in question are those within the organization, such as management and corporate leaders, who help make decisions regarding marketing and tactics. The external parties in question are external parties, such as creditors and investors, for whom these financial statements help assess the company's ability to repay loans and make investment decisions. The ratio is a method for calculating by comparing quantities to other quantities; the results are utilized for analysis (Fahmi, I. 2014). This indicates that financial ratios are crucial variables utilized in analysis to determine a company's financial health. Before making investment decisions, investors analyze by calculating investment-relevant financial ratios (Smith, B. D. 1999, Chen, Y., Jermias, J., & Nazari, J. A. 2021, Hilmi, H., Zarkasyi, W., Sueb, M., & Tanzil, N. D. 2021).

Effectiveness is how a business can achieve a predetermined aim or objective (Megalia et al., 2021). The relationship between planning and achievement of a goal can be said to be effective if they are linked, in the sense that the result in the principle of effectiveness becomes a benchmark when someone has a desire or plan for something and the final result occurs following the desire or plan; conversely, if the desire or plan results are not as expected, the relationship cannot be said to be effective, effectiveness is a predetermined goal that is measured to determine how well corporate management has met the goal (Serrador, P., & Pinto, J. K. 2015, Stolzer, A. J., et.al. 2018). The efficiency of using working capital is determined by the degree of profit-sharing margin (profit from financing) relative to the amount of working capital provided (Megalia & Situmorang, B., 2021).

The use of own capital profitability ratio in calculating the effectiveness of working capital use is above 21 percent (very effective), 15 percent to 21 percent (effective), 9 percent to 15 percent (quite effective), 3 percent to 9 percent (less effective), and 3 percent (ineffective) (Kep.Men.No.06/Per/M.KUKM/V/2006). Working capital efficiency is the efficient use of working capital in the operational activities of a business. If management is successful, its use of resources is not excessive, and it can be described as efficient because the use of limited resources demonstrates management's capacity to work diligently to reach the company's objectives or goals (Megalia & Situmorang, B., 2021).

This efficiency concept ensures no hurdles to attaining the established goals by balancing inventories and requirements. Use the working capital turnover formula, a ratio, to determine whether a company's working capital is efficient or inefficient. The working capital turnover is calculated by comparing net sales to working capital. The greater the quantity of working capital turnover, the more efficiently the company will utilize its working capital (Abuzayed, B. 2012, Megalia & Situmorang, B., 2021).

### **3. Research Method**

The place of research is where a study takes place to obtain data useful for ongoing research. The place of this research is by collecting data by accessing the Indonesia Stock Exchange (IDX) website of [www.idx.co.id](http://www.idx.co.id). Data collection on the Indonesia Stock Exchange (IDX) is carried out because the website has the necessary data on Industrial Sector Companies listed on the Indonesia Stock Exchange (IDX) as the object of this study. However, the Indonesia Stock Exchange (IDX) only provides data on the company's annual financial statements for the last four years, namely 2019-2022. Therefore, annual financial report data in 2010-2018 is taken by accessing the website of [www.idnfinancials.com](http://www.idnfinancials.com). This research employs a quantitative research method. Quantitative research collects data using numerical measures (Sardiyo et al., 2022). This study's population comprises fifty-five industrial sector firms listed on the Indonesia Stock Exchange (IDX). The sample reflects the size and features of the population as a whole. Sampling is conducted since the entire population cannot be utilized for a research study. The sampling method employed is the method of purposive sampling (Sardiyo et al., 2022). (a) Industrial sector firms listed on the Indonesia Stock Exchange; (b) Companies listed on the Indonesia Stock Exchange during 2010-2021; and (c) Companies that disclose consecutive financial statements throughout 2010-2021. Based on the established criteria, as many as twenty-nine firms were identified.

