



## The Impact of Intellectual Capital on Company Value with Profitability as a Mediator

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**ABSTRACT:** This study aims to determine the effect of intellectual capital on firm value with profitability as a mediator in the food and beverage sub-sector. This study is quantitative empirical research using hypothesis research that examines the significant influence and direction of the direct and indirect relationship between the independent variables and the dependent variable through the intermediate variable. The total research sample is 14 companies. The sampling technique used in this research was purposive sampling. The data used is panel data. The data analysis method uses path analysis with the help of Eviews software. Partial test results show that intellectual capital has a positive and significant effect on firm value and profitability. The Sobel test results show that profitability cannot mediate the effect of intellectual capital on firm value.

**KEYWORDS:** Firm Value, Intellectual Capital, Profitability.

### PRELIMINARY

An organization that is planned to be built by two or more individuals to operate a business with a specific purpose is called a company, which includes maximizing the value of the company.(Irnawati, 2021). The business performance and progress prospects of an entity are reflected in the company's value which is measured through investors' reactions to the entity's share price. An entity performs well if the company value shows good value so that it attracts investors to invest their capital in the company(Kong et al., 2020). One reflection of company value is the price to book value (PBV) ratio, the value of which fluctuates from year to year, and is experienced by various types of industry, including the food and beverage industry.

The food and beverage industry is projected to remain as one of the leading sectors supporting manufacturing growth and the national economy in the current and future(Aprilyani et al., 2021). Most food and beverage products which are basic needs are still needed in any situation, whether the public is experiencing a crisis or not. This results in the food and beverage industry having good company value and becoming an investment priority because it has a big opportunity(Kevin, 2022). However, there are food and beverage sub-sector entities listed on the Indonesia Stock Exchange (BEI) that have experienced a decline in company value and there are also entities whose PBV value is smaller than 1. A PBV value of less than 1 indicates that investors are less interested and pessimistic about shares. that entity.

Based on the overview of the financial statements of food and beverage sub-sector entities in [www.idx.co.id](http://www.idx.co.id) and the website of each entity, it was found that the PBV value had decreased, there were also PBV values from entities that had a value of less than 1 which was summarized using the following table:

**Table 1. Company Value Phenomenon**

No	Name	Code	2018	2019	2020	2021	2022
1	PT. Wilmar Cahaya Indonesia Tbk	CHECK	0.838	0.878	0.842	0.806	0.76
2	PT. Indofood Sukses Makmur Tbk	INDF	1,399	1,394	1.11	0.702	0.631
3	PT. Sekar Bumi Tbk	SKBM	1,172	0.68	0.54	0.646	0.57

**Source:** Indonesian Stock Exchange 2024

Based on Table 1. PT. Wilmar Cahaya Indonesia Tbk (CEKA) found a PBV value below number 1, namely PBV in 2018 and 2019 of 0.838 and 0.878, then in 2020, 2021 and 2022 it was 0.842, 0.806 and 0.76. Then, PT. Indofood Sukses Makmur Tbk has a PBV value of 1.399, 1394 in 2018 and 2019. In 2021, 2021 and 2022 it is 1.11, 0.702 and 0.631. Next PT. Sekar Bumi Tbk also has



a decreasing PBV value, in 2018 it was 1.172, decreasing in 2019 and 2020, namely 0.54 and 0.642. In 2021, 2022 the PBV value will be 0.646 and 0.57.

The PBV value, which reflects the value of an entity in the food and beverage sub-sector, fluctuates and tends to decrease, if left unchecked, it results in a decline in the level of confidence of investors and potential investors in a company's shares and, more fatally, results in the company's difficulty in obtaining external funding, which in the long term results in the entity will experience financial difficulties.

Based on a literature survey conducted, there is a strong suspicion that intellectual capital has an impact on company value. Doan (2020); Salvi et al. (2020); Ozkan et al., (2017) found that intellectual capital has a positive influence on company value. Investors realize that intellectual capital is an intangible asset that can increase a company's competitive advantage in international competition. Investors give higher value to companies that have better intellectual capital. Li & Zhao, (2018) and Agustin et al. (2022) found that intellectual capital has no impact on company value.

Companies with high profitability receive positive investor reactions, as evidenced by the increasing number of investors who invest in the company's shares by buying them. Thus, share prices will also rise so that profitability becomes one of the factors that influence company value. Utama & Lisa, (2018); Sari, (2020); Markonah et al., (2020); Yohana et al. (2021) states that profitability has a positive impact on company value, however, based on a literature survey, profitability is also influenced by intellectual capital. In short, profitability can mediate the influence of intellectual capital, audit committee and institutional ownership on company value.

