Jurnal Informatika Ekonomi Bisnis

http://www.infeb.org

2023 Vol. 5 Iss. 1 Hal: 91-96 e-ISSN: 2714-8491

# The Impact of Profitability and Liquidity on Firm Value with Tax Avoidance as Intervening Variable of F&B Company

Anton Adventus Kacaribu[1]✉, Jessica Winata[2]

[1,2]Universitas Pelita Harapan Medan

anton.kacaribu@lecturer.uph.edu

**Abstract**

This study aimed to analyze the effect of profitability and liquidity on firm value through tax avoidance as intervening variables. This research was conducted on the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange period 2018-2020. The total research data are 48 samples. Path analysis was used as an analytical technique with the SPSS version 25 software. The first structure of this research shows that both profitability and liquidity do not have a significant effect on tax avoidance, and the second structure shows that profitability has a significant effect on Firm Value. In contrast, liquidity has no significant effect on Firm Value. Tax avoidance has a significant effect on Firm Value. The direct effect of profitability on firm value is known to be 0.646, while the indirect effect is -0,071, which shows the direct is greater; therefore, indirectly, Tax Avoidance does not have a dominant effect on the firm value. The direct effect of liquidity on firm value is known to be -0.179, whereas the indirect effect of -0,049 is shown indirectly through Tax Avoidance has a dominant effect on the firm value.

Keywords: Profitability, Liquidity, Firm Value, Tax Avoidance, F&B Company.



## 1. Introduction

The establishment of a company is related to the goal of creating value for its owner by maximizing shareholder wealth [1]. Shareholders will be drawn to a company with a high value since it can generate maximum profits [2]. To provide welfare, a company must optimize its resources in order to generate profits. The ability of a company to generate profits adds value to the company or the firm [3]. As stated earlier, the company's resources must be optimized. Assets are among the resources included [4]. Profitability can be measured using various ratios, one of which is the return on assets (ROA), a tool used to assess a company's ability to generate profits [5].

The other tools are liquidity measures how healthy current assets cover current liabilities [6]. The greater the current asset-to-current-liability ratio, the greater the company's ability to cover its short-term liabilities [7]. A company's effectiveness must also be followed by doing everything possible to accomplish the goals, one of which is using tax avoidance [8]. Taxes play an essential role in supporting a country's economic development [9]. The contribution of the taxation sector is very influential in increasing Indonesia's state revenues [10]. If the company's value is High will make the market believe not only in the company's current performance but also in the company's prospects [11]. This research was conducted on food and beverage sector companies listed on the Indonesia Stock Exchange (IDX) for 2018-2020 [12]. Food and beverage sector companies were chosen because this company has a wide market share and supports people's needs [13]. Also, the current economic conditions have created intense competition between companies and other companies [14]. One of its industries is a company engaged in food and beverage [15]. This sector has a significant level of Gross Domestic Income compared to other industries [16]. A significant GDP level shows that the company can make a substantial profit [17].

Tax avoidance is necessary for the company. Tax avoidance is a measure taken by a person to avoid taxes but in legal ways [18]. Tax avoidance is often used to describe the reduction or elimination of tax liability or participatory [19]. Good tax avoidance can increase the company's value based on the results of achieving profitability and liquidity, particularly in food and beverage companies with high current asset turnover rates [20].

Based on the background above, the research's problem formulations are as follows: Do profitability variables significantly impact tax avoidance?; Do liquidity variables have a significant impact on tax avoidance?; Does profitability variables have a significant impact on firm value?; Do liquidity variables significantly impact tax firm value?; Do tax avoidance variables significantly impact firm value?; Do profitability variables significantly impact firm value through tax avoidance?; Do liquidity variables have a significant impact on firm value throughout tax avoidance?.

