

## **THE EFFECT OF CASH FLOW AND RETURN ON EQUITY ON RETURN ON INVESTMENT BASED ON FOOD AND BEVERAGES SECTOR COMPANIES LISTED ON THE INDONESIAN STOCK EXCHANGE FOR THE PERIOD 2019 – 2021**

**Aliya Ananda Putri<sup>1</sup>, Zulkifli<sup>2</sup>**

*Department of Management & Jaya Launch Pad, Universitas Pembangunan Jaya, Indonesia*

*[Aliya.anandaputri@student.upj.ac.id](mailto:Aliya.anandaputri@student.upj.ac.id), [zul.kifli@upj.ac.id](mailto:zul.kifli@upj.ac.id)*

### **Abstract**

This study aims to determine the effect of Cash Flow and Return on Equity (ROE) on Return on Investment (ROI) in food and beverage sector companies listed on the Indonesia Stock Exchange for the 2019- 2021 period. The population of this study amounted to 72 companies. The sampling technique using the sampling method obtained 26 companies. The results of the study prove that Cash Flow has no significant effect on Return on Investment (ROI). Meanwhile, Return on Equity (ROE) has a positive and significant effect on Return on Investment (ROI) in food and beverages sector companies listed on the Indonesia Stock Exchange for the 2019-2021 period.

### **Keywords**

Cash Flow, Return on Equity, Return on Investment (ROI)

### **INTRODUCTION**

Companies in the food and beverage sector are industries that have a very important position in the economy in Indonesia. From time to time food is something that humans need every time because food is the staple of human life. This is assisted by countless human resources, so that in this country there are many companies engaged in the food and beverages sector. However, food and beverage sector companies have faced volatility during 2014-2018, which was caused by several problems such as limited raw materials, inadequate infrastructure, insufficient supply of electricity and gas, and high levels of investment. The first issue is the food and beverages sector was slow at the end of June 2017 compared to the results of the first quarter of 2017 Airlangga Hartato (2015). The growth of companies in the food and beverage sector slowed by 7.19% in the second quarter of 2017 compared to 8.15% in the first quarter of 2017 (Porter, 2015). Based on the problems that affect the profit development of issuers in companies in the food and beverage sector, several companies, namely in 2014 PT Wilmar Cahaya Tbk (CEKA) experienced a nominal net sales depreciation of 54.16% to Rp. 875.46 billion, from net sales of Rp. 1.91 trillion per March 2014 Setia (2016). The next company, in the same year PT.Multi Bintang Tbk (MLBI) recorded a nominal net profit of IDR 353.47 billion per quarter III 2015 or decreased by 29.39% from a profit of IDR 500.66 billion per quarter III. Then in September 2015 the company's sales decreased by IDR 1.7 trillion per month, compared to IDR 2 trillion in 2014, due to lower profits. Realizing the impact of this issue is a change in share price growth In 2018, as of December 11 2018, the company PT Prasida Aneka Niaga Tbk. transaction volume has decreased. According to the Indonesia Stock Exchange (IDX), prices on coded stocks were the initial reason for the weakening. After closing, it decreased by 15.24% before ending at IDR 178 per share. (Loan et al., n.d.)

**Theoretical Background**

**Effect of cash flow on Return on Investment (ROI)**

Research Raheman and Nasr (2014), Teruel and Solano (2014), Rahma (2015) and Putra (2016) states that cash flow has a relationship with return on investment (ROI). Because the higher the cash flow, the profits the company will also get higher. With a certain amount of cash owned by the company, it will generate high sales. A high level of sales will lead to higher profits for the company. Similar research was also conducted by Hartono (2012) tested the effect of earnings and cash flow information on ROI. The research results show that the total cash flow does not have a significant effect on ROI. However, the separation of cash flows into the components of operating cash flows, financing cash flows, and investing cash flows has a significant effect significant to ROI. Research Latief (2014) tested the effect of the cash flow component on ROI. The results of this study prove that operating cash flow has a positive and significant effect on ROI. Investment cash flow has a positive effect and not significant to ROI. Funding cash flow has a positive and significant effect on ROI. Accounting profit effect positive and not significant to ROI. Meanwhile, dividend yield has a negative and insignificant effect on ROI. Based on the results of the research above, the following hypotheses can be built: H1 : Cash flow has a positive and significant effect on Return on Investment (ROI)