This research has several practical contributions. First, for company managers, the results of this research can be used as evaluation material, strategies and suggestions for increasing company value and offering solutions for companies in the food and beverage sub-sector to achieve success through achieving competitive advantage. Second, for investors, this research can be used as material for their consideration in making decisions to maintain and withdraw their investment by considering various factors.

## THEORETICAL BASE

### Resource-Based View (RBV) Theory

RBV theory suggests that company resources and capabilities are essential for the company, because they represent the main elements or foundations of the company's competitiveness and performance. According to the Resource-Based View (RBV) theory, company resources are resources that have unique value and are able to provide diverse and productive services. If a company can make full use of its resources, and is able to compete with its competitors (Grace, 2020).

### Signaling Theory

Signaling theory sees that company managers have more information about the company and are encouraged to communicate this information to potential investors so that the company's share price increases (Adam et al., 2018). According to Brigham & Houston (2014) signaling theory explains management's actions in providing guidance to investors regarding management's views on the company's prospects.

### The value of the company

Company value is an investor's reaction to the level of success of a company and is often linked to share prices (Nugraha et al., 2021). The market price of a company's shares that is formed between buyers and sellers in a transaction is called the company's market value because it is considered to reflect the true value of the company.

### Intellectual Capital

The International Federation of Accountants (1998) defines IC as intellectual property, intellectual assets, and knowledge assets which can be interpreted as capital based on the knowledge owned by the company. Intellectual capital (IC) is an intangible asset that is not reported on the balance sheet but has a positive impact on the company's performance and success. (Mondal & Ghosh, 2012).

### Profitability

Profitability is defined as the net profit obtained from policies and decisions in a company (Brigham & Houston, 2011). Profitability can be seen in a ratio, this indicator represents a measure of the effectiveness of a company's management and is reflected in the profits generated from sales or investment income (Zuhroh, 2019).



**RESEARCH METHODS**

This type of research is quantitative research testing the significant influence and direct linear and indirect linear direction between the independent variable and the dependent variable. In this research, the independent variable in the form of intellectual capital was tested for the influence and direction of its relationship with the dependent variable, namely company value, directly and indirectly through the intervening variable, namely profitability. The research uses secondary data taken based on annual reports and financial reports of food and beverage sub-sector companies listed on the IDX throughout the time of the research. The research time is set for 11 years, namely 2012 to 2022. This research utilizes a data review system with the Eviews application.

This research uses a sample of food and beverage sub-sector companies listed on the IDX in 2012-2022 using a purposive sampling method where from a population of 45 companies, 14 companies were selected that matched the predetermined criteria. The following are several criteria that have been determined in sampling:

1. Food and beverage sub-sector companies are on the IDX from 1 January 2012 to 31 December 2022.
2. Food and beverage sub-sector companies have published annual reports and financial reports (audited) for the period 2012 to 2022.
3. Food and beverage sub-sector companies that submit information regarding sustainability reports in published annual reports.

The operationalization of the variables in this research is as follows:

**Table 2. Variable Operationalization**

Variable	Definition	Measurement	Scale
The value of the company	Company value is an investor's reaction to an entity, which is often linked to the market performance of an entity (Nuryaman, 2015).	$Value = \frac{Price \text{ to } Book}{\text{harga saham}} = \frac{\text{nilai buku per lembar saham}}{\text{nilai buku per lembar saham}}$	Ratio
Intellectual Capital	Intellectual capital namely ownership of knowledge and experience, special skills and knowledge, technical abilities, good relationships that can be utilized to create competitive advantages which can further increase company value. (Agustin et al., 2022).	$VAIC = VACA + VAHU + STVA$ $VA = OUT - IN$ $VACA = \frac{VA}{CE}$ $VAHU = \frac{VA}{HC}$ $STVA = \frac{SC}{VA}$	Ratio
Profitability	Profitability is an indicator of an entity's management performance in managing assets as shown by the profits generated (Rahman et al., 2020)	$ROA = \frac{\text{Laba Bersih}}{\text{Total Aset}}$	Ratio

The data analysis model in research is path analysis with model calculations formulated by model I and model II equations, namely:

1. Model I

$$PROF = \alpha + \beta IIC + e$$

Information:

PROF = Profitability

$\alpha$  = Constant

$\beta_1, \dots, \beta_5$  = Regression Coefficients

I.C = Intellectual Capital

e = Error (Error)



2. Model II

$$NP = \alpha + \beta_1 IC + \beta_2 PROF + e$$

Information:

- N.P = The value of the company
- $\alpha$  = Constant
- $\beta_1, \dots, \beta_5$  = Regression Coefficients
- I.C = *Intellectual Capital*
- PROF = Profitability
- e = Error (Error)

**RESEARCH RESULTS**

In this research, a path analysis test was carried out on model 1 and model 2, then a mediation test was carried out using a sobel test for the variables Intellectual capital (X1), Profitability (Z) and Company Value (Y). The results of hypothesis testing for model 1 and model 2 with Eviews are shown in the table below.