#### 4. Findings and Discussions

Table 1. The level of effectiveness of capital use based on the profitability of industrial sector companies in 2010-2021

| No | Company Name                               | Own Capital Profitability Ratio |      |      |       |       |      |      |       |       |        |      |        | Effectiveness Rate |
|----|--------------------------------------------|---------------------------------|------|------|-------|-------|------|------|-------|-------|--------|------|--------|--------------------|
|    |                                            | 2010                            | 2011 | 2012 | 2013  | 2014  | 2015 | 2016 | 2017  | 2018  | 2019   | 2020 | 2021   |                    |
| 1  | Asahimas Flat Glass Tbk                    | 35%                             | 30%  | 28%  | 22%   | 25%   | 19%  | 29%  | 4%    | 1%    | -215%  | 91%  | -1533% | -122%              |
| 2  | Arwana Citramulia Tbk                      | -918%                           | 366% | 344% | 255%  | 137%  | 690% | 55%  | 43%   | 45%   | 53%    | 56%  | 56%    | 265%               |
| 3  | Astra Graphia Tbk                          | 47%                             | 43%  | 53%  | 54%   | 45%   | 35%  | 35%  | 29%   | 26%   | 22%    | 4%   | 7%     | 33%                |
| 4  | Astra International Tbk                    | 164%                            | 120% | 105% | 130%  | 96%   | 54%  | 86%  | 103%  | 186%  | 91%    | 40%  | 45%    | 102%               |
| 5  | MNC Asia Holding Tbk                       | 32%                             | 21%  | 20%  | 5%    | 16%   | -27% | 55%  | 40%   | 47%   | 138%   | 163% | 51%    | 47%                |
| 6  | Global Mediacom Tbk                        | 9%                              | 10%  | 24%  | 17%   | 16%   | 8%   | 58%  | 21%   | 56%   | 97%    | 39%  | 80%    | 36%                |
| 7  | Bakrie & Brothers Tbk                      | -92%                            | 157% | 14%  | 464%  | -2%   | 20%  | 0%   | 10%   | 443%  | 600%   | 74%  | -7%    | 140%               |
| 8  | Citatah Tbk                                | 95%                             | 7%   | 14%  | 3%    | 5%    | 1%   | 13%  | 2%    | 2%    | -13%   | -35% | -23%   | 6%                 |
| 9  | Island Concepts Indonesia Tbk              | 449%                            | -30% | 120% | 64%   | 5%    | 3%   | 3%   | 11%   | 18%   | 18%    | 5%   | 0%     | 55%                |
| 10 | Tanah Laut Tbk                             | 4%                              | 2%   | 45%  | 29%   | 46%   | 2%   | -29% | -109% | -184% | 5%     | 0%   | -8%    | -16%               |
| 11 | Intraco Penta Tbk                          | 108%                            | -31% | -3%  | 28%   | 11%   | 95%  | 83%  | 39%   | -98%  | -115%  | 43%  | 18%    | 15%                |
| 12 | Jembo Cable Company Tbk                    | -5%                             | 56%  | 38%  | -97%  | 88%   | 6%   | 95%  | 112%  | 69%   | 40%    | 5%   | 273%   | 57%                |
| 13 | Jasindo Tiga Perkasa Tbk                   | 110%                            | 146% | 62%  | 50%   | 49%   | 111% | 61%  | 102%  | 69%   | 72%    | 28%  | 29%    | 74%                |
| 14 | KMI Wire and Cable Tbk                     | 14%                             | 17%  | 25%  | 13%   | 12%   | 18%  | 39%  | 39%   | 18%   | 24%    | -4%  | 6%     | 18%                |
| 15 | Kabelindo Murni Tbk                        | 133%                            | -72% | 217% | -48%  | 147%  | 65%  | 23%  | 38%   | 29%   | 25%    | 4%   | -9%    | 10%                |
| 16 | Keramika Indonesia Asosiasi Tbk            | 9%                              | 6%   | 13%  | 13%   | 14%   | -31% | -71% | -24%  | -22%  | -344%  | -60% | -4%    | -42%               |
| 17 | Kokoh Inti Arebama Tbk                     | 11%                             | 408% | 79%  | 45%   | 31%   | 17%  | 0%   | -16%  | -15%  | -48%   | 53%  | 262%   | 69%                |
| 18 | Perdana Bangun Pusaka Tbk                  | 19%                             | 25%  | 14%  | -50%  | 44%   | 135% | 114% | 16%   | 82%   | -68%   | 0%   | 9%     | 28%                |
| 19 | Lion Metal Works Tbk                       | 16%                             | 19%  | 24%  | 18%   | 14%   | 12%  | 11%  | 3%    | 4%    | 0%     | -3%  | -1%    | 10%                |
| 20 | Modern Internasional Tbk                   | 17%                             | 16%  | 10%  | 17%   | 16%   | 26%  | 92%  | 99%   | 6%    | 14%    | 55%  | -45%   | 27%                |
| 21 | Multifiling Mitra Indonesia Tbk            | 14%                             | 15%  | 25%  | 39%   | 56%   | 74%  | 115% | 130%  | 112%  | 90%    | 110% | 30%    | 67%                |
| 22 | Mulia Industrindo Tbk                      | 370%                            | -8%  | -7%  | -275% | 78%   | 69%  | -3%  | -25%  | -236% | 44%    | 91%  | 129%   | 19%                |
| 23 | Multipolar Tbk                             | 174%                            | 5%   | 7%   | 39%   | 73%   | -63% | 10%  | -121% | -205% | -1851% | 98%  | 4%     | -152%              |
| 24 | Supreme Cable Manufacturing & Commerce Tbk | 32%                             | 41%  | 45%  | 26%   | -158% | 28%  | 41%  | 29%   | 23%   | 23%    | 17%  | 9%     | 13%                |
| 25 | Tira Austenite Tbk                         | 9%                              | 16%  | 16%  | -48%  | 7%    | 4%   | 3%   | -23%  | -1%   | 2%     | 5%   | -10%   | -2%                |