**Effect of Return on Equity (ROE) on Return on Investment (ROI)**

Return on Equity has a significant effect on Return on Investment, this shows that by increasing the company's ability to utilize its own capital, the company can maximally provide guarantees for the investments that have been made. On the other hand, one measure of a company's success is the rate of return generated by dividing the net income available to common stockholders by the average equity of common stockholders for that year. Investors who will buy shares will be interested in this measure of profitability. The company's profitability level determines the company's ability to generate profits. The higher the level of profitability, the positive effect on stock prices. The company's financial performance for prospective shareholders illustrates the prospects of the company whose shares will be purchased. Investors will make decisions related to the decision to buy, hold or sell back their shares. Investors believe that the financial performance of companies (issuers) is positively related to prices. The results of this study are consistent with that of Anwar et al. (2013), Hidayansyah et al. (2015), and Anwaar (2016) which state that the ROE variable affects Return on Investment. Based on the results of the research above, the following hypotheses can be built: H2 : Return on Equity (ROE) has an effect on Return on Investment (ROI)

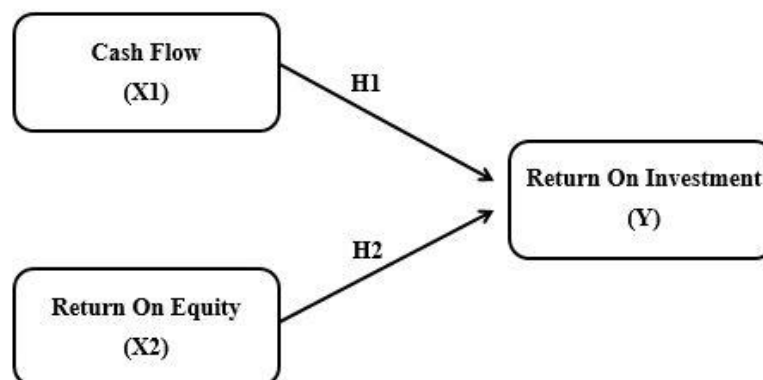


Figure 1. Research Model

### METHODS

The data used in this research is secondary data. Secondary data is data obtained from books, company published financial reports, government reports, articles, books and so on Sujarweni (2014). The data used are financial statements that have been audited by independent auditors. The report period used by the research is 2019-2021. The secondary data used was obtained from [www.idx.co.id](http://www.idx.co.id). The method used in this research is quantitative research with quantitative descriptive research. Descriptive method aims to describe the characteristics of a particular phenomenon. This method only collects facts and describe it thoroughly. Facts are adjusted to the problem to be solved. Descriptive data can be directly used as a basis for making a decision. Quantitative research is research that uses statistical procedures to produce findings Sujarweni (2014). The quantitative approach focuses on the variables studied. Variables are symptoms that have certain characteristics in human life. The results of a series of observations or measurements can be expressed in numbers. Quantitative data is used as input to be analyzed in an effort to answer existing problems. Population is the total value that can be counted and measured, both quantitatively and qualitatively for certain characteristics Riadi (2015). This research was conducted through the website by searching for a list of Food and Beverages companies on the Indonesia Stock Exchange (IDX). The population studied were companies listed on the Indonesia Stock Exchange from 2019 to 2021. The sampling technique used was a purposive sampling technique. The purposive sampling technique is a technique used in determining the sample with certain considerations Sugiyono (2014). Of the many food and beverage companies in Indonesia that have been listed on the Indonesia Stock Exchange (IDX). In this study there were 72 companies in the food and beverage sector that were listed on the IDX for the 2019-2021 period, so there were 26 samples of companies in the food and beverage sector. The following is a list of companies in the food and beverages sector that are listed on the IDX.

