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THE INFLUENCE OF INTELLECTUAL CAPITAL ON THE VALUE OF MANUFACTURING COMPANIES IN THE FOOD AND BEVERAGE SUB-SECTOR LISTED ON THE INDONESIAN STOCK EXCHANGE FOR THE PERIOD OF 2015-2022

Arief Hambali[1]
Asep Permana Sukma[2]
Tetty Lasniroha Sarumpaet[3]

Program Pendidikan Profesi Akuntan, Universitas Widyatama[1,2,3]
arief.hambali@widyatama.ac.id [1]
permana.sukma@widyatama.ac.id [2]
tetty.lasniroha@widyatama.ac.id [3]

ABSTRACT

The important position of food and beverage sub-sector companies in Indonesia in supporting economic growth means the government needs to make efforts to accommodate their interests in creating profits. The fluctuating growth in share values in the majority of food and beverage companies needs to be a major concern because a decrease in income in this sub-sector will directly impact on the decline of the Indonesian economy. To anticipate this, evaluate the role of intellectual capital in increasing the value of the company. The research method approach uses a quantitative-associative approach, which aims to determine the relationship between research variables of intellectual capital and price to book value as a proxy for company value. Panel data regression testing, accompanied by the classical assumption test, chow test, and hausman test, was carried out to answer the hypothesis and determine the role of intellectual capital on company value. The research results show that simultaneously, intellectual capital has a significant positive effect on increasing company value, and partially, the VACA and STVA constructs have a positive effect on company value, while the VAHU construct has a negative effect.

Keywords: food and beverage sub-sector, intellectual capital, price to book value

INTRODUCTION

The food and beverage sub-sector manufacturing industry during the period 2015 to 2022 contributed to GDP (Gross Domestic Product) Indonesia on average is 6.38%, with a contribution proportion to manufacturing industry income of 33.93% (BPS, 2020, 2023). This is an indication that this industry has quite an important and strategic role in the construction of Indonesia's economic structure (Hambali, 2021), so the economic stability of this industry needs to be maintained and paid attention to by the government.

Even though it is generally stated that the growth of this industry shows a positive direction of 3.68% in 2022 (Coordinating Ministry for the Economy, 2023), the majority of food and beverage companies listed on the Indonesian stock exchange show that the majority or eleven companies experienced a decline in market performance below their industry average value. This can be known based on the company's share market valuation or a company value

price to book value (Anggraini, Seprijon, Y, et al., 2020), as can be seen based on the following table.

Table 1. Values of Price to Book Value Food and Beverage Sub-sector Companies 2019- 2022

No	Kode	PBV				*Mean*	Tren			
		2019	2020	2021	2022		2019	2020	2021	2022
1	AISA	0,16	-2,63	2,12	1,68	0,33	-0,17	-2,96	1,79	1,35
2	ALTO	2,32	1,81	1,68	0,30	1,53	0,79	0,28	0,15	**-1,23**
3	CEKA	0,95	0,89	0,84	0,80	0,87	0,08	0,02	-0,03	**-0,07**
4	DLTA	4,84	3,61	3,12	3,22	3,70	1,14	-0,09	-0,58	**-0,48**
5	ICBP	5,15	2,34	1,92	2,08	2,87	2,28	-0,53	-0,95	**-0,79**
6	INDF	1,34	0,80	0,67	0,65	0,87	0,48	-0,06	-0,20	**-0,22**
7	MLBI	41,01	15,75	19,45	22,31	24,63	16,38	-8,88	-5,18	**-2,32**
8	MYOR	5,09	5,60	4,12	4,68	4,87	0,22	0,73	-0,75	**-0,19**
9	PSDN	0,94	1,47	3,84	5,33	2,90	-1,96	-1,43	0,95	2,44
10	ROTI	2,64	3,12	2,85	3,25	2,97	-0,33	0,16	-0,12	0,29
11	SKBM	0,62	0,60	0,65	0,63	0,63	-0,01	-0,03	0,03	0,01
12	SKLT	2,98	2,72	3,78	2,41	2,97	0,01	-0,25	0,81	**-0,56**
13	STTP	2,91	4,93	3,18	2,71	3,43	-0,52	1,50	-0,25	**-0,72**
14	ULTJ	3,56	3,98	3,79	2,98	3,58	-0,02	0,40	0,21	**-0,60**
15	ADES	1,17	1,34	2,30	3,50	2,08	-0,91	-0,74	0,22	1,42
16	BTEK	1,05	1,26	1,49	1,57	1,34	-0,29	-0,08	0,15	0,23
17	BUDI	0,37	0,35	0,59	0,72	0,51	-0,14	-0,16	0,08	0,21
18	IIKP	4,63	4,78	5,41	6,42	5,31	-0,68	-0,53	0,10	1,11
19	MGNA	-0,48	-0,56	-0,99	3,88	0,46	-0,94	-1,02	-1,45	3,42
20	TBLA	1,03	0,89	0,67	0,55	0,79	0,25	0,11	-0,12	**-0,24**
Mean		4,11	2,65	3,07	3,48	3,33	0,78	-0,68	-0,26	0,15

