

# The Effect of Intellectual Capital on Tax Avoidance Before and After the Tax Amnesty

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## ABSTRACT

The purpose of this research was to analyze the effect of intellectual capital on tax avoidance before and after the tax amnesty. This research used manufacturing industries listed on Indonesia Stock Exchange in the periods of 2015 and 2017 as the samples. By using purposive sampling technique, 230 data were taken as samples. For data processing, multiple linear regression analysis was used in this research by using SPSS version 22 and WARP PLS version 3.0. The measurement of intellectual capital used structural capital (STVA), while tax avoidance was Corporate Tax to Turn Over Ratio (CTTOR) and Net Profit Margin (NPM). The result showed that there was no significant impact of intellectual capital on tax avoidance before and after the tax amnesty.

**Keywords:** *Intellectual Capital, Tax Avoidance, Tax Amnesty*

## 1. INTRODUCTION

According to Soemitro in [1], "Tax is a public contribution to the state treasury based on the law (which can be forced) by not getting reciprocal services (contra) which can be directly shown, and which is used to pay for general expenditure." The country's revenue is dominated by the tax sector when being viewed from the APBN (State Budget) figures. State revenue in the state budget aims to finance state expenditure for the purpose of development in various fields for community welfare [19].

However, according to the development of tax ratio over the past six years starting from 2012-2018, Indonesia was still below 12%, namely 11.60% in 2018. Based on the tax ratio in 2018, Indonesia was still below the Philippines (16.7%), Malaysia (15.9%) and Singapore (13.9%).

One of the causes of not achieving the ideal tax ratio is because taxpayers conduct tax avoidance. The tax avoidance actions undertaken by a number of companies in Indonesia are not intended for tax evasion, but rather on the purpose of saving the amount of tax burden paid by the company by exploiting the loopholes in tax laws that exist in Indonesia [17]. However, these activities reduce state revenues from tax.

In this study, the calculation of tax avoidance used the Benchmark Behavioral Model (BBM). Benchmarking is one of the methods developed by the Directorate General of Taxes to explore potential tax revenue. The role of benchmarking is referred to [16] as a tool that can be used by tax officials in fostering taxpayers and assessing tax compliance ([www.bppk.kemenkeu.go.id](http://www.bppk.kemenkeu.go.id)).

Intellectual capital has a role in tax avoidance activities. [4] stated that intellectual capital consists of human capital, structural capital, and physical capital. Intellectual capital is a knowledge-based resource concept that describes capital which, if being used to its full potential, supports a company to carry out its activities effectively and efficiently. Tax avoidance is done by management which is part of the

human capital. Likewise with structural capital has an influence on tax avoidance. According to [12] and [8], physical capital also affects tax avoidance activities in which company activities are related to the use of physical capital which also influences corporate taxation activities. The company's strategy influences its tax avoidance, but intellectual capital is still a view that is rarely seen to conduct tax avoidance.

This study intended to examine the effect of intellectual capital on tax avoidance in Indonesia by using the periods before and after the tax amnesty. Tax amnesty is a momentum where taxpayers have used their constitutional rights to support a fairer taxation system and the expansion of a more valid, comprehensive and integrated taxation database. Taxpayers after participating in tax amnesty, are expected to be better able to meet tax compliance obligations in subsequent periods, so that the level of tax avoidance is expected to decrease.

## 2. THEORETICAL REVIEW

### 2.1 Agency Theory

The concept of agency theory according to [21] is a relationship or contract between the principal and the agent, whereas the principal is the party that employs the agent to perform tasks in the interests of the principal, while the agent is the party that carries out the principal's interest. According to [21], moral hazard occurs because the activities carried out by a manager are not entirely known by shareholders or lenders, so managers can take action outside the shareholder's knowledge that violates the contracts and in fact, ethically or normally, may not be worth doing. Asymmetric information can also arise due to the differences in interest between the principal and the agent, namely conditions in which there is an imbalance in

information acquisition between management as the provider of information and principal as the user [21].

### 2.2 Intellectual Capital

[4] stated that intellectual capital is the concept of knowledge-based resources that describe capital which, if being used to its full potential, supports a company to carry out its activities effectively and efficiently. There are three main constructs of intellectual capital, namely: human capital (HC), structural capital (SC), and physical capital (CE).

Value-Added Intellectual Coefficient (VAIC). The VAIC method is designed to present information about the value creation efficiency of tangible and intangible assets belonged to companies [22].

Human Capital. According to [5], human capital is the basis of intellectual capital which refers to factors such as employee knowledge, skills, abilities, and attitudes. According to [20], human capital is a source of knowledge, skills and competencies in an organization or company.

Structural Capital. According to [20], structural capital is a supporting infrastructure for the performance of company's employees. Structural capital consists of the company's operational systems, manufacturing processes, organizational culture, management philosophy and all forms of company's intellectual property.