**Table 1. Research Sample**

No	Kode Perusahaan	Nama Perusahaan
1	ADES	PT Akasha Wira International Tbk.
2	AISA	PT FKS Food Sejahtera Tbk.
3	ALTO	PT Tri Banyan Tirta Tbk.
4	BTEK	PT Bumi Teknokultura Unggul Tbk.
5	BUDI	PT Budi Starch & Sweetener Tbk.
6	CAMP	PT Campina Ice Cream Industry Tbk.
7	CEKA	PT Wilmar Cahaya Indonesia Tbk.
8	CLEO	PT Sariguna Primatirta Tbk.
9	COCO	PT Wahana Interfood Nusantara Tbk.
10	DLTA	PT Delta Djakarta Tbk.
11	FOOD	PT Sentra Food Indonesia Tbk.
12	GOOD	PT Garudafood Putra Putri Jaya Tbk.
13	HOKI	PT Buyung Poetra Sembada Tbk.
14	ICBP	PT Indofood CBP Sukses Makmur Tbk.
15	INDF	PT Indofood Sukses Makmur Tbk.
16	KEJU	PT Mulia Boga Raya Tbk.
17	MLBI	PT Multi Bintang Indonesia Tbk.

18	MYOR	PT Mayora Indah Tbk.
19	PANI	PT Pratama Abadi Nusa Industri Tbk.
20	PSDN	PT Prasadha Aneka Niaga Tbk.
21	ROTI	PT Nippon Indosari Corpindo Tbk.
22	SKBM	PT Sekar Bumi Tbk.
23	SKLT	PT Sekar Laut Tbk.
24	STTP	PT Siantar Top Tbk.
25	TBLA	PT Tunas Baru Lampung Tbk.
26	ULTJ	PT Ultra Jaya Milk Industry & Trading Company Tbk.

Source: Bursa Efek Indonesia Periode 2019 -2021

**RESULTS AND DISCUSSION**

This research establishes food and beverage companies as a consistent sample in the year of observation and consistently distributes cash dividends for the 2019-2021 period. Data analysis The method used in this research is panel data regression analysis which is a combination of time series and cross data. There are three approaches to analyzing panel data regression, namely the Common Effect Model, Fixed Effects and Random Effects . The selection of the Panel Data Model is as follows: (a) The Chow test is a test conducted to find out whether the model used is a common effect model or a fixed effect model. (b) The Hausman test is used to determine whether to use a fixed effect or a random effect.

**Table 2. Model Test Results**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.977.202	-25,5	0.0000
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	7.387.589	2	0.0249

Source: Processed Data From Eviews 10

Based on table 2, it can be seen that the Cross-section F value is 0.0000 <0.05, then H0 is rejected and Ha is accepted, which means that the fixed effect model is better used in estimating panel data regression than the common effect model and follows the Hausman test which shows the Cross value -sectional. random section 0.0249 <0.05, then H0 is rejected and Ha is accepted, which means that the fixed effect model is better used in estimating panel data regression.

**Table 3. Panel Data Regression Model Estimation Results**

Variabel	CEM			FEM			REM		
	Coeff.	t-Stat.	Prob.	Coeff.	t-Stat.	Prob.	Coeff.	t-Stat.	Prob.
Constants	0.069076	3.870.599	0.0002	0.068505	3.252.089	0.0021	0.069929	3.058.499	0.0031
Arus Kas	0.006365	0.356642	0.7224	0.024293	0.836585	0.4068	0.016242	0.825238	0.4119
Return On Equity	0.221105	5.155.948	0.0000	0.103377	2.698.800	0.0095	0.143795	4.101.959	0.0001
R-squared		0.273948			0.791879			0.185667	
F-statistic		1.414.921			7.046.098			8.549.944	
Prob.		0.000006			0.000000			0.000452	

Source: Processed Data From Eviews 10

Based on the calculations in Table 3, together it shows that the significance of testing the F statistics value is 7.046098 and the probability value is 0.000000 which is less than 0.05. This means that H<sub>0</sub> is rejected and H<sub>a</sub> is accepted so that it can be stated that cash flow and return on equity together affect the return on investment.

## Discussion

### Effect of cash flow on Return on Investment (ROI)

From the test results it is known that cash flow does not have a significant effect on return on investment (ROI). Result this research does not match the hypothesis put forward by the author that cash flows have an influence on return on investment (ROI). Previous research was conducted by Gunawan Arisdianto (2014), concluded that cash flows simultaneously did not significantly influence return on investment (ROI). Data test results in Eviews it answers the research hypothesis which states that cash flow has no significant effect on return on investment (ROI). The results of this hypothesis in accordance with the results of the previous research hypothesis Gunawan Arisdianto (2014).