Source: Data processing for 2019-2022 financial reports

The table above shows that in 2022 companies with codes ALTO, CEKA, DLTA, ICBP, INDF, MLBI, MYOR, SKLT, STTP, ULTJ, and TBLA have PBV values below the industry average value. Fluctuations in the value of PBV data in the previous 2015-2019 period led to a decrease in the value of the majority of food and beverage sub-sector companies listed on the IDX. Companies that show a negative trend show a weakening or decrease in the selling value of their shares (Hambali, 2021). On the other hand, the positive trend that occurs in this instrument shows that the value of shares is increasing and shows an increase in public trust in the company, as happened in companies with the codes MGNA, PSDN, ADES, AISA, and IIKP, where a PBV value of more than one indicates good performance (Kusumawardhani, 2021) and or higher than its market value (overvalued) (Mappadang et al., 2021) shows that the general public has a good interest in the company, because one indicator that a company has good performance effectiveness is marked by the high share price of a company (Sarumpaet et

al., 2023). The higher the market value a company has, the higher the investor's desire to make sacrifices to acquire shares in that company (Puspita & Wahyudi, 2021).

Control of internal assets and resources owned by the company directly can be a stimulus for increasing company value (Shulthoni & Rizkya, 2023), where currently intangible assets such as technology, organizational management, systems, and wealth of knowledge from human resources are considered as factors driving company's competitiveness in creating positive company value (Tiono & Haryadi, 2015). Ensuring that the company's economic resources are used in accordance with the company's strategy is an important thing that must be done by various organizations and companies (Novatiani & Mustofaa, 2014). Workers as assets and intellectuality as capital of an organization are often associated with talent, skills, experience, managerial knowledge and organizational abilities of individuals within the scope of their work (Torrington et al., 2020), where companies with very high intellectual capital often generate ideas and innovations that are communicated through interesting and attractive products (Gamble et al., 2021), so that in the era of openness of information and technology as well as a knowledge-based economy (business based on knowledge) the role of employees who have intellectual superiority (Intellectual capital) will have higher significance for the company in increasing share value and gaining public trust (Wulandari & Purbawati, 2021).

Inefficient handling of intellectual capital can result in a drop in a company's worth. Hence, it's crucial for companies to manage and leverage their intellectual assets effectively to generate value for the business (Anggraini et al., 2020). This is supported by research from Lestari (2017) which found that in companies where intellectual capital is mismanaged or undervalued, there is a negative impact on the company's value. Therefore, increasing financial investment in human capital will not enhance company value unless the company effectively manages its intellectual assets. Increasing investment in the intellectual aspect of human resources can positively impact the company's value when the company manages its intellectual assets effectively. Therefore, financial growth in employee development can contribute to enhancing the company's value (Juwita & Angela, 2016); (Mullyaningtyas, 2019); (Wulandari & Purbawati, 2021); (Shulthoni & Rizkya, 2023).

The intellectual asset, proxied by the Value Added Intellectual Coefficient (VAIC), consists of the constructs of human capital (HC), structural capital (SC), and customer capital (CC) (Ulum, 2017). The creation of positive intellectual capital value within a company indicates that workforce management is effectively conducted to enhance the company's value. Therefore, it is crucial for companies to generate positive value in this parameter. Ulum (2017)

further explains that a relatively high VAIC value for intellectual capital indicates good performance in managing its intellectual assets, as outlined in the criteria below.

1. VAIC value above 3.00 indicates the best performance or top performers.
2. VAIC value of 2.0 to 2.99 indicates good performance or good performers.
3. VAIC value of 1.5 to 1.99 indicates adequate performance or common performers.
4. VAIC value below 1.5 indicates poor or bad performers.

Based on the assumptions provided, here are the performance of intellectual asset management in companies within the food and beverage sub-sector listed on the IDX for the period 2019-2022.