The research aims to analyze the impact of profitability liquidity on the firm value on tax avoidance. Referring to the problem formulation, the objectives of this research are to analyze the impact of profitability toward tax avoidance of food and beverages companies listed on the Indonesia Stock Exchange for 2018 to

Accepted: 05-03-2023 | Revision: 15-03-2023 | Publication: 31-03-2023 | doi: 10.37034/infeb.v5i1.202

2020. To analyze the impact of profitability on the firm value of food and beverages companies on the Indonesia Stock Exchange from 2018 to 2020. To analyze the impact of liquidity on?. Signalling theory refers to the information signals required for investors to analyze and decide whether or not to invest their shares in the company in question, where information concerning changes in stock prices and volumes provides useful data that can be utilised in decision-making.

Profitability is one of the measurements of the performance of a company. The profitability of a company demonstrates a company's ability to generate profits over a period of time at the level of sales, assets, and share capital. For company managers, this profitability ratio can be a reference to evaluate the company's performance and a basic reference in corporate taxes. Profitability is proxied by the return on Assets Ratio (ROA), which is used to assess the percentage of profit against the total assets owned by the company. Efficiency in a company in managing its assets can actually be seen from this ROA. The formula is as follows (1).

$$\text{ROA} = \frac{\text{Net income}}{\text{T. Asset}} \qquad (1)$$

Tax avoidance, also referred to as tax planning, is a process or control of actions to avoid the consequences of the imposition of unwanted taxes. Tax avoidance is an attempt by taxpayers to reduce taxes in a way that goes against the meaning and purpose of the provisions of laws and regulations. Tax avoidance is an effort made by taxpayers, whether successful or not, to reduce or eliminate tax debt based on applicable provisions that do not violate tax laws and regulations. Tax avoidance is not illegal because the taxpayer's efforts to decrease, avoid, lessen, or alleviate the tax burden are legal. Tax avoidance, as stated earlier, is an attempt to decrease or save taxes as long as this is permitted by existing legislation. Applying tax avoidance will make companies get tax savings by regulating the necessary actions to avoid the imposition of excess taxes. Tax avoidance is proxied by CETR (cash effective tax rate). The formula is as follows (2).

$$\text{CETR} = \frac{\text{Cash Tax Paid}}{\text{Income Before Tax}} \qquad (2)$$

Liquidity refers to a company's ability to meet its short-term obligations. According to Febriani (2020), Liquidity measures how well current assets cover current liabilities. The greater the ratio of current assets and current liabilities, the higher the company's ability to cover its short-term obligations. Companies with good financial conditions will, of course, immediately fulfill their short-term obligations (Khasanah & Indriyani, 2021). Liquidity is proxied by the current ratio (CR), which is one of the company's liquidity measurements. Companies with a high CR have a high level of liquidity, which also indicates the company's opportunity to develop the company in order to increase the company's value (Febriani, 2020). The formula is as follows (3).

$$\text{Current Ratio} = \frac{\text{Current asset}}{\text{Current liability}} \qquad (3)$$

Firm value can be defined as the company's fair value, which describes the investor's perception of the issuer in inquiry. Firm value is an important concept for shareholders or investors because it is used to evaluate the company as a whole, and it is reflected in the company's share price. The higher the stock price, the higher the value of the company, thus increasing the prosperity of shareholders.

## 2. Research Method

The research design that's used in this study is a quantitative method. Collecting, analyzing, interpreting, and writing the results of a study are all part of quantitative methods. The writer decided to use the quantitative method for the research. The type of data that is being used is secondary data obtained from the Indonesia Stock Exchange website. The population used in this research is all companies in the food and beverage sector on the Indonesia Stock Exchange.

The data analysis method used in this research is path analysis. Path analysis is a technique for analyzing causal relationships that occur in multiple regressions if their independent variables affect dependent variables not only directly but also indirectly. The level of mediation through the relevant mediator variables is shown by the magnitude of the indirect effect. The analytical tool used to test the hypothesis of this study is the Statistical Package for the Social Science (SPSS). The framework in this study is presented in Figure 1.

