

Effect of Leverage, Liquidity, Accounts Receivable Turnover, Inventory Turnover, and Working Capital Turnover on Return on Investment in Food and Beverage Companies Listed on the Indonesia Stock Exchange for the Period 2018-2020

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Abstract

The purpose of this test and analysis is to determine effect of leverage, liquidity, accounts receivable turnover, inventory turnover, and working capital turnover on return on investment in Food and Beverage Companies listed on the Indonesia Stock Exchange for the period 2018-2020. This type of research is quantitative research. The population in this study is the Food and Beverage Companies Listed on the Indonesia Stock Exchange as many as 27 issuers. The criteria that are known to be obtained are 36 of the 12 issuers for 5 years, namely the 2018-2020 period. The analytical method used is multiple regression analysis. Which consists of a partial test (t) and simultaneous test (F). The results show that leverage has a negative and insignificant effect on return on investment. Liquidity has a positive and insignificant effect on return on investment. Accounts receivable turnover has a positive and insignificant effect on return on investment. Inventory turnover has a negative and insignificant effect on return on investment. Working capital turnover has a negative and insignificant effect on return on investment. Leverage, liquidity, accounts receivable turnover, inventory turnover, and working capital turnover have a significant effect simultaneously on return on investment.

Keywords

Leverage; liquidity; accounts receivable turnover; inventory turnover; working capital turnover; return on investment



I. Introduction

Competition in the food and beverage business is now providing good competitiveness, so it is hoped that this will improve the shortcomings that occur in the company. Each company tries to determine the right management effectiveness so that the company's growth runs well. However, if we look at 2020, there is a decline in profit growth for Food and Beverage Companies, even though these companies can reap net profits. This is due to the lack of public consumption in Indonesia, which affects the use of debt, current assets and company sales.

The profit the company will earn next year cannot be determined. Determining future profits in terms of return on investment. Because return on investment as an indicator determines whether there are fluctuations in the process of managing finances. These fluctuations can have an impact on management decisions related to future activities, such as investment decisions and going concern.

To generate large profits, the accounting division finds a way to capitalize on the company's operational activities. Leverage is one of the ratios that can finance the company's operations. The use of debt can be seen in leverage which shows that if debt increases, it means that the company must accept a greater level of bankruptcy risk so that

it can reduce the company's business to obtain a large level of profit from return on investment.

Besides leverage, liquidity factor also needs to be considered in increasing return on investment. Liquidity provides an illustration of how the company pays off current liabilities through the use of the company's current assets because if liquidity increases it means the company is able to pay all current liabilities so that the company can enlarge to get large profits.

Accounts receivable turnover provides information about the sales effectiveness of the use of receivables. The relationship return on investment is if the higher the receivables owned by the company, the receivables turning into cash take longer so that it can reduce company profits.

Inventory turnover can determine the company's profit by paying attention to the amount of inventory in the company. The relationship return on investment is the increasing level of inventory that can turn into cash quickly so that there is an increase in company profits.

Working capital turnover has a role to facilitate the process of company activities. The relationship between return on investment is that the higher the working capital turnover will provide benefits for business owners because they can maximize efforts to receive large income.

The observation uses the food and beverages sector, because basically the food and beverages sector provides all the necessities of daily life so that with the growth of Indonesia's population, the demand for food and beverage supplies will increase. This affects the existence of proper management of receivables and working capital by using debt loans which can later increase company profits. With the increase in population growth, it can attract investors to invest their capital.

The purpose of this test and analysis is to determine effect of leverage, liquidity, accounts receivable turnover, inventory turnover, and working capital turnover on return on investment in Food and Beverage Companies listed on the Indonesia Stock Exchange for the period 2018-2020.

II. Review of Literature

2.1 Effect of Leverage on Return on Investment

Ramadita and Suzan (2019) said that a low debt-to-capital ratio gave the company profit growth because the company's production costs fell.

Leverage is the use of assets and sources of funds by companies that have fixed costs to increase shareholder profits. The source of this company's funds is obtained from loans. In addition, the source of loan funds also has interest which functions as a fixed expense. Meanwhile, the leverage ratio is a measure of debt to the total capitalization of a company. The higher this ratio indicates that the company's debt is getting bigger. This situation makes the financial situation unhealthy and at risk of bankruptcy.

The magnitude of this calculation, provides additional capital from debt loans to help business equity run its business, and the lower this ratio, the higher the survival in a state of bankruptcy.

Mulyawan (2015) said that issuers with large profits would not use loans in the form of debt. Due to the hierarchical theory that companies with high profit margins have abundant sources of funding.

2.2 Effect of Liquidity on Return on Investment

The converted company assets can pay off all of its obligations. A good financial position will affect the company's profits.