Table 2. the Intellectual Capital value of companies in the Food and Beverage subsector for the period 2019-2022

No	Code	VAIC				*Mean*	Trend			
		2019	2020	2021	2022		2019	2020	2021	2022
1	AISA	11,80	9,79	1,11	0,69	5,85	5,95	3,94	-4,74	-5,15
2	ALTO	0,92	0,80	0,77	0,52	0,75	0,17	0,05	0,02	-0,23
3	CEKA	5,50	4,64	4,38	5,38	4,98	0,53	-0,34	-0,60	0,41
4	DLTA	4,79	2,89	3,70	4,09	3,87	0,92	-0,98	-0,16	0,23
5	ICBP	3,31	3,50	3,37	2,79	3,24	0,07	0,26	0,13	-0,45
6	INDF	2,54	2,93	3,07	2,90	2,86	-0,32	0,07	0,21	0,04
7	MLBI	7,36	3,10	5,02	5,82	5,32	2,03	-2,22	-0,30	0,50
8	MYOR	2,82	2,94	2,36	2,85	2,74	0,08	0,19	-0,38	0,11
9	PSDN	0,76	0,15	-38,49	2,20	-8,84	9,60	9,00	-29,65	11,05
10	ROTI	1,86	1,63	2,06	2,43	1,99	-0,14	-0,37	0,07	0,44
11	SKBM	1,17	1,28	1,52	1,94	1,48	-0,31	-0,20	0,04	0,47
12	SKLT	2,06	1,90	2,79	2,09	2,21	-0,15	-0,31	0,58	-0,12
13	STTP	3,12	3,27	3,08	2,93	3,10	0,02	0,17	-0,02	-0,17
14	ULTJ	5,69	5,85	6,18	4,84	5,64	0,05	0,21	0,54	-0,80
15	ADES	2,69	3,40	4,88	5,45	4,11	-1,41	-0,70	0,77	1,34
16	BTEK	-0,84	-11,43	-0,54	-8,56	-5,34	4,51	-6,08	4,80	-3,22
17	BUDI	1,94	1,74	2,12	3,21	2,25	-0,31	-0,51	-0,13	0,96
18	IIKP	12,04	-2,07	-2,43	-3,60	0,99	11,05	-3,06	-3,42	-4,58
19	MGNA	-9,88	29,67	-1,39	0,15	4,64	-14,51	25,03	-6,03	-4,49
20	TBLA	4,33	3,95	4,05	10,50	5,71	-1,37	-1,76	-1,66	4,80
Mean		3,20	3,50	0,38	2,43	2,38	0,82	1,12	-2,00	0,06

Source: Data processing for 2019-2022 financial reports

Based on the table above, the average intellectual capital value of companies in the Food and Beverage subsector is 2.38, indicating good performance. However, in 2022, nine companies with the codes AISA, MGNA, IIKP, BTEK, ULTJ, ICBP, ALTO, STTP, and SKLT show a declining trend based on the average value-added intellectual coefficient (VAIC) of the industry. This needs to be evaluated by the companies and stakeholders to anticipate the decline

in their intellectual assets' performance and to prevent future decreases, as it could impact the company's valuation.

Referring to the above, this research intends to test the influence of intellectual capital variables and the constructs that form it on the company value variable, which is proxied by price to book value.

LITERATURE REVIEW

Intellectual Capital

Intellectual capital pertains to the creation of human resource assets through the development of employee knowledge and information management capabilities (Christina et al., 2020), as well as creativity and innovation manifested through financial allocation for labor. It is believed to contribute to the long-term development of company value (Puspita & Wahyudi, 2021). Three elements that researchers commonly agree on regarding intellectual capital are human resources, structure, and their interrelationship as capital. When combined into a theoretical construct, this concept becomes the definitive intellectual asset owned by an organization, which plays a role in creating value and wealth (Guthrie et al., 2018), These assets are considered intangible assets, implemented through financial investment in establishing knowledge-based employee ownership capable of fostering good cooperation in the work process (Hambali, 2021).

Common instruments used in measuring intellectual capital generally use the Value-Added Intellectual Coefficient (VAIC™). This construct is built from three components: value added capital employed, which compares value added with capital employed; value added human capital, which compares value added with human capital; and structural capital value added, which compares structural capital with value added (Ulum, 2017).

Company Value

Market value itself is a manifestation of a company's success in gaining broad public trust through its demonstrated performance. This leads to public interest and stock purchases, resulting in sustained increases in stock prices. This process occurs over a relatively long period, starting from the company's establishment to the present (Triyani et al., 2018). The future growth prospects of a company, based on historical performance data, reflect its value, influencing both current and potential investors to increase investments due to the growth of its stock value (Scott, 2015).