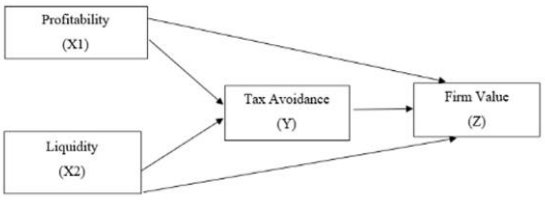


Figure 1. Research Design

Based on Figure 1, the hypothesis (H) is obtained as follows profitability impacts tax avoidance of food and beverages companies listed on the Indonesia stock exchange (H1); Liquidity impact the tax avoidance of food and beverages companies listed on the Indonesia stock exchange (H2); Profitability impact Firm Value of food and beverages company listed on Indonesia stock exchange (H3); Liquidity impact the firm value of food and beverages company listed on the Indonesian stock exchange (H4); Tax avoidance impacts the firm value of food and beverages companies listed on the Indonesia stock exchange (H5).

## 3. Result and Discussion

A descriptive statistic is one of the most well-known statistical analytic strategies for presenting data. The purpose of descriptive statistics in this research is to describe each variable's minimum, maximum, mean, and standard deviation values. Descriptive Statistic are presented in Table 1.

Table 1. Descriptive Statistic

| Variable | N | Min | Max | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Profitability | 48 | 0.00 | 0.42 | 0.0999 | 0.08636 |
| Liquidity | 48 | 0.73 | 13.27 | 3.1427 | 2.84659 |
| Firm Value | 48 | 0.12 | 12.34 | 2.6405 | 2.51747 |
| Tax Avoidance | 48 | 0.07 | 2.30 | 0.3476 | 0.39457 |

As seen in Table 1, the total samples are 48 with the minimum, maximum, mean, and standard deviation profitability minimum value is 0.00and the maximum value is 0,42. The mean or the average profitability of the food and beverage company in Indonesia is 0,9999, and its standard deviation is 0.08636. Its shows that the minimum liquidity value is 0,73 while the maximum value is 13,27, and the mean is 3.1427. then for the standard deviation of 2.84659. The firm value of the food and beverages company in Indonesia shows that their minimum value is 0.12 while the maximum value is 12.34. The average value of firm value is 2.6405which is quite bigger than the standard deviation's value, which is 2.51747. For tax avoidance, it shows that the minimum liquidity value is 0,07 while the maximum value is 2.30, and the mean is 0.3476. Then, for the standard deviation of 0.39457. This study's classic assumption test will be conducted using the normality test, multicollinearity, autocorrelation, and heteroscedasticity test.

The normality test is to test whether the residual value resulting from the regression is normally distributed or not. the test results after transformation for the normality test can be seen from the Monte Carlo Sig. (2-tailed) is 0,075, which means greater than 0.05, indicating that the data is normally distributed. a multicollinearity test is a test performed to ascertain whether in a regression model there is an interrelationship or collinearity between independent variables. The multicollinearity test examined the correlation between one independent variable and another. A good regression model should avoid multicollinearity. Both for the transform X1 and transform X2, The tolerance is more than 0,10, and for the VIF is less than 10.

The heteroscedasticity test determines whether there is a variance inequality between the residuals of one observation and the residuals of another observation in a regression model. The researcher used the Spearman Rho test, which looked at the sig value of the independent variable with the condition that if the sig (2 tailed) > 0.05, there was no heteroscedasticity and vice versa. The sig. (2-tailed) value for each variable in the table above is more than 0.05. The following is an explanation of each variable are the outcome sig. (2-tailed) value for transform X1 (Profitability) is 0.170. Because 0.170 is more than 0.05, this regression model does not have heteroscedasticity. The outcome sig. (2-tailed) value for Transform X2 (Liquidity) is 0,703. Because 0.703 is greater than 0.05, this regression model does not have heteroscedasticity. Autocorrelation is the correlation between residual in period t and residual in the previous period (t-1). A good regression model that does not occur autocorrelation. The autocorrelation test is used to determine whether the errors in the (t-1) period are related. The run test can be used to perform this test.