Physical Capital. According to [13], physical capital consists of all non-human storehouses of knowledge in the organization. This includes databases, organizational charts, process manuals, strategies, routines and everything that makes the company's value greater than its material value.

### 2.3 Tax Avoidance

It is undeniable that taxpayers want to pay taxes in small amounts. Many methods are used to minimize the tax burden starting from those still in the framework of tax regulations to those that violate the regulations. According to [11], tax avoidance is defined as an explicit tax reduction.

In [3], the definition of tax avoidance is namely tax avoidance by following the existing regulations.

### 2.4 Hypotheses Development

The concept of agency theory according to [21] is a relationship or contract between the principal and the agent that can lead to moral hazard in the activities carried out by a manager which are not entirely known by shareholders or lenders, so that managers can take actions outside the shareholder's knowledge that violate contracts and actually are ethically or normally improper. Asymmetric information can also arise due to the differences in interests between the principal and the agent, namely conditions in which there is an imbalance in information acquisition between management as the provider of information and principal as the user [21].

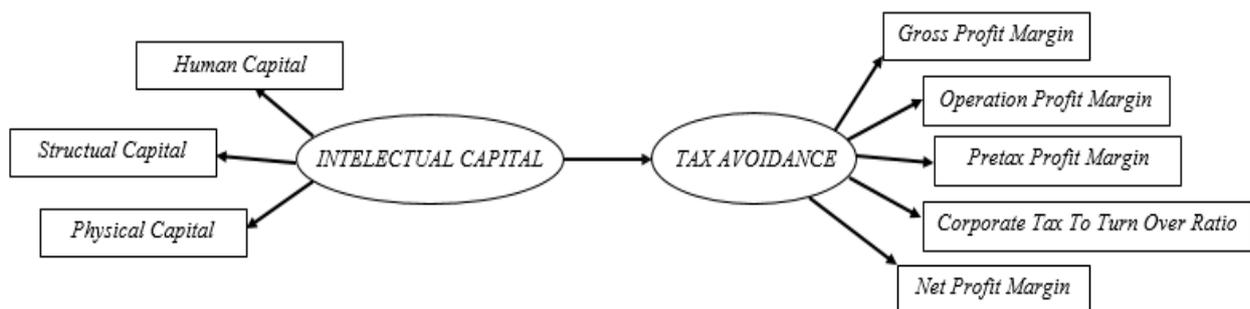
Based on the research conducted by [8], [6], [7], [12], [15], and [9], humans also play a role in corporate tax caused by the desire of them to benefit more from the financial side with minimum tax payments. Tax avoidance is carried out by human resources themselves, and aims to satisfy individual interests.

The research conducted by [9], [2], [14], [3], [18], mentioned that corporate governance has an influence on tax avoidance. The form of corporate structure also affects the payment of corporate taxes. Tax avoidance can be done by a company. Structural capital is a supporter of human capital for tax avoidance, therefore structural capital has an influence on tax avoidance.

According to the research conducted by [12] and [8], physical capital also affect the activities of tax avoidance in which the company activities are closely related to the use of physical capital that helped influence the activities of corporate taxation. The company's strategy influences its tax avoidance. Companies that routinely operate across countries have a tendency to take tax avoidance measures. Based on the explanation above, the hypothesis is formulated as follows:

H<sub>1</sub> : There is significant effect of intellectual capital on tax avoidance before dan after the tax amnesty.

The framework of thinking in this study is illustrated below.



**Fig.1.** Research Framework

### 3. METHODOLOGY

#### 3.1 Research Object

This study used manufacturing companies that were consistently listed on the Indonesia Stock Exchange in 2015-2017. The data obtained was processed and analyzed using the SPSS computer program for Windows version

22.0. The sample selection was done by purposive sampling technique by excluding the criteria as follows: 1) State-Owned Enterprises (SOE), because they do not have the tendency to conduct tax avoidance. This is in accordance with the statement expressed by the minister of SOEs, Rini Soemarno, on April 13, 2016 ([www.bumn.go.id](http://www.bumn.go.id)); 2) Companies conducting an IPO in the year of observation; 3) Companies that were delisted in the year of observation, 4). Companies that did relisting in the year of observation; and 5) Company that merged in the year of observation.