|         |                          |     |     |     |     |      |      |      |     |      |     |     |      |     |
|---------|--------------------------|-----|-----|-----|-----|------|------|------|-----|------|-----|-----|------|-----|
| 26      | Surya Toto Indonesia Tbk | 53% | 56% | 46% | 40% | 50%  | 36%  | 24%  | 38% | 39%  | 14% | -3% | 15%  | 34% |
| 27      | United Tractors Tbk      | 69% | 55% | 54% | 36% | 28%  | 13%  | 21%  | 34% | 167% | 61% | 24% | 35%  | 50% |
| 28      | Voksel Electric Tbk      | 6%  | 37% | 41% | 22% | -55% | 0%   | 50%  | 41% | 26%  | 21% | 0%  | -56% | 11% |
| 29      | Dosni Roha Indonesia Tbk | 43% | 39% | 39% | 30% | 203% | 120% | 114% | -4% | 5%   | 9%  | 12% | 3%   | 51% |
| Average |                          |     |     |     |     |      |      |      |     |      |     |     |      | 36% |

The effectiveness rate of using working capital at PT Asahimas Flat Glass Tbk is (-122%). Hence the company's use of working capital is declared ineffective. With a working capital utilization rate of 265%, PT Arwana Citramulia Tbk is categorized as having a very effective working capital utilization rate. With a working capital utilization rate of 33%, PT Astra Graphia Tbk has been deemed a very efficient organization. PT Astra International Tbk utilizes its working capital at a rate of 102%, making it, by industry standards, an extremely efficient organization.

The working capital utilization rate of PT MNC Asia Holding Tbk is 47%. Therefore, it is highly efficient. Thirty-six percent of PT Global Mediacom Tbk's working capital is utilized effectively, making it a highly efficient organization. PT Bakrie & Brothers Tbk has an adequate level of working capital utilization of 140%, indicating that its utilization of working capital is highly efficient. PT Citatah Tbk has a practical working capital utilization of 6%. Hence it is deemed to be less effective. Fifty-five percent of PT Island Concepts Indonesia Tbk's working capital is utilized well. Hence the company is deemed to be very effective. PT Tanah Laut Tbk's practical level of working capital utilization is -16 percent, making it ineffective. Fifteen percent of PT Intraco Penta Tbk's working capital is utilized effectively, classifying it as effective. PT Jembo cable Company Tbk has a 57% utilization rate of its working capital. Thus, it is efficient.

PT Jasuindo Tiga Perkasa Tbk has a working capital utilization rate of 74%, indicating that the company is very efficient. 18% of PT KMI Wire and Cable Tbk's working capital is utilized well, indicating its effectiveness. Ten percent of PT Kabelindo Murni Tbk's working capital is utilized effectively. Hence the company is quite effective. PT Keramik Indonesia Assosiasi Tbk has a working capital utilization rate of (-42%), indicating that the company is inefficient. With a working capital utilization rate of sixty-nine percent, PT Kokoh Inti Arebama Tbk is deemed to be a highly efficient organization.