The coefficient of determination can be measured by adjusted R Square and if the coefficient of determination is close to one, it means that there is a strong relationship. The Adjusted R Square value, which is transformed into percentage form, shows the coefficient of determination. Adjusted R Square value is 0,074 that it can be concluded that the impact of Profitability, Liquidity toward tax avoidance is 7.4%, while the remaining 92.6% is explained by other variables that are not used in this research. F-test determines whether independent variables influence the dependent variable concurrently within the regression model. A simultaneous F-Test is done to know whether independent variables have any simultaneously significant effect on the dependent variable or not.

the Fcount of the regression model is 2,868. The first degree of freedom (df1) = k – 1 = 2, while the second degree of freedom (df2) = n – k = 48 – 3= 45, which represents the number of samples, and k represents the number of variables. With the df1 is 2 and df2 is 45, the ftable with a confidence level of 0.05 is 3204. With the requirement to have a simultaneous effect, a significant value < 0.05 or the Fcount must be greater than Ftable. Based on the result the significant value 0.067 > 0,05 and Fcount is less than Ftable 2.868< 3,204. It can be concluded that the independent variables, including profitability and liquidity, are not simultaneously significant affect the dependent variable, tax avoidance.

The T-test determines how well an independent variable can explain the dependent variable on its own . A partial T-test is done to know whether independent variables have any significant partial effect on the dependent variable or not. the value of ftable with a two-tailed significance level of 0.05 at a degree of freedom of n – k – 1 = 48 – 3 – 1 = 44 is 2.015. It can be concluded that profitability toward tax avoidance; For profitability, tcount value is -1,878 and ttable is 2.015 and significant value is 0,067. -1.878 < 2.015 and 0.067 > 0.05 means that profitability does not have a significant effect on tax avoidance H1 is rejected; Liquidity toward tax avoidance; For liquidity, tcount value is -1,314 and ttable is 2.015, and the significant value is 0.195. -1,314 < 2.015 and 0.195 > 0.05, means that liquidity does not have a significant effect toward

tax avoidance. H2 is rejected. The substructure I multiple linear regression model is as follows:

$Y = \rho 1\ X1 + \rho 2X2 + e1$

$Y = -.265\ X1 + -.185\ X2 + e1$

$e1 = \sqrt{1 - R2}$

$= \sqrt{1-0,113}$

$= 0.94$

The equation above indicates that profitability (ROA) has a regression coefficient of-0,265. This means that when the ROA increases by one unit, the tax avoidance will decrease. For the liquidity (current ratio), when the CR increases by one unit, the tax avoidance will decrease by 0,185. The normality test was conducted to analyze whether the regression used in the research was normally distributed or not. If the sig value is more than 0.05, then the data is normally distributed. The term Monte Carlo sampling is discussed how Monte Carlo programs should be arranged or organized before moving on to the interpretation and analysis of Monte Carlo data. Below is the normality test using the Kolmogorov Smirnov test with Monte Carlo. it can be seen that the sig. is greater than 0,05, and the value is 0,888; therefore, it can be stated that the data is normally distributed. All X1 and X2, and Y variables had tolerance values larger than 0.10. Other than that, the VIF is less than 10. larger than 0.10. Other than that, the VIF is less than 10. The sig. (2-tailed) value for each variable in the table above is more than 0.05. The following is an explanation of each variable are the outcome sig. (2-tailed) value for transform X1 (Profitability) is 0.459. This regression model does not have heteroscedasticity because 0.459 is greater than 0.05. For transform, X2 (Liquidity) has a sig. (2-tailed) value of 0.824. This regression model has no heteroscedasticity because 0.824 is greater than 0.05. For the outcome sig.(2- tailed) value for Transform Y (Tax Avoidance) is 0.336. based on the result, 0.336 is greater than 0.05. therefore, it can be stated that there is no heteroscedasticity. Based on the result of run test, it can be seen that the sig.(2-tailed) with value 0.058 is greater than 0.05. Therefore, it can be stated that there is no autocorrelation. The Adjusted R Square value of 0,385 indicates that the impact of Profitability, Liquidity, and Tax Avoidance on Firm Value is 38,5 %, with the remaining 61,5 % explained by other variables not used in this research. the F-count of the regression model is 10.788. The first degree of freedom (df1) = k -1 = 3, while the second degree of freedom (df2) = n – k = 48 – 4 = 44 in which n represents the number of samples and k represents the number of variables. With the df1 is 3 and df2 is 44, the ftable with a confidence level of 0.05 is 2.816.