**Table 3. Model I**

Dependent Variable:	PROF			
Variables	Coefficient	Std. Error	t- Statistics	Prob.
C	91.76599	28.70504	3.196859	0.0017
I.C	0.051584	0.073084	0.401573	0.0482

From the statistical calculations shown in Table 3, the results of the equation are as follows:

$$\begin{aligned}
 PROF &= \alpha + \beta_1 IC + e \\
 &= 91.76599 + 0.551584 + e
 \end{aligned}$$

Next, the test results for model II are in Table 4.

**Table 4. Model II**

Dependent Variable:	N.P			
Variables	Coefficient	Std. Error	t- Statistics	Prob.
C	1445.166	1736.178	0.832383	0.4065
I.C	0.150282	5.510678	0.828157	0.0307
PROF	0.053544	5.500377	5.334645	0.0000

From the statistical calculations shown in Table 4, the results of the equation are as follows:

$$\begin{aligned}
 NP &= \alpha + \beta_1 IC + \beta_2 PROF + e \\
 &= 1445.166 + 0.150282 IC + 0.053544 PROF + e
 \end{aligned}$$

For the results of the sobel test mediation test, profitability as an intervening variable can be seen in Table 5.

**Table 5. Sobel Test Mediation Test Results**

	Test statistics:	Std.Error:	p- value:
Sobel test:	-0.54865945	2.15590431	0.58323918
Aroian test:	-0.53936346	2.19306156	0.58963609
Goodman test:	-0.55845328	2.11809532	0.5765349



## DISCUSSION

### *The Influence of Intellectual Capital on Profitability*

Based on testing the Intellectual Capital variable on profitability, the regression coefficient value was 0.051584 and had a positive sign at the significance value, namely  $0.0482 < 0.05$ . This means accepting H1 and proving that intellectual capital has a positive impact on profitability. RBV theory states that company resources and capabilities are essential for the company, because they represent the main elements or foundations of the company's competitiveness and performance.

The better the performance and measurement of a company's intellectual capital, the better the company's intellectual capital capabilities will be. Through the use of intellectual capital, companies must be able to process and maximize their resources efficiently and effectively and increase company profits. The better a company increases profits by utilizing its intellectual capital, the greater its profitability and investor confidence.

The results of this research are in line with the results of previous research Bayraktaroglu (2019); Hatane et al. (2019); Single (2020) proves that intellectual capital has a positive impact on profitability.

### *The Influence of Intellectual Capital on Company Value*

Based on testing the intellectual capital variable on company value, the regression coefficient value was 0.150282 and had a positive sign with a significance value of  $0.0307 < 0.05$ . This means accepting H2 and proving that intellectual capital has a positive impact on company value. This is in accordance with signaling theory where high intellectual capital can provide a positive signal to the market, because companies can manage intellectual capital well to create company value. Intellectual capital is one of the fundamental elements of company performance and provides information about the company's intangible value that can affect its resilience and competitive advantage.

The results of this study are in line with the research results Nguyen & Doan (2020); Salvi et al., (2020); Ozkan et al. (2017) proves that intellectual capital has a positive impact on company value.

### *The Effect of Profitability on Company Value*

Based on testing the profitability variable on company value, the regression coefficient value was 0.053544 and had a positive sign at a significance value of  $0.0000 < 0.05$ . This means accepting H3 and proving that profitability has a positive impact on company value. This result is in accordance with signaling theory which assumes that increasing profitability in an entity is a positive signal for investors and potential investors. Profitability can reflect profits from financial investments, meaning that as internal sources increase, profitability affects company value. Since profitability is the most important metric for a company, enterprise value is a good prospect for attracting investors. The higher this ratio, the higher the company's profit.

The results of this study are in line with the research results Jihadi et al. (2021); Sintyana & Artini (2018) proves that profitability has an impact on company value.

### *Profitability Mediates the Influence of Intellectual Capital on Company Value*

Based on testing the profitability variable mediates the influence of intellectual capital on company value, the p-Value is  $0.58323918 > 0.05$  with a Sobel Test Statistical Test value of -0.54865945. This means rejecting H4 and proving that profitability is unable to mediate the impact of intellectual capital on company value in food and beverage sub-sector companies listed on the Indonesia Stock Exchange (BEI) for the 2012-2022 period. This is because there are several companies that cannot utilize the resources they have, so they cannot increase company profits because the company has not optimally managed intellectual capital to create company value, so it cannot provide a positive signal for the company in carrying out its operational activities. The better the performance and measurement of a company's intellectual capital, the better the company's intellectual capital capabilities. However, if the entity does not manage intellectual capital well, the entity will not be able to compete well with other companies.

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