One of the measurements used to assess the performance of a company, especially those publicly listed on the stock exchange, is examining the price-to-book value (PBV), which reflects the prospects of growth or decline in the company's value(Mardhiana, 2020). The use of this ratio also aims to provide an indication of possible movements in stock value in the future and is closely related to the stock price itself (Sorongan & Yatna 2018).

Framework and Research Model

The various factors underlying the occurrence of an event associated with the current emerging issue is simple concepts within a framework of thought (Sugiyono, 2017), which in this case focuses on the causes of changes in company value in the food and beverage sub-sector which are linked to intellectual assets owned by each company are the scope of the research area.

It is known that various studies, such as those conducted by Juwita & Angela (2016); Lestari (2017); Wulandari & Purbawati (2021); Shulthoni & Rizky (2023) demonstrate the simultaneous influence of the intellectual capital variable construct on company value, It is also found partially that the dimensions forming intellectual capital are value added capital employed (VACA),value added human capital (VAHU), and structural capital value added (STVA) have an influence on changes in company value. Based on this, the following research model was formed:

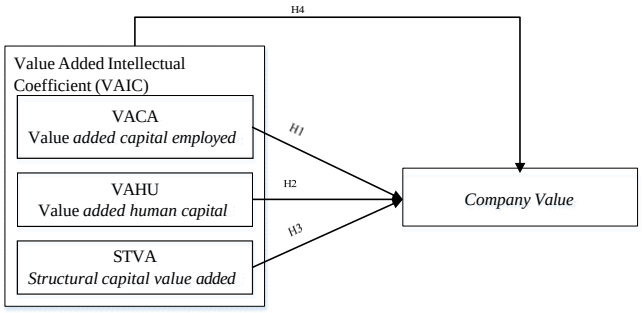

Figure 1. Research Model

Hypothesis H1: Value added capital employed influence on company value H2: Value added human capital influence on company value H3: Structural capital value added influence on company value

H4: Value added intellectual coefficient influence on company value

RESEARCH METHODS

The approach to this research method is quantitative causality, a research approach that employs a data collection method followed by statistical and/or mathematical calculations to find answers to the hypotheses formulated. In this case, the research seeks to examine the influence of independent variables, such as intellectual capital, on changes in the dependent variable, which is the company's value (Sekaran & Bougie, 2016). Complementing the concept mentioned above, this research is classified as associative research based on its explanatory nature, aiming to determine the relationship or influence between research variables. In terms of data type, this study utilizes quantitative data in the form of numerical data for conducting mathematical calculations (Machali, 2021)

The research was conducted over a span of three months, from February 2024 to April 2024. The population of this study comprised 20 companies in the food and beverage sub-sector that are registered or listed on the Indonesian Stock Exchange (IDX). The sample selection criteria were based on the following conditions: the company must have listed or published its shares on the IDX between the years 2015 and 2022, must not have been delisted during the research period, and must have complete and published financial reports available on the company website and/or on the Indonesian Stock Exchange (BEI). Consequently, the sample consisted of 20 companies selected through saturated sampling (Sekaran & Bougie, 2016).

Based on the data obtained, the source of data for this research is secondary. The financial reports from companies were collected from other parties or institutions that conducted the data collection and processing (Sekaran & Bougie, 2016); (Hikmawati, 2020).

Types of Data and Research Instruments

This research utilizes combined data types, specifically time series and cross-sectional data, resulting in panel data. Cross-sectional data collection occurs at one specific time point, whereas time series data collection focuses on a variable over continuous or sequential periods. The data scale used in this research is a ratio scale, where a zero value is considered significant (Sekaran & Bougie, 2016).

Instruments used to measure independent variables intellectual capital are based on the theories by theory Ulum (2017); Anggraini et al. (2020) employing the Value Added Intellectual Coefficient (VAIC) approach, obtained through the following process:

- VAIC is the sum of VACA + VAHU + STVA
- VACA: Value Added Capital Employed is the ratio of VA divided by CE. VA: Value Added from output (∑ Income) –Input (∑ Operational) CE: Capital Employed represents existing funds (∑ equity)
- VAHU: Value Added Human Capital income from VA/HC (Human Capital or employee expenses).
- STVA: Structural Capital Value Added acquisition from SC/VA. SC: Structural Capital obtained from VA – HC

The instrument utilized to measure the dependent variable, firm value, adopts the approach proposed by Shulthoni & Rizkya (2023), employing the Price-To-Book Value (PBV) approach, obtained through the following formula.

$$PBV = \frac{Market\ Value}{Book\ Value}$$

Data analysis technique

The panel data used to test the influence among variables in this study will employ partial and simultaneous panel data regression. In this model, if there are biases in the classical assumption tests (normality, heteroskedasticity, and autocorrelation) conducted prior to regression analysis, they can be tolerated. This is because combined time series-cross-section data are susceptible to disturbances in classical assumptions. Nevertheless, data transformation can be conducted to address these issues (Gujarati, 2015).