Liquidity refers to the ease with which an asset, or security, can be converted into ready cash without affecting its market price. Cash is the most liquid of assets, while tangible items are less liquid. The two main types of liquidity include market liquidity and accounting liquidity. An asset is said to be liquid if it is easy to sell or convert into cash without any loss in its value. Business liquidity is determined by how quickly a business can convert its assets into cash. Non-cash assets in this context could include stock, equipment, and money owed by debtors, but individual businesses may hold different assets depending on their industry and business type.

Fahmi (2016) said that companies with large liquidity ratios can be seen as good for creditors, and companies are considered as companies with a favorable position.

According to Wahyuni and Suryakusuma (2018), the higher the current liquidity ratio value, the more beneficial it is for the company. These results indicate that high liquidity indicates that the company can meet all of its short-term obligations.

2.3 Effect of Accounts Receivable Turnover on Return on Investment

Receivables can rotate quickly, showing that bad debts are smaller and therefore the cost of receivables is also low. For example, analysis of the cost of credit and collection of accounts receivable and the possibility of bad debts. This can increase company profits.

Accounts receivable turnover is described as a ratio of average accounts receivable for a period divided by the net credit sales for that same period. This ratio gives the business a solid idea of how efficiently it collects on debts owed toward credit it extended, with a lower number showing higher efficiency.

Conveyed that the high turnover of receivables causes the return of liquid funds to be faster, because bad debts will be smaller, so that the company's operations can work without problems in accordance with the desired goals and the company's profits can increase improved.

Wilasmi et al. (2020), increasing bill receivables cycle, accelerated refunds assigned to cash recovered receivables to have an impact.

2.4 Effect of Inventory Turnover on Return on Investment

States that the faster the inventory turnover rate, the more profitable the issuer is, in addition, the smaller the rotating inventory level, the lower the profit for business owners.

Inventory turnover measures how many times in a given period a company is able to replace the inventories that it has sold. A slow turnover implies weak sales and possibly excess inventory, while a faster ratio implies either strong sales or insufficient inventory.

This stipulates that the higher the inventory bill, the more likely the company is to make a profit and vice versa.

According to Diana and Santoso (2016), the higher the revolving inventory, the greater the strength for the company to earn profits. The reverse is also true. When inventory turnover increases, inventory increases, which increases inventory holding costs, then profits decrease.

2.5 Effect of Working Capital Turnover on Return on Investment

According to Mustafa (2017), sufficient capital is an important prerequisite for the growth and success of a company in the long term that will generate profits, on the

contrary without working capital the company will not be able to increase its production, so it will not be able to expand sales, eventually lose the running profit.

Also known as net sales to working capital, working capital turnover measures the relationship between the funds used to finance a company's operations and the revenues a company generates to continue operations and turn a profit. The working capital turnover ratio is calculated by dividing the company's net annual sales by its average working capital. Working capital is calculated by subtracting total liabilities for total assets. The working capital turnover ratio measures how well a company is utilizing its working capital to support a given level of sales. Working capital is current assets minus current liabilities. Capital turnover compares the annual sales of a business to the total amount of its stockholders' equity. The intent is to measure the proportion of revenue that a company can generate with a given amount of equity. A company's working capital turnover ratio can be negative when a company's current liabilities exceed its current assets. The working capital turnover is calculated by taking a company's net sales and dividing them by its working capital.

According to Taufiqurrohman and Agnestia (2017), the higher the relationship between the collection of working capital, improving the company's performance, with the percentage of available working capital, can produce a certain level of profitability.

Anissa's opinion (2019) says that efficient working capital management can increase profits because it is considered to be able to manage working capital well.

III. Result and Discussion

This type of research is quantitative research. Quantitative research defines objectively from the collection and testing of other statistical methods (Asyraini et al., 2022; Pandiangan, 2015).

Population is a group or collection of objects or objects that will be generalized from the results of research (Pandiangan et al., 2018; Tobing et al., 2018). The population in this study is the Food and Beverage Companies Listed on the Indonesia Stock Exchange as many as 27 issuers. The sample is part of the population that has characteristics similar to the population itself. Samples are also called samples. The calculated value obtained from this sample is called statistic (Octiva et al., 2018; Pandia et al., 2018; Pandiangan, 2018). The amount to be studied using purposive sampling technique. Purposive sampling technique, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys (Octiva, 2018; Pandiangan et al., 2022). The criteria that are known to be obtained are 36 of the 12 issuers for 5 years, namely the 2018-2020 period.

The data collected is taken from documentation, namely obtaining financial report data from food and beverage issuers on the Indonesia Stock Exchange. The type of data is quantitative. The data source used secondary data from the Indonesia Stock Exchange.