Significant value < 0.05 = 0.00 < 0.05 or fcount > ftable =10.788 > 2.816 it can be seen in the data above, indicating that independent variables such as profitability, liquidity, and tax avoidance have a simultaneous significant impact on the dependent variable, Firm Value. the value of Ttable with a two-tailed significance level of 0.05 at a degree of freedom of n – k – 1 = 48 – 4 – 1 = 43 is 2.017. it can be stated that profitability Toward Firm Value. For profitability, tcount value is 5.414 and ttable is 2.017, and the significant value is 0.00. 5.414 > 2.017 and 0.00 < 0,05 means that profitability has a significant effect on Firm Value H3 is accepted. Liquidity Toward Firm Value. For liquidity tcount -1.530 and ttable 2.017, and significant value is 0.133. -1.530 < 2.017 and 0.133 > 0.05, it can be concluded that liquidity has a reverse relation and no significant effect on Firm Value. H4 is rejected. Tax Avoidance Toward Firm Value; For tax avoidance tcount 2.223 and ttable is 2.017, and the significant value is 0.031. 2.223 > 2.017 and 0.031 < 0.05 tax avoidance has a significant effect on Firm Value and has a direct relation. H5 is accepted. The substructure II multiple linear regression model is as follows:

$Z = \rho 3\ X1 + \rho 4X2 + \rho 5X3 + e2$

$Z = 0,646\ X1 + -0,179\ X2 + 0,270\ X3 + e2$

$e2 = \sqrt{1-R2}$

$= \sqrt{1- 0,424}$

$= 0,758$

The equation above, it indicates that profitability (ROA) has a regression coefficient of 0,646. This means that when the ROA is increasing by one unit, then the firm value will be increased. For the liquidity (current ratio), the regression coefficient is -0,179. When the CR increases by one unit, the tax avoidance will decrease by 0,179. The tax avoidance equation indicates that tax avoidance has a regression coefficient of 0,270. This means that when the tax avoidance (CETR) is increases by one unit, the firm value will be increased.

The direct effect of profitability on firm value is known to be 0.646, while the indirect effect of profitability through tax avoidance on firm value is the multiplication of beta value (profitability to tax avoidance) and beta value (tax avoidance to firm value), such as -0,265 X 0,270 = -0,071. Based on the above calculation, the direct effect is 0.646, and the indirect effect is -0.071, so the total effect of profitability on firm value is the direct effect plus the indirect effect, that is: 0,646+ -0,071 = 0,575. Based on the calculation results, it is known that the direct value is 0.646 and the indirect effect is -0.071, so it can be concluded that the direct effect is greater than the indirect effect. This shows that indirectly through Y does not have a dominant effect on the value of the company. The direct effect of liquidity on firm value is known to be -0.179, whereas the indirect effect of liquidity on firm value through tax avoidance is known to be the multiplication of beta value (liquidity to tax avoidance) and beta value (tax avoidance to firm value), such as: -0,185 X 0,270 =-0,049. Based on the calculation above, it is known that the direct effect is -0.179 and the indirect effect is -0.049, so the total effect given by profitability to firm value is the direct

effect plus the indirect effect, which are: -0,179+ -0,049 = -0,228. Based on the calculation results, it is known that the direct value is -0.179 and the indirect effect is -0.049, so it can be concluded that the direct effect is lower than the indirect effect. This shows that indirectly through Y does have a dominant effect on the firm value.