The normality test, a classical assumption in this study aims to determine the normality of the distribution of research data (Sekaran & Bougie, 2016), The technique used in this research is the Jarque–Bera (JB) test, with the condition that data passing the normality test have a probability value > 0.05. Therefore, if the value exceeds this threshold, the data is considered non-normally distributed (Agung, 2021).

The classic assumption-heteroscedasticity test aims to determine whether the regression model has high differences in residual variance values or vice versa, where high differences indicate symptoms of heterogeneous and potentially biased data (Gujarati, 2015). However, panel data generally has a high possibility of bias so failure to meet this criterion is acceptable (Agung, 2021). Test in this approach using breusch–pagan test, white test, and or Glejser test with the conditions to pass, namely probability F (DF) > 0,05 and or F.Statistics < F.table (Gujarati, 2015).

The autocorrelation test, a classical assumption, aims to diagnose high correlation among error values in data scores from specific time periods, commonly occurring in time series data (Gujarati, 2015). This test can be conducted using the Breusch–Godfrey (BG) method with the condition that a data passes this test if probability F (DF) > 0.05 and or F.Statistics < F.table.

This research's panel data regression test will display a partial influence test Value Added Capital Employed (VACA), Value Added Human Capital (VAHU) and structural Capital Value Added (STVA) on firm value (PBV), and simultaneous influence Value Added Intellectual Coefficient (VAIC) to company value (PBV). However, before proceeding with that, the following criteria are employed to determine the best model to be selected for panel data regression estimation.

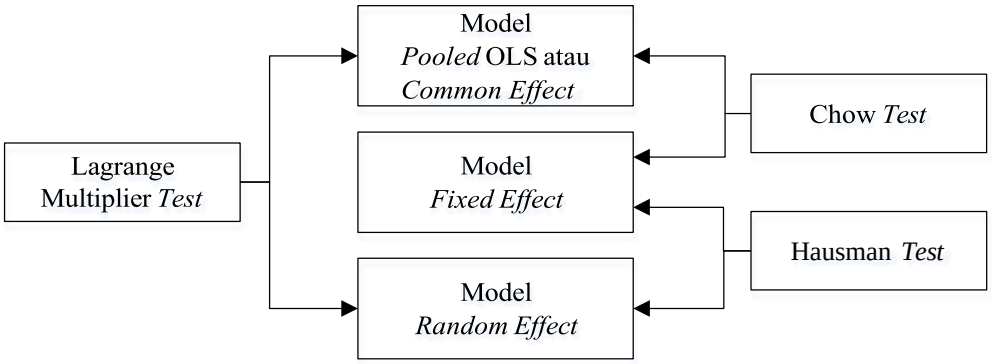

Figure 2. Stages of Model Determination

Referring to the above figure, panel data regression will estimate three models: pooled OLS, fixed effects, and random effects. To select the best model, a comparison of three tests is conducted, namely:

- Chow test which requires if the value is $F._{count} < F_{table}$ and or $P._{value}$ > alpha 5% so H_0 accepted, and model Pooled Ordinary Least Square (POOLS) is selected, if the value is inversely proportional then the selected model is the model fixed effect.
- Hausman test which gives the condition if probability statistic oncross-section random > α 5% mixture H_0 accepted, then random effect is selected, otherwise if the value is contrary to these provisions then the model fixed effect the chosen.
- Lagrange Multilier tes, this model comparison requires that if probability B.P > probability α 5% and or LM.chi-square < chi-squares 5% so H_0 accepted, then Parties POLS is selected, but when the values are inversely proportional then the model is selected random effect.

After the regression model is selected, the next step is to determine the criteria for acceptance and rejection of the partial hypothesis using the t test. The assessment criterion in this approach is if the t value.$_{statistics}$ > t.$_{table}$ and or P.$_{value\ probability}$ < α 5% (0.05) then the partial independent variable is considered to have an effect on the dependent variable, and if the value is the opposite then the partial independent variable is considered to have no effect on the dependent variable.

Next is determining the criteria for accepting the simultaneous hypothesis, which is tested using the F test, where the condition in this test is if the F value is.$_{count}$ > F.$_{table}$, and or P.$_{value}$ ≤ α 5% (0.05) so H_0 is rejected, then the independent variable is simultaneously able to predict the sensitivity of the dependent variable. If the values are inversely proportional then H_0 accepted, and stated that simultaneously the independent variable is unable to predict sensitivity to the dependent variable.