### Effect of Return on Equity (ROE) on Return on Investment (ROI)

Return on equity has a significant effect on return on investment (ROI), partially the variable Return on Equity (ROE) has a positive and significant effect on the variable return on investment (ROI). As well as research conducted by Donny Siahaan (2011) whose results ROE has a positive and significant influence on return on investment (ROI). Thus, the higher the Return on Equity, the higher the return on investment (ROI) and conversely, the lower the Return on Equity, the lower the return on investment (ROI).

## CONCLUSION

This study estimates and analyzes panel data regression in FOOD AND BEVERAGES companies listed on the Indonesia Stock Exchange (IDX) for the period 2019 - 2021. The estimation and analysis of this research uses a fixed effect model which has an R square value. 0.791879 is better from the common effects model and the random effects model. This research model estimates and analyzes it which affect the return on investment namely cash flow and return on equity.

Cash flow has a positive but not significant effect on return on investment. This empirical finding is inconsistent with the research hypothesis which states the opposite statement, besides that the return on equity variable has a positive and significant effect on the return on investment of food and beverages sector companies listed on the Indonesia Stock Exchange (IDX) in period 2017 – 2021. This is in accordance with the hypothesis which states that return on equity has a positive and significant effect on the return on investment of food and beverages sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2019 - 2021.

## REFERENCES

- (Ansori, 2015) Ansori. (2015). arus kas. *Paper Knowledge . Toward a Media History of Documents*, 3(April), 49–58.
- Ardiansyah, A., Ali, M., & Djaya, Y. (2015). *Hubungan Informasi Komponen Arus Kas Dan Return on Investment Terhadap Return Saham Connecting Components of Cash Flow Information and Return on Investment To Stock Return*.
- Devita, L., Mawardi, M. C., & Sari, A. F. K. (2021). ANALISIS PENGARUH PEUBAHAN ARUS