The analytical method used is multiple regression analysis. Which consists of a partial test (t) and simultaneous test (F). Partial test (t) is a test used to test the significance of the regression coefficient (Pandiangan, 2022). Simultaneous test (F) is used to determine whether or not there is a joint or simultaneous influence between the independent variables on the dependent variable (Octiva et al., 2021; Pandiangan et al., 2021).

IV. Result and Discussion

4.1 Partial Test (t) Results

Table 1. Partial Test (t) Results

Variable	B	Sig
Leverage	-0.071	0.072
Liquidity	0.004	0.631
Accounts Receivable Turnover	0.001	0.865
Inventory Turnover	-0.002	0.237
Working Capital Turnover	-0.002	0.152

4.2 Dependent Variable: Return on Investment

The results show that leverage has a negative and insignificant effect on return on investment. Liquidity has a positive and insignificant effect on return on investment. Accounts receivable turnover has a positive and insignificant effect on return on investment. Inventory turnover has a negative and insignificant effect on return on investment. Working capital turnover has a negative and insignificant effect on return on investment.

4.3 Simultaneous Test (F) Results

Table 2. Simultaneous Test (F) Results

F	Sig
5.193	0.002

4.4 Dependent Variable: Return on Investment

Leverage, liquidity, accounts receivable turnover, inventory turnover, and working capital turnover have a significant effect simultaneously on return on investment.

V. Conclusion

The results show that leverage has a negative and insignificant effect on return on investment. Liquidity has a positive and insignificant effect on return on investment. Accounts receivable turnover has a positive and insignificant effect on return on investment. Inventory turnover has a negative and insignificant effect on return on investment. Working capital turnover has a negative and insignificant effect on return on investment. Leverage, liquidity, accounts receivable turnover, inventory turnover, and working capital turnover have a significant effect simultaneously on return on investment.

The suggestions that can be given are:

1. For other researchers, to give a greater impact on return on investment, other researchers also add other variables such as company size and ownership structure to obtain more accurate results.
2. For companies, the addition of assets for shareholders is very necessary for business continuity, so that management can pay more attention to and improve operational performance.
3. Other researchers can increase research time and increase population, thus impacting return on investment.

References

- Anissa, A. R. (2019). Pengaruh Perputaran Modal Kerja, Petumbuhan Penjualan, dan Likuiditas Terhadap Profitabilitas pada Perusahaan Retail yang Terdaftar di Bursa Efek Indonesia. *Jurnal Riset Manajemen Sains Indonesia (JRMSI)*, 10(1), 125-135.
- Asyraini, Siti, Fristy, Poppy, Octiva, Cut Susan, Nasution, M. Hafiz Akbar, & Nursidin, M. (2022). Peningkatan Kesadaran Protokol Kesehatan di Masa Pandemi Bagi Warga di Desa Selamat Kecamatan Biru-biru. *Jurnal Pengabdian Kontribusi (Japsi)*, 2(1), 33-36.
- Diana, P. A., & Santoso, B. H. (2016). Pengaruh Perputaran Kas, Piutang, Persediaan Terhadap Profitabilitas pada Perusahaan Semen di BEI. *Jurnal Ilmu dan Riset Manajemen*, 5(3), 1-18.
- Fahmi, I. (2016). *Pengantar Manajemen Keuangan*. Bandung: CV. Alfabeta.
- Mulyawan, Setia. (2015). *Manajemen Keuangan*. Bandung: CV. Pustaka.
- Musthafa. (2017). *Manajemen Keuangan*. Yogyakarta: CV. Andi Offset.
- Octiva, C. S., Irvan, Sarah, M., Trisakti, B., & Daimon, H. (2018). Production of Biogas from Co-digestion of Empty Fruit Bunches (EFB) with Palm Oil Mill Effluent (POME): Effect of Mixing Ratio. *Rasayan J. Chem.*, 11(2), 791-797.
- Octiva, Cut Susan, Indriyani, & Santoso, Ari Beni. (2021). Effect of Stirring Co-digestion of Palm Oil and Fruith for Biogas Production to Increase Economy Benefit. *Budapest International Research and Critics Institute-Journal*, 4(4), 14152-14160. DOI: <https://doi.org/10.33258/birci.v4i4.3521>.
- Octiva, Cut Susan. (2018). Pengaruh Pengadukan pada Campuran Limbah Cair Pabrik Kelapa Sawit dan Tandan Kosong Kelapa Sawit terhadap Produksi Biogas. Tesis. Medan: Fakultas Teknik, Program Studi Teknik Kimia, Universitas Sumatera Utara. <https://repositori.usu.ac.id/bitstream/handle/123456789/12180/157022002.pdf?sequence=1&isAllowed=y>.
- Pandia, S., Tanata, S., Rachel, M., Octiva, C., & Sialagan, N. (2018). Effect of Fermentation Time of Mixture of Solid and Liquid Wastes from Tapioca Industry to Percentage Reduction of TSS (Total Suspended Solids). *IOP Conference Series: Materials Science and Engineering*, 309, 012086. DOI: 10.1088/1757-899X/309/1/012086.
- Pandiangan, Saut Maruli Tua, Oktafiani, Fida, Panjaitan, Santi Rohdearni, Shifa, Mutiara, & Jefri, Riny. (2022). Analysis of Public Ownership and Management Ownership on the Implementation of the Triple Bottom Line in the Plantation Sector Listed on the Indonesia Stock Exchange. *Budapest International Research and Critics Institute-Journal*, 5(1), 3489-3497. DOI: <https://doi.org/10.33258/birci.v5i1.4016>.
- Pandiangan, Saut Maruli Tua, Resmawa, Ira Ningrum, Simanjuntak, Owen De Pinto, Sitompul, Pretty Naomi, & Jefri, Riny. (2021). Effect of E-Satisfaction on Repurchase Intention in Shopee User Students. *Budapest International Research and Critics Institute-Journal*, 4(4), 7785-7791. DOI: <https://doi.org/10.33258/birci.v4i4.2697>.
- Pandiangan, Saut Maruli Tua, Rujiman, Rahmanta, Tanjung, Indra I., Darus, Muhammad Dhio, & Ismawan, Agus. (2018). An Analysis on the Factors which Influence Offering the Elderly as Workers in Medan. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 23(10), 76-79. DOI: 10.9790/0837-2310087679. <http://www.iosrjournals.org/iosr-jhss/papers/Vol.%2023%20Issue10/Version-8/K2310087679.pdf>.
- Pandiangan, Saut Maruli Tua. (2015). Analisis Lama Mencari Kerja Bagi Tenaga Kerja