RESEARCH RESULTS AND DISCUSSION

Research result

This research employs data transformation in the process of testing classical assumptions, aimed at ensuring that the data used in the regression testing process can adequately estimate the model.

The first testing process in the classical assumption test is the normality test of data, which yields testing parameters as shown in the following figure.

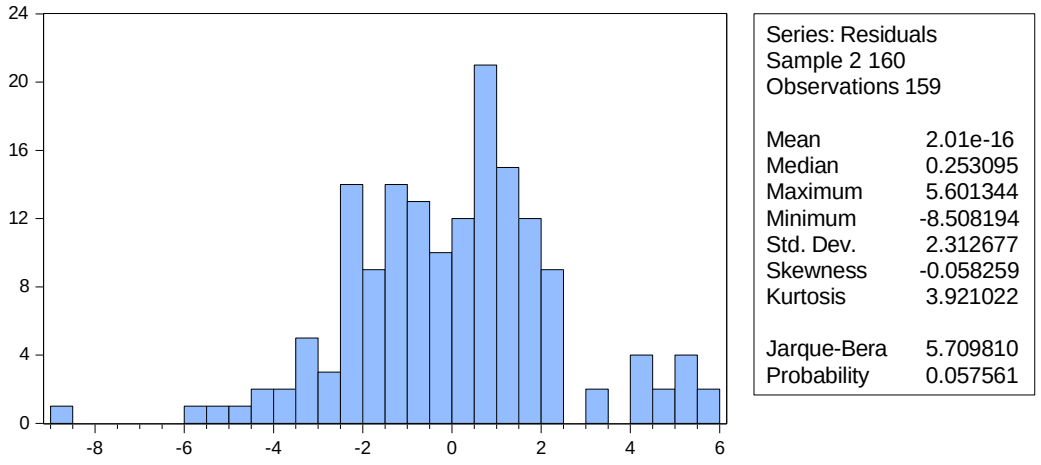

Figure 2. Normality of the Jarque-Bera Graphics Method

The image in the model above shows the distribution of data which is considered close to normal, this is concluded because of the value probability has a value of 0.057 or greater than alpha research was 0.05 (5%) so it was stated that the data passed the normality test.

Next, test the classic assumption of heteroscedasticity, the results of this test can be seen from the following table.

Table 3. Heteroscedasticity Test *Breusch-Pagan-Godfrey*

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	**1.244591**	**Prob. F(3,155)**	**0.2956**
Obs*R-squared	3.740034	Prob. Chi-Square(3)	0.2909
Scaled explained SS	28.95019	Prob. Chi-Square(3)	0.0000

Test Equation:
Dependent Variable: RESID^2 Method: Least Squares
Date: 04/15/24 Time: 02:57
Sample: 2 160
Included observations: 159

Source: 2024 Data Processing Using Eview

The test results in the table above show that the value probability F is 0.2956 > 0.05 and/or $F._{Statistics}$ equal to 1.245 < $F._{table}$ 2.663, then it is stated that the data passes the heteroscedasticity test.

Next is testing the classic assumption of autocorrelation in the regression model, the results of which can be seen based on the following table data.

Table 4. Autocorrelation Test breusch-*Godfrey Serial Correlation LM*

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	**1.470440**	**Prob. F(25,130)**	**0.0858**
Obs*R-squared	35.05015	Prob. Chi-Square(25)	0.0873

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 04/12/24 Time: 04:26
Sample: 2 160
Included observations: 159
Presample missing value lagged residuals set to zero.

Source: 2024 Data Processing Using Eview

In the table above, values Probability F (DF) is 0.0858 > 0.05 and $F._{Statistics}$ equal to 1.470 < $F._{table}$ 1.591, which means that the data used passed the autocorrelation test.

The next process is model testing which will show the results of data processing from the test chow, hausman and lagrange multiplier to estimate the regression model that will be used. Following are the test results.