- KAS DAN LABA AKUNTANSI TERHADAP RETURN SAHAM PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA (BEI) (Tahun 2018-2020). *E-Jra*, 10(12), 1–10.
- Endang Masitoh W., S. P. Y. C. (2017). Pengaruh Laba Akuntansi Dan Arus Kas Terhadap Return Saham Perusahaan Yang Listing Di Bei. *Jurnal Akuntansi Dan Pajak*, 16(01), 113–123. <https://doi.org/10.29040/jap.v16i01.27>
- Fabiana Meijon Fadul. (2019). PENGARUH ARUS KAS TERHADAP RETURN ON INVESTMENT PERUSAHAAN (STUDI KASUS PADA PERUSAHAAN PHARMACEUTICALS YANG LISTING DI BURSA EFEK INDONESIA (BEI) PERIODE 2003 SAMPAI 2007). 52(2), 19–25.
- Firmansyah, D., & Dede. (2022). Teknik Pengambilan Sampel Umum dalam Metodologi Penelitian: Literature Review. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 1(2), 85–114. <https://doi.org/10.55927/jiph.v1i2.937>
- Hidayat, A., & Sadewa, P. (2020). Pengaruh Penggunaan Aplikasi Eviews Terhadap Sikap Belajar dan Kemampuan Pemecahan Masalah Statistik. *Edumaspol: Jurnal Pendidikan*, 4(1), 321–328. <https://doi.org/10.33487/edumaspol.v4i1.253>
- Hutami, R. P. (2012). Pengaruh Dividend Per Share, Return on Equity Dan Net Profit Margin Terhadap Harga Saham Perusahaan Industri Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2006-2010. *Nominal, Barometer Riset Akuntansi Dan Manajemen*, 1(2). <https://doi.org/10.21831/nominal.v1i2.1001>
- Kurniasari, R. (2017). Analisis Return On Assets (ROA) dan Return On Equity Terhadap Rasio Permodalan (Capital Adequacy Ratio) Pada PT Bank Sinarmas Tbk. *Jurnal Moneter*, 4(2), 150–158.
- Manullang, J., Pratiwi, N., Sihombing, R. Y., Harahap, R. A., & Tampubolon, K. C. (2021). Pengaruh Return on Asset, Net Profit Margin dan Current Ratio Terhadap Harga Saham Food and Beverage di Bursa Efek Indonesia. *Owner*, 5(1), 119–129. <https://doi.org/10.33395/owner.v5i1.286>
- Maulita, D., & Arifin, M. (2018). Pengaruh Return On Investment (ROI) dan Earning Per Share (EPS) Terhadap Return Saham Syariah (Studi Kasus Pada Perusahaan Manufaktur Sub Sektor Makanan dan Minuman Yang Terdaftar Pada Indeks Saham Syariah Indonesia Periode 2012-2016). *Jurnal Manajemen*, 8, 10–19.
- Muhammad Ikbal. (2019). Pengaruh Roa Dan Eva Terhadap Harga Saham Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Adz-Dzahab: Jurnal Ekonomi Dan Bisnis Islam*, 4(2), 21–29. <https://doi.org/10.47435/adz-dzahab.v1i2.337>
- Ni Made Tia Swastini. (2020). PENGARUH PERPUTARAN KAS, PERPUTARAN PIUTANG, PERPUTARAN PERSEDIAAN DAN PERPUTARAN MODAL KERJA TERHADAP PROFITABILITAS (Studi Kasus Pada Perusahaan Food And Beverage Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2018). 12(1), 1–16.
- Pratama, A., & Erawati, T. (2016). PENGARUH CURRENT RATIO, DEBT TO EQUITY RATIO, RETURN ON EQUITY, NET PROFIT MARGIN DAN EARNING PER SHARE TERHADAP HARGA SAHAM (Study Kasus Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2008-2011). *Jurnal Akuntansi*, 2(1). <https://doi.org/10.24964/ja.v2i1.20>
- Rizka Hadya 1), Nova Begawati 2), I. Y. 3. (2017). ANALISIS EFEKTIVITAS PENGENDALIAN BIAYA, PERPUTARAN MODAL KERJA, DAN RENTABILITAS EKONOMI MENGGUNAKAN REGRESI DATA PANEL Rizka. 28(4), 164–168.
- S. Chandrasekhar, F. R. S., & Laily Noor Ikhsanto, jurusan teknik mesin. (2020). PENGARUH ARUS KAS DAN LABA AKUNTANSI TERHADAP RETURN SAHAM PADA

- PERUSAHAAN BATU BARA YANG TERDAFTAR DI BURSA EFEK INDONESIA. *Liquid Crystals*, 21(1), 1–17.
- Sasongko, H., & Apriani, D. (2016). Analisis Pengaruh Arus Kas Terhadap profitabilitas Pada Pt Mayora Indah Tbk. *JIAFE (Jurnal Ilmiah Akuntansi Fakultas Ekonomi)*, 2(1), 1–15. <https://doi.org/10.34204/jiafe.v2i1.533>
- Sitepu, S., Purwanto, B., & Irwanto, A. K. (2018). Pengaruh Arus Kas Terhadap Profitabilitas dan Kinerja Saham Emiten Kompas 100 di Bursa Efek Indonesia. *Jurnal Manajemen Dan Organisasi*, 8(3), 236. <https://doi.org/10.29244/jmo.v8i3.22472>
- Suaidah, Y. M. (2017). Kemampuan Informasi Komponen Arus Kas Dan Laba Dalam Memprediksi Arus Kas Masa Depan. *Eksis: Jurnal Riset Ekonomi Dan Bisnis*, 12(2), 161–170. <https://doi.org/10.26533/eksis.v12i2.105>
- Warizal, Nirwanti, & Setiawan, A. B. (2019). Return On Investment (ROI) dan Economic Value Added (EVA) terhadap Return Saham (Studi Empiris Pada Perusahaan LQ45 periode 2013-2018). *Jurnal Akunida*, 5(9), 47–58.
- Wati, A. S., & Solihin, D. (2018). Analisis Pertumbuhan Return On Investment ( ROI ) pada PT . Kino Indonesia Tbk Sebelum dan Sesudah Go Public.