- Terdidik di Kota Medan. Skripsi. Medan: Fakultas Ekonomi dan Bisnis, Program Studi Ekonomi Pembangunan, Universitas Sumatera Utara. https://www.academia.edu/52494724/Analisis_Lama_Mencari_Kerja_Bagi_Tenaga_Kerja_Terdidik_di_Kota_Medan.
- Pandiangan, Saut Maruli Tua. (2018). Analisis Faktor-faktor yang Mempengaruhi Penawaran Tenaga Kerja Lanjut Usia di Kota Medan. Tesis. Medan: Fakultas Ekonomi dan Bisnis, Program Studi Ilmu Ekonomi, Universitas Sumatera Utara. <http://repositori.usu.ac.id/bitstream/handle/123456789/10033/167018013.pdf?sequence=1&isAllowed=y>.
- Pandiangan, Saut Maruli Tua. (2022). Effect of Packaging Design on Repurchase Intention to the Politeknik IT&B Medan Using E-Commerce Applications. *Journal of Production, Operations Management and Economics (JPOME)*, 2(1), 15–21. <http://journal.hmjournals.com/index.php/JPOME/article/view/442>.
- Ramadita, E. S., & Suzan, L. (2019). Pengaruh Biaya Produksi, Debt to Equity Ratio, dan Perputaran Persediaan Terhadap Profitabilitas. *Jurnal Aset (Akuntansi Riset)*, 11(1), 159-168.
- Taufiqurrohman, C., & Agnestia, S. (2017). Pengaruh Working Capital Turn Over dan Current Ratio Terhadap Return on Asset pada Perusahaan Farmasi yang Terdaftar di BEI Tahun 2013-2016. *Jurnal Kebangsaan*, 6(12), 22-32.
- Tobing, Murniati, Afifuddin, Sya'ad, Rahmanta, Huber, Sandra Rouli, Pandiangan, Saut Maruli Tua, & Muda, Iskandar. (2018). An Analysis on the Factors Which Influence the Earnings of Micro and Small Business: Case at Blacksmith Metal Industry. *Academic Journal of Economic Studies*, 5(1), 17-23. <https://www.cceol.com/search/article-detail?id=754945>.
- Wahyuni, A. N., & Suryakusuma. (2018). Analisis Likuiditas, Solvabilitas, dan Aktivitas Perusahaan Terhadap Profitabilitas pada Perusahaan Manufaktur. *Jurnal Manajemen*, 15(1), 1-17.
- Wilasmi, N. K., Kepramareni, P., & Ardianti, P. N. (2020). Pengaruh Ukuran Perusahaan, Perputaran Kas, Perputaran Piutang, dan Perputaran Persediaan Terhadap Profitabilitas. *Jurnal Kharisma*, 2(2), 96-115.