Table 5. Chow Test

Redundant Fixed Effects
Tests Equation: EQ01_PARS
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	**18.535519**	**(19,137)**	**0.0000**
Cross-section Chi-square	203.638254	19	0.0000

Cross-section fixed effects test equation:
Dependent Variable: PBV
Method: Panel Least Squares
Date: 04/11/24 Time: 15:24
Sample: 2015 2022
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160

Source: 2024 Data Processing Using Eview

The values in the table above show that $F._{count}$ equal to 18.535 > $F._{table}$ 1,663, and $P._{value}$ 0,000 < alpha 5% so H_0 rejected, until the model is set fixed effect selected,

Table 6. Hausman Test

Correlated Random Effects - Hausman Test
Equation: EQ01_PARS
Test cross-section random effects

Test Summary	Chi- Sq.Stat	Chi-Sq. d.f.	Prob.
Cross-section random	**7.918140**	3	**0.0477**

Cross-section random effects test equation: Dependent Variable: PBV
Method: Panel Least Squares Date: 04/11/24 Time: 15:25 Sample: 2015 2022
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160

Source: 2024 Data Processing Using Eview

Based on the table data above the values probability statistic oncross-section random equal to 0.0477 < alpha 0.05 (α 5%) and value chisquare statistics of 7.918 > Chi $square._{table}$ 7.815, then based on this H_0 rejected, and the chosen one is fixed effect model. The following is an illustration depicting the results of the model comparison.

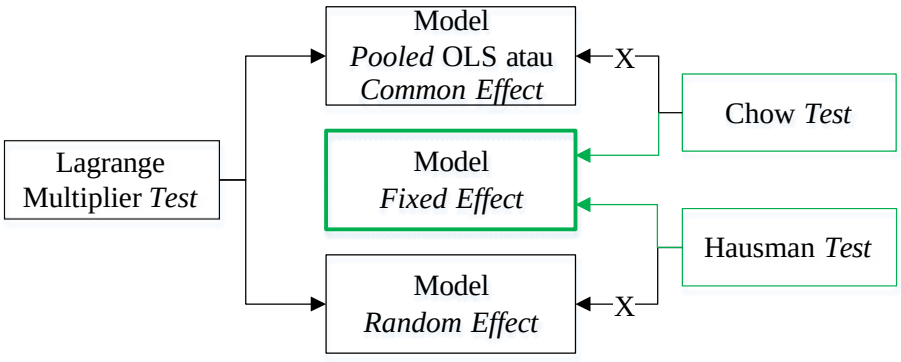

Figure 3. Model Test Selection Results

The results of the Chow and Hausman tests indicate that the fixed effect model is selected, eliminating the need for a comparison between the POLS and random effect models. Therefore, the model to be used for estimating partial and simultaneous panel data regression is the fixed effect model, as seen in the subsequent process.

Table 7. Panel Data Partial Regression Test

Dependent Variable: PBV
Method: Panel EGLS (Cross-section
weights) Date: 04/11/24 Time: 14:18
Sample: 2015 2022
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160
Linear estimation after one-step weighting matrix
White period standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.624004	0.434811	8.334666	**0.0000**
VACA	0.522331	0.117549	4.443495	**0.0000**
VAHU	-0.393322	0.112200	-3.505539	**0.0006**
STVA	0.181869	0.051285	3.546261	**0.0005**

Source: 2024 Data Processing Using Eview

The partial regression test results in the table above show the values prob.value VACA is 0.0000, VAHU 0.0006, and STVA is 0.0005. The overall value is smaller than the value alpha research was 0.05 (α 5%). This indicates that the data reject the null hypotheses (H_{01}, H_{02}, H_{03}). Referring to this value, it is stated that all three dimensions forming the intellectual capital variable are considered to independently influence the increase in company value (PBV), with only VAHU contributes negatively, while VACA and STVA have a positive effect on increasing company value. An increase in the VACA construct by one unit will increase the company value by 0.522, an increase in the VAHU construct by one unit will reduce the

company value by 0.393, while an increase in the STVA construct by one unit will increase the company value in the food and drink sub-sector by 0.182, Therefore, based on this information, it is evident that the VACA construct is the highest component that enhances the company's value. Next, to determine the simultaneous regression test, it can be known from the following table of data processing results.

Table 8. Panel Data Simultaneous Regression Test

Dependent Variable: PBV
Method: Panel EGLS (Cross-section weights)
Date: 04/11/24 Time: 14:40
Sample: 2015 2022
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160
Linear estimation after one-step weighting matrix
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.170885	0.148786	7.869580	0.0000
VAIC	0.168739	0.062909	2.682261	0.0082
Weighted Statistics				
R-squared	**0.927922**	Mean dependent var		3.629770
Adjusted R-squared	**0.917551**	S.D. dependent var		5.481630
S.E. of regression	1.390909	Sum squared resid		268.9133
F-statistic	89.47288	Durbin-Watson stat		1.123825
Prob(F-statistic)	**0.000000**			

Source: 2024 Data Processing Using Eview

Based on the results of data processing in the table above, it is known that the value probability simultaneous regression statistics are 0.000 < alpha 0.05 (α 5%), then based on this it is stated that H_{04} simultaneous is rejected, which means that, simultaneously the variable intellectual capital has a positive effect on increasing company value. As for the magnitude of the influence of the variables intellectual capital in predicting changes or increases that occur in the variable of company value, proxied using price to book value, is 0.9175 or 91.75%.