Twenty-eight percent of PT Perdana Bangun Pusaka Tbk's working capital is utilized effectively, classifying it as highly effective. The working capital utilization rate of PT Lion Metal Works Tbk is 10%, which is relatively efficient. Twenty-seven percent of PT Modern International Tbk's working capital is utilized effectively, which qualifies it as a highly efficient company. The utilization rate of PT Multifiling Mitra Indonesia Tbk's working capital is 67%, making it very efficient. 19% of PT Mulia Industrindo Tbk's working capital is utilized well. Hence the company is deemed effective.

PT Multipolar Tbk's degree of effective utilization of its working capital is (-152%), hence rendering the company ineffective. The working capital utilization rate of PT Supreme Cable Manufacturing & Commerce Tbk is 13%. Thus, it is highly efficient. PT Tira Austenite Tbk has an ineffective working capital utilization rate of (-2%) categorized as

inefficient. PT Surya Toto Indonesia Tbk utilizes its working capital at an effective rate of 34%, indicating that the company is very efficient. Fifty percent of PT United Tractors Tbk's working capital is utilized effectively, making it a highly efficient company. Eleven percent of PT Voksel Electric Tbk's working capital is utilized effectively, which qualifies it as highly efficient. With a working capital utilization rate of 51%, PT Dosni Roha Indonesia Tbk is considered very efficient.

Based on the discussion of the effectiveness of the use of working capital in each company, an overall accumulation was performed to determine the effectiveness of the use of working capital in industrial sector companies listed on the IDX in 2010-2021. The results obtained after calculating the average effectiveness rate of 36 percent indicated that, based on the criteria of own capital profitability ratio, the level of effectiveness of using working capital was high. This is because it has a small operating capital yet can make maximum profit.

Table 2. Level of Efficiency of Capital Use of Industrial Sector Companies The year 2010-2021

| No | Company Name                    | Working Capital Turnover Ratio |      |      |      |      |      |      |      |      |      |      |      | Efisiensi Rate |
|----|---------------------------------|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|----------------|
|    |                                 | 2010                           | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |                |
| 1  | Asahimas Flat Glass Tbk         | 3                              | 2    | 2    | 2    | 2    | 2    | 4    | 4    | 9    | 70   | -8   | -228 | -11            |
| 2  | Arwana Citramulia Tbk           | -95                            | 228  | 24   | 15   | 8    | 125  | 9    | 6    | 6    | 5    | 4    | 3    | 28             |
| 3  | Astra Graphia Tbk               | 6                              | 5    | 6    | 6    | 4    | 4    | 4    | 4    | 4    | 4    | 3    | 3    | 4              |
| 4  | Astra International Tbk         | 12                             | 9    | 9    | 11   | 9    | 6    | 8    | 9    | 16   | 8    | 4    | 4    | 9              |
| 5  | MNC Asia Holding Tbk            | 3                              | 2    | 1    | 1    | 2    | 6    | 8    | 10   | 7    | 11   | 16   | 4    | 6              |
| 6  | Global Mediacom Tbk             | 0                              | 1    | 1    | 2    | 1    | 3    | 8    | 2    | 5    | 5    | 3    | 5    | 3              |
| 7  | Bakrie & Brothers Tbk           | 2                              | 199  | 6    | -2   | -1   | -1   | 0    | 0    | -12  | 22   | -2   | -2   | 17             |
| 8  | Citatah Tbk                     | 11                             | 11   | 8    | 14   | 9    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 5              |
| 9  | Island Concepts Indonesia Tbk   | -39                            | -52  | 124  | 14   | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 5              |
| 10 | Tanah Laut Tbk                  | 1                              | 2    | 3    | 2    | 2    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1              |
| 11 | Intraco Penta Tbk               | 24                             | -8   | -7   | -3   | -2   | -4   | -5   | -3   | 7    | 5    | 0    | 0    | 0              |
| 12 | Jembo Cable Company Tbk         | 37                             | 24   | 15   | -64  | 55   | 38   | 15   | 29   | 25   | 11   | 6    | 3    | 16             |
| 13 | Jasindo Tiga Perkasa Tbk        | 6                              | 9    | 6    | 7    | 8    | 17   | 9    | 15   | 7    | 6    | 4    | 3    | 8              |
| 14 | KMI Wire and Cable Tbk          | 4                              | 5    | 4    | 5    | 4    | 4    | 3    | 4    | 3    | 3    | 1    | 1    | 3              |
| 15 | Kabelindo Murni Tbk             | 186                            | -33  | -93  | -64  | 65   | 49   | 11   | 11   | 9    | 7    | 6    | 8    | 14             |
| 16 | Keramika Indonesia Asosiasi Tbk | 3                              | -2   | 1    | 2    | 1    | 2    | 2    | 2    | 2    | 5    | 5    | 4    | 2              |
| 17 | Kokoh Inti Arebama Tbk          | 13                             | -27  | 21   | 14   | 14   | 17   | 16   | 18   | 26   | 42   | 19   | -243 | -6             |