**Table 1.** The Summary of Variable Operationalization

Variable	Indicator	Scale
<b>Independent Variables</b>		
Intellectual Capital (IC) Ulum, 2009; and Tan, 2007	Human Capital (VAHU) = Value Added / Human Capital Where : VA (Value Added) = OUT – IN OUT (Output) = total sales and other income IN (Input) = sales expense and other costs (other than employee expenses) HC (Human Capital) = employee expenses incurred	Ratio
	Structural Capital (STVA) = Structural Capital / Value Added Where : SC (Structural Capital) = VA – HC VA = Value Added	
	Physical Capital (VACA) = Value Added / Capital Employed Where : VA = Value Added CE (Capital Employed) = available funds (equity, net income)	
Year	Score 0 = 2015 (period before tax amnesty) Score 1 = 2017 (period after tax amnesty)	Nominal
<b>Dependent Variables</b>		
Tax Avoidance (TAVoid) SE – 02/PJ/2016; and Goh et. al (2016)	Gross Profit Margin (GPM) = -1 x (gross profit / sales) Operating Profit Margin (OPM) = -1 x (operating income / sales) Pre-tax Profit Margin (PPM) = -1 x (net income before tax / sales) Corporate Tax to Turn Over Ratio (CTTOR) = -1 x (income tax / sales) Net Profit Margin (NPM) = -1 x (net income / sales)	Ratio

### 4. STATISTICAL TEST RESULTS AND DISCUSSION

Classic assumption test. Before testing the hypothesis, classical assumption test were performed on the regression model. This study passed the classical assumption test, namely autocorrelation test, multicollinearity test, and heteroscedasticity test. But the normality test in this study had no normal distribution, or in other words, it did not pass the test. However, according to The Central Limit Theorem (Dr. Danardono, MPH), if the number of samples is above

100, then the data can be considered normal. This normality test had an number of 252 samples.

KMO Factor Test Results. The KMO test was conducted to obtain the most significant tax avoidance calculation. The method used in this test was the Kaiser Meyer Olkin Measure of Sampling [25]. The best measurement of intellectual capital was structural capital (STVA) with a value of 0.984, while the measurement of tax avoidance was the Net Profit Margin (NPM) with the largest MSA value of 0.989 as the first rank, and then was followed by the Corporate Tax to Turn Over Ratio (CTTOR) with a value of 0.887 in the second rank. In this study, human capital

(VAHU) and physical capital (VACA) as well as Operating Profit Margin (OPM) and Pre-tax Profit Margin (PPM) could not be used as a measure of intellectual capital and tax avoidance, because in the KMO factor test, the indicator had a value of Measures of Sampling Adequacy (MSA) below 0.5, or in other words, it did not meet the requirements.

Analysis of the Coefficient of Determination (CD). The value of R-Square in this study was 0.001, which means that the study did not pass the CD test, which means that the variation of the independent variables consisting of intellectual capital (STVA) was not able to explain the variations in tax avoidance (NPM, CTTOR).

Hypothesis 1 was not supported by data, so it can be said that there was no effect of intellectual capital variables on tax avoidance. In tax avoidance as the dependent variable, the t-value was 0.621 ( $< t$ -table of 1.671) with a significance value of 0.535 ( $> 0.05$ ). The result of this study supports the previous similar study conducted by [24] in which the intellectual capital (structural capital / STVA) has no influence on tax avoidance.

There were some reasons that might cause that there was no effect of intellectual capital on tax avoidance as this research result. This was because the data in this study was not normal, so the regression test could not be done statistically. This was a very new research. There are still many taxpayers nowadays who do not know the latest trends in tax avoidance. Taxpayers are more likely to conduct tax avoidance in more conventional ways. There are not many researches that discussed the effect of intellectual capital on tax avoidance. The results of this study have proven that there are still many parties who are not aware that intellectual capital plays a role in the process of tax avoidance.

## 5. CONCLUSION

Based on the result of data processing and analysis that have been done, the conclusions as the result of this study are as follows: 1) The best measurement in this study for the intellectual capital variable was structural capital (STVA), while for the tax avoidance was Net Profit Margin (NPM) and then followed by Corporate Tax to Turn Over Ratio (CTTOR). In this study, two indicators were not used in the intellectual capital variable and three indicators in the measurement of tax avoidance. 2) There was no effect of intellectual capital on tax avoidance. The result of this study does not support the previous similar studies conducted by [18], [6] [7], [15], [14], [8], [12], [3], [9], and [2]. However, the result of this study does support the research conducted by [24].

## 6. LIMITATION AND SUGGESTION

Based on the result, the limitations of this study are: 1) Abnormal data, that cause a model of Goodness-of-Fit (GoF) test consisting of CD test ( $R^2$ ) and hypothesis test, did not achieve the expected result; 2) The observation period used

in this study only amounted to one year, namely the year 2015 and 2017, because 2016 was the year of tax amnesty. Based on the conclusions and limitations of this study as described above, the suggestions that can be given for further research are as follows: 1) Expand the population and research samples to other sectors, so the various types of other existing sectors, such as the primary and tertiary sectors, can be known. 2) Expand the research by using other new independent variables, such as audit committee's accounting expertise, largest share ownership, transfer pricing, earnings management, and company size; 3) Extend the research period to more than one year of observation.

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