Discussion

Separately or partially, dimensions form variables intellectual Capital that is Value Added Capital Employed (VACA) has a positive influence on the increase in value (PBV) in food and beverage sub-sector companies listed on the Indonesian stock exchange. VACA it self talks o the extent of value added created from investment activities (Ulum, 2017), so companies with

healthy financial conditions (value added and/or positive comprehensive profit) and those increasing their workforce investments have the potential to increase their company value compared to those not increasing their workforce investments and choosing to increase their company's equity value. These results have the same consistency as research conducted by Juwita & Angela (2016); Lestari (2017); Shulthoni & Rizky (2023), which states that good asset management capable of creating positive value in a company's value added will impact the increase in the company's value.

Value Added Human Capital (VAHU) which is a dimension or structural component of the intellectual capital variable, has a negative effect on company value (PBV), so control over the efficiency and effectiveness of these activities is considered more effective in maintaining stability in the value of companies in the food and beverage sub-sector that are listed on the Indonesian stock exchange. The results of this research are in line with research conducted by Lestari (2017), which states that companies hoping to increase company value (PBV) need to increase their allocation of funds for employee development to create synergy within the company's components to achieve increased company value through the creation of long-term profit stability.

Construction Structural Capital Value Added or abbreviated STVA which is the dimension of Intellectual Capital is considered to have a positive influence on increasing the value of food and beverage sub-sector that are listed on the Indonesian stock exchange. Companies that increase costs in their workforce component structure (human capital) will experience a positive increase in their company's value. This is consistent with the results of research conducted by Juwita & Angela (2016) which states that the effectiveness of investment in human capital will result in an increase in company value.

Simultaneously, Intellectual Capital has a positive effect on increasing the value of food and beverage sub-sector companies in Indonesia. Companies that focus on improving the quality of human resources in order to support their operational activities will experience an increase in company value as indicated by an increase in the Price To Book Value ratio (PBV). These results are in line with research by Juwita & Angela (2016); Lestari (2017) ; Wulandari & Purbawati (2021); Shulthoni & Rizky (2023) which states that simultaneous increase in Intellectual Capital value contribute positively to the increase in company value.

CONCLUSIONS AND IMPLICATIONS

Conclusion

For companies engaged in food and beverage production, it's crucial to continually control and improve the quality of their human resources, because various studies including this research show that in general there is an increase intellectual capital companies can contribute to increasing company value. This means that human capital implemented through increasing ability, knowledge and expertise both technically and conceptually needs to be undertaken by companies in order to be able to create various inventions and product innovations that appeal to the wider community. Consequently, this leads to increased consumption of products from food and beverage companies, which in turn impacts in increasing company trust and values.

Companies that successfully record positive profits due to their asset structure stability can opt to invest in both human resources and supporting equipment. It cannot be denied that investment in equipment needs to be accompanied by an increase in workers' knowledge of using tools or innovative technology. Therefore, investing in human capital as an operational driving factor becomes crucial to create positive company value.

For companies that have effectively managed human capital, as indicated by a positive value in the ratio of comprehensive income to financial expenses for employees, increasing investment in their workforce to maintain stability in this component is advisable. This is because a significant increase in this component might potentially decrease the company's value in the long term. Efforts to enhance a company's value in the long term require maintaining stability in this component so that, in the future, profit recording can drive company value growth.

Companies that record high profits indicate the success of the company in managing its workforce potential. Human capital investment can enhance the company's value while still considering its financial capabilities. Increasing investment in human capital in companies with unhealthy financial conditions and relying on debt to finance their activities can have negative long-term implications. Therefore, investment in workforce activities (human capital) should be carried out while still considering the company's financial condition.

Implications

This research is limited to the research object of the food and beverage sub-sector during the period of 2015-2022, Therefore, based on its type, time, and characteristics, the results of this research are only relevant when applied to companies operating in similar fields, To enhance the generalizability of its findings, other researchers interested in the research concept can expand the research area to include the manufacturing sector or extend the research time frame further. Additionally, the variables considered in estimating company value are limited to intellectual capital and its constructs. Thus, to broaden the understanding of estimating company value, other researchers can incorporate relevant theoretical concepts that are deemed to have correlations with company value.

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