## 4. Conclusion

The researcher used the Return on Asset ratio for profitability, the Current Ratio for liquidity, the Tobins' Q formula for firm value, and the cash effective tax rate for tax avoidance to determine the relationship between the variable and the other variable. The researcher also used several tests for the test, including the Multi Linear Regression Model, Coefficient of Determination (R2), Simultaneous Significance (F-Test), and Individual Parameter Significance (T-Test), as well as the path analysis, and after the test was completed, the following conclusion can be seen that analysis the impact profitability/ ROA (X1) toward tax avoidance/ CETR (Y) it shows that profitability does not have a significant effect and reverse relation toward tax avoidance. H1 is rejected. Analysis the impact of liquidity/ current ratio (X2) toward tax avoidance/ CETR (Y) Based on the result, the sig value that liquidity does not have a significant effect toward tax avoidance and reverse relation. H2 has rejected Analysis the impact of profitability/ ROA (X1) toward firm value/ Tobins Q (Z) Based on the result that, profitability have a significant effect toward Firm Value and direct relation. H3 is accepted. Analysis the impact of liquidity (X2) toward Firm Value (Z).Based on the result of output SPSS that, liquidity have a negative or reverse relation and not significant effect toward Firm Value. H4 is rejected.Analysis the impact of Tax avoidance (Y) toward firm value (Z) Based on the result that, tax avoidance has a significant effect toward Firm Value and has a direct relation. H5 is accepted. Profitability (X1) to firm value (Z) through Tax Avoidance (Y). Based on the results, it is known that the direct effect from profitability to firm value is 0.646, and the indirect effect from profitability to firm value through tax avoidance is -0.071. So, it can be concluded that the direct effect is greater than the indirect effect. This shows that indirectly Y does not have a dominant effect on the value of the company. Liquidity (X2) to firm value (Z) through Tax Avoidance (Y). Based on the calculation results, it is known that the direct effect from liquidity to firm value is -0.179, and the indirect effect from liquidity to firm value through tax avoidance is -0.049. It can be concluded that the direct effect is lower than the indirect effect. This shows that indirectly mediation through Y has a dominant effect on the firm value.

## References


[1] Endri, E., Sari, A. K., Budiasih, Y., Yuliantini, T., & Kasmir, K. (2020). Determinants of Profit Growth in Food and Beverage Companies in Indonesia. *Journal of Asian Finance, Economics and Business, 7*(12), 739–748. DOI: https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.739 .

[2] Nirino, N., Miglietta, N., & Salvi, A. (2020). The impact of corporate social responsibility on firms' financial performance, evidence from the food and beverage industry. *British Food Journal, 122*(1), 1–13. DOI: https://doi.org/10.1108/BFJ-07-2019-0503 .

[3] Koo, W. (2022). The Effect of the Management Performance on Earning Quality in F&B Companies. *Journal of Tourism and Leisure Research, 34*(1), 373–387. DOI: https://doi.org/10.31336/jtlr.2022.1.34.1.373 .

[4] Lubis, M., Lubis, A. R., Pratiwi, S. H., & Yuherisna, D. P. (2021). Customer satisfaction assessment coffee roaster restaurant using SERVQUAL: Utilization of customer relationship management (CRM) application. *In ACM International Conference Proceeding Series* (pp. 85–92). Association for Computing Machinery. DOI: https://doi.org/10.1145/3456146.3456160 .

[5] Tepic, M., Fortuin, F., Kemp, R. G. M., & Omta, O. (2014). Innovation capabilities in food and beverages and technology - based innovation projects. *British Food Journal, 116*(2), 228–250. DOI: https://doi.org/10.1108/BFJ-09-2011-0243 .

[6] Fawzi, A. M., & Sunarti, S. (2021). Factors Affecting the Performance of F&B Industry in Malaysia and Indonesia. *Jurnal Economia, 17*(1), 65–80. DOI: https://doi.org/10.21831/economia.v17i1.36010 .

[7] Salim, H. K., Padfield, R., Lee, C. T., Syayuti, K., Papargyropoulou, E., & Tham, M. H. (2018). An investigation of the drivers, barriers, and incentives for environmental management systems in the Malaysian food and beverage industry. *Clean Technologies and Environmental Policy, 20*(3), 529–538. DOI: https://doi.org/10.1007/s10098-017-1436-8 .

