Value Relevance Using Accounting Information and Market Reaction to Tax Amnesty in Indonesia

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Abstract—On July 2016, the Indonesian Government issued Law No. 11 2016 on Tax Amnesty. Under this regulation, all taxpayers, both individual and corporate taxpayers, have an opportunity to disclose assets and liabilities that were unreported in previous tax periods and pay a redemption fee. Subsequently, the Indonesian Board of Accounting Standards issued Pernyataan Standar Akuntansi Keuangan (PSAK) 70 to specify the accounting treatment of tax amnesty assets and liabilities. Prior research on the value relevance of tax account and disclosure is still limited, especially regarding tax amnesty information. This study aims to examine the value relevance of tax amnesty as accounting information. We use an empirical method with a sample of 142 firms that participate in the tax amnesty program in Indonesia. We find that tax amnesty information on a firm’s financial statement has no significant correlation with cumulative abnormal earnings; however, tax amnesty information indirectly has a significant negative effect on unexpected earnings. The findings confirm that tax amnesty information has a negative signal to the market and suggests that investors perceive the right financial information presented. Our results provide insights into management on accounting policy choice regarding tax amnesty. Besides, the results provide information to standard setters about the impact of a new accounting standard related to tax amnesty.

Keywords—tax amnesty; value relevance; signaling; accounting information.

I. INTRODUCTION

On July 1, 2016, the Indonesian Government issued Law No. 11 2016 regarding Tax Amnesty. Under the law, all taxpayers have the right to participate in tax amnesty by disclosing assets and paying a redemption fee. This applies to both individual taxpayers and companies. Since the plan has been valid, from July 1 to November 24, 2016, a total of 171 companies (31.84%) of the 537 companies listed on the Indonesia Stock Exchange have participated in the tax amnesty program [1]. Responding to the need for guidelines for the accounting treatment for tax amnesty programs, the Indonesian Board of Accounting Standards or the Dewan Standar Akuntansi Keuangan (DSAK) issued new financial accounting standards. PSAK 70 on Accounting for Assets and Liabilities of Tax Amnesty. PSAK 70 prescribes the recognition, presentation, measurement, and disclosure of assets and liabilities for tax amnesty.

Accounting information should be relevant to the users of financial statements; it should be valuable in assisting the users in their decision-making. This requirement has evolved into the concept of value relevance. The value relevance of accounting information, characterized by the quality of accounting information, illustrates the usefulness of financial statement information to investors in the capital market [2]. Identifying the assets and liabilities involved in tax amnesty provides additional information to the users of financial statements. In this study, the examination of value relevance uses a linear information model and correlates accounting information with the cumulative abnormal return, as used in [3].

The introduction of tax amnesty law is received positively in the market because funds from tax amnesty increase government budgets, boost the potential of domestic consumption and encourage the growth of industry [4]. In contrast, a prior study conducted by Bayer et al. [5] found that tax amnesty provides an opportunity for companies to avoid future claims and punishments related to unrecognized assets. Tax amnesty also signals the weakness of law enforcement or government efforts to increase revenue in the short term by ignoring long-term compliance [6]. There is mixed evidence as to whether a tax amnesty program has a positive or negative signal to the market.

Study on the value relevance of tax amnesty as accounting information is still limited. Nia, et al. [7] state that tax amnesty has no significant effect on a bank’s return in the collection of tax amnesty funds. Cahyono and Fitradiansyah [8] find that there is an abnormal return in the third period of tax amnesty. Since the amnesty program has been in place in Indonesia, the Jakarta Composite Index (JCI) increased by 2.87% on a monthly basis and grew by 15.32% in 2016 [9]. Because there is still little evidence to suggest that tax amnesty programs have a significant effect on returns, and due to the contradicting finding in prior research, this study intends to fill the gap.
by providing empirical evidence of value relevance of tax amnesty.

This study aims to examine the relevance of the value of tax amnesty information as accounting information. The research questions are as follows: (1) does the market react to tax amnesty information? And (2) does the market have a lower response to earnings by companies that participate in tax amnesty?

Our study uses a quantitative method based on secondary data from 2016 financial statements. We used purposive sampling to identify firms that participated in tax amnesty from July 2016 to March 2017. To collect tax amnesty assets and liability data, the research instrument is documentation on tax amnesty found in the note sections of the financial statement. Supplementary data is obtained from the Thomson Reuters database. The final sample contains 142 firm observations.

The remainder of the paper is organized as follows. Section 2 contains a literature review of tax amnesty research and signaling theory. Section 3 discusses the methodology of the research. Section 4 shows the results of the tests and Section 5 presents the conclusions of the research.

II. LITERATURE REVIEW

A. Overview of the Tax Amnesty Law and PSAK 70

The Indonesian government released Law No. 11 2016 regarding Tax Amnesty that outlines the waiver of taxes due, the administration of sanctions, and the tax crime sanctions that can be granted by paying redemption fees [10]. All taxpayers are eligible for tax amnesty, including personal and corporate taxpayers, except for those whose investigation cases have been declared complete by the Prosecutor; those who are undergoing court proceedings; or those who are undergoing criminal punishment for a tax crime [10]. Tax amnesty is calculated by the total declared assets minus liabilities inside or outside of Indonesia. The Indonesian board of accounting standards responded to the law by issuing the financial accounting standard No. 70 (PSAK 70) to regulate the accounting treatment of tax amnesty assets and liabilities.

As a consequence, a firm’s information on its tax amnesty assets and liabilities are presented and disclosed in its financial reports. This research uses the concept of value relevance to examine the value of tax amnesty information for financial statement users. Value relevance is the ability of information disclosed by financial statements to capture and summarize firm value [11]. This concept will be associated with a signaling theory that can explain how the public captures signals from tax amnesty information.

B. Signaling Theory and Tax Amnesty

The signalling theory started from the phenomenon of asymmetry of information about the quality of a product between the seller and buyer [12]. Arklow said that a seller could reduce the impact of adverse selection by giving a signal of information about the quality of the product. This theory was then developed by Ross [13], who says that management has more information and will convey that information to the public by giving a particular signal. A company reviews its positive and negative information and then decides whether the information will be publicly available [14]. According to Connelly et al. [14], the key to signaling theory is how outsiders receive signals and then make decisions based on the information from those signals.

The implementation of a tax amnesty program can offer both positive and negative signals to the public. Tax amnesty is considered a signal that a government has a high discount rate due to the failure of its tax collection procedures [15]. Tax amnesty also can signal weak law enforcement or a government’s efforts to increase its revenue in the short term by ignoring long-term