|         |                                            |    |    |    |    |     |     |     |     |     |     |     |    |    |
|---------|--------------------------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|----|----|
| 18      | Perdana Bangun Pusaka Tbk                  | 11 | 6  | 5  | 14 | 42  | -41 | -18 | -22 | -18 | -34 | 2   | 1  | -4 |
| 19      | Lion Metal Works Tbk                       | 1  | 1  | 1  | 1  | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1  | 1  |
| 20      | Modern Internasional Tbk                   | 3  | 3  | 2  | 4  | 6   | -5  | -1  | 0   | 0   | 0   | 0   | 0  | 1  |
| 21      | Multifiling Mitra Indonesia Tbk            | 1  | 1  | 1  | 2  | 3   | 4   | 6   | 6   | 5   | 1   | 9   | 2  | 3  |
| 22      | Mulia Industrindo Tbk                      | 8  | 8  | 10 | 30 | 34  | -25 | -22 | -33 | -70 | 13  | 62  | 9  | 2  |
| 23      | Multipolar Tbk                             | 3  | 5  | 6  | 3  | 6   | 9   | 6   | 11  | 19  | 217 | -10 | 15 | 24 |
| 24      | Supreme Cable Manufacturing & Commerce Tbk | 12 | 13 | 9  | 9  | -42 | 6   | 4   | 5   | 5   | 4   | 3   | 3  | 3  |
| 25      | Tira Austenite Tbk                         | 6  | 6  | 6  | 10 | 8   | 8   | 6   | 5   | 5   | 5   | 6   | 7  | 7  |
| 26      | Surya Toto Indonesia Tbk                   | 3  | 3  | 3  | 3  | 4   | 3   | 3   | 3   | 3   | 2   | 2   | 2  | 3  |
| 27      | United Tractors Tbk                        | 7  | 5  | 5  | 4  | 3   | 2   | 2   | 3   | 12  | 5   | 3   | 3  | 5  |
| 28      | Voksel Electric Tbk                        | 7  | 7  | 7  | 14 | 13  | 10  | 6   | 6   | 6   | 3   | 2   | 5  | 7  |
| 29      | Dosni Roha Indonesia Tbk                   | -1 | -1 | -1 | -1 | -3  | -3  | -1  | -2  | -2  | -1  | -1  | 4  | -1 |
| Average |                                            |    |    |    |    |     |     |     |     |     |     |     |    | 5  |

Each company's average working capital turnover ratio is compiled for study in Table 2, according to Table 1. PT Asahimas Flat Glass Tbk's efficiency level in using working capital is minus eleven times the industry standard, indicating that working capital is inefficient. PT Arwana Citramulia Tbk has an efficient working capital utilization of twenty-eight times, hence classifying its working capital utilization as efficient. PT Astra Graphia Tbk has an inefficient working capital utilization level, as its working capital efficiency is four times the industry average.

Based on industry standards, PT Astra International Tbk's use of working capital is relatively efficient, as its working capital efficiency is nine times the industry average. PT MNC Asia Holding Tbk has an efficient level of working capital use of six times, indicating that, according to industry standards, its use of working capital is relatively efficient. PT Global Mediacom Tbk's level of working capital efficiency is three times the industry average, indicating that the company's use of working capital is inefficient. PT Bakrie & Brothers Tbk's level of working capital efficiency is seventeen times the industry average, indicating that the company's use of working capital is efficient. PT Citatah Tbk has an inefficient level of working capital use of five times, making its use of working capital inefficient. The inefficiency of PT Island Concepts Indonesia Tbk's use of working capital is indicated by the fact that it has a working capital efficiency ratio of five times. PT Tanah Laut Tbk has an efficient level of working capital utilization of one time, thereby classifying its use of working capital as inefficient.

The ratio of PT Intraco Penta Tbk's working capital to its total assets is none. Hence, it is categorized as inefficient. PT Jembo Cable Company Tbk's working capital efficiency is 16 times, indicating that the company uses working capital relatively efficiently. PT Jasuindo Tiga Perkasa Tbk has an efficient working capital use of 8 times, indicating that the company's use of working capital is relatively efficient. PT KMI Wire and Cable Tbk

have an inefficient working capital use level, as their working capital efficiency is three times the industry average. Based on the established standards, PT Kabelindo Murni Tbk's use of working capital is deemed efficient due to its fourteen times efficient utilization level.

PT Keramika Indonesia Assosiasi Tbk has an efficient working capital use of two times, indicating that the company's use of working capital is inefficient. PT Kokoh Inti Arebama Tbk has an efficient working capital use of minus six times, indicating that the company's use of working capital is inefficient. PT Perdana Bangun Pusaka Tbk has an efficient working capital use of -4 times, indicating that the company's use of working capital is inefficient. PT Lion Metal Works Tbk's degree of efficient use of working capital is one time, which classifies PT Lion Metal Works Tbk's use of working capital as inefficient.

PT Modern International Tbk's degree of efficient use of working capital is one time, indicating that the company's use of working capital is inefficient. PT Multifiling Mitra Indonesia Tbk's level of working capital efficiency is three times the industry average, indicating that the company's use of working capital is inefficient. PT Mulia Industrindo Tbk has an inefficient working capital use of two times, indicating that the company's use of working capital is inefficient. PT Multipolar Tbk's degree of working capital efficiency is 24 times, indicating that the company's use of working capital is efficient. PT Supreme Cable Manufacturing & Commerce Tbk needs to improve its working capital use three times. Hence the company's use of working capital needs to be more efficient.

PT Tira Austenite Tbk has an adequate working capital use of (-2%) and an efficiency level of working capital use of seven times, indicating that the company's use of working capital is efficient. PT Surya Toto Indonesia Tbk has an efficient working capital use of three times, indicating that the company's use of working capital is inefficient. PT United Tractors Tbk's working capital efficiency is five times, indicating the company's inefficient working capital.

PT Voksel Electric Tbk's level of working capital efficiency is seven times the industry average. Hence the company's use of working capital is deemed efficient. PT Dosni Roha Indonesia Tbk has an efficiency ratio of minus one for its use of working capital, indicating that it is inefficient. Based on the discussion of the level of efficiency in the use of working capital in each company, an overall accumulation was conducted to determine the level of efficiency in the use of working capital in industrial sector companies listed on the IDX in 2010-2021. The results obtained after calculating the average efficiency level in using working capital were five times the level of efficiency discussed.

Based on the criteria for the ratio of working capital turnover, the level of efficiency in the use of working capital by IDX-listed industrial enterprises from 2010 to 2021 is determined to be inefficient. This results from the company's substantial sales volume and poor working capital management. Based on relevant research, Suci Astina (2022), Megalia and Burnok Situmorang (2021), and Dewa Ayu Rumini and Ni Luh Ayu Teges Aryastuti (2019) have differences with this study, namely in the use of different objects and indicators in measuring the level of effectiveness and efficiency of working capital use, even in their findings. Therefore, the results of this study are inconsistent with those

of earlier research.

## 5. Conclusion

Based on the results of the analysis and discussion, it can be concluded that the results of the calculation of the average level of effectiveness of the use of working capital are 37%. Based on the standard profitability ratio of own capital, the effectiveness of working capital in industrial sector companies listed on the Indonesia Stock Exchange (IDX) in 2010-2021 is deemed very effective. Comparatively, the average result of the level of efficiency in the use of working capital is six times; therefore, based on the standard working capital turnover ratio, the level of efficiency in the use of working capital in industrial sector companies listed on the Indonesia Stock Exchange (IDX) for 2010-2021 is deemed efficient. It is advised that businesses handle the use of working capital appropriately since the consistency of the effectiveness and efficiency of using it influence the growth of a business's profitability. Furthermore, for the next researcher to conduct better research than the prior researcher by adding variables or using alternative variables and other ratios such as cash turnover ratios, receivables turnover, and inventory turnover.

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