[8] Bruce Ho, C.-T., Denis Yang, J.-M., & Victor Hung, C.-S. (2015). The Factors of Information System Success: An Example of Customer Relationship Management Implementation in Food & Beverage Industry. *International Journal of E-Education, e-Business, e-Management and e-Learning, 5*(3), 114–128. DOI: https://doi.org/10.17706/ijeeee.2015.5.3.114-128 .

[9] Alam, N., Aida, N., & Mukhtar, A. (2021). Effect of Financial Performance on Stock-Prices in Food and Beverages Firm. *Golden Ratio of Finance Management, 1*(2), 61–74. DOI: https://doi.org/10.52970/grfm.v1i2.63 .

[10] Sabrina, S., & Thersia, L. (2019). The Factors Affecting Online Voluntary Disclosure in Indonesian F&B Companies. *International Journal of Recent Technology and Engineering (IJRTE), 8*(4), 10681–10685. DOI: https://doi.org/10.35940/ijrte.d4285.118419 .

[11] Bogers, M., Chesbrough, H., & Strand, R. (2020). Sustainable open innovation to address a grand challenge : Lessons from Carlsberg and the Green Fiber Bottle. *British Food Journal, 122*(5), 1505–1517. DOI: https://doi.org/10.1108/BFJ-07-2019-0534 .

[12] Miglietta, N., Battisti, E., & Campanella, F. (2017). Value maximization and open innovation in food and beverage industry: evidence from US market. *British Food Journal, 119*(11), 2477–2492. DOI: https://doi.org/10.1108/BFJ-04-2017-0213 .

[13] Salim, H. K., Padfield, R., Yuzir, A., Mohamad, S. E., Kaida, N., Papargyropoulou, E., & Nakamura, S. (2018). Evaluating the organizational intention to implement an Environmental Management System: evidence from the Indonesian food and beverage industry. *Business Strategy and the Environment, 27*(8), 1385–1398. DOI: https://doi.org/10.1002/bse.2188 .

[14] Moschidis, O., Chatzipetrou, E., & Tsiotras, G. (2018). Quality costing and quality management maturity in Greece: An exploratory multi-dimensional data analysis. *International Journal of Productivity and Performance Management, 67*(1), 171–191. DOI: https://doi.org/10.1108/IJPPM-08-2016-0152 .

[15] Ozturkoglu, Y., Sari, F. O., & Saygili, E. (2021). A new holistic conceptual framework for sustainability oriented hospitality

innovation with triple bottom line perspective. *Journal of Hospitality and Tourism Technology*, *12*(1), 39–57. DOI: https://doi.org/10.1108/JHTT-02-2019-0022 .

[16] Salim, H. K., & Padfield, R. (2017). Environmental management system in the food & beverage sector: A case study from Malaysia. *Chemical Engineering Transactions*, *56*, 253–258. DOI: https://doi.org/10.3303/CET1756043 .

[17] Martini, E., Ramli, M. A., Gustyana, T. T., & Nugraha, N. (2021). Impact of Activity Ratio, Profitability, Liquidity, and Asset Structure on Capital Structure in Food and Beverages Companies Listed On Indonesia Stock Exchange Period 2015-2019. *Jurnal Manajemen Indonesia*, *21*(2), 112. DOI: https://doi.org/10.25124/jmi.v21i2.3514 .

[18] Fiandrino, S., Busso, D., & Vrontis, D. (2019). Sustainable responsible conduct beyond the boundaries of compliance: Lessons from Italian listed food and beverage companies. *British Food Journal*, *121*(5), 1035–1049. DOI: https://doi.org/10.1108/BFJ-03-2019-0182 .

[19] Frederick, H., & Elting, J. (2013). Determinants of green supply chain implementation in the food and beverage sector. *International Journal of Business Innovation and Research*, *7*(2), 164–184. DOI: https://doi.org/10.1504/IJBIR.2013.052577 .

[20] Enzing, C. M., Batterink, M. H., Janszen, F. H. a., & Omta, S. W. F. (2011). Where innovation processes make a difference in products' short- and long-term market success. *British Food Journal*, *113*(7), 812–837. DOI: https://doi.org/10.1108/00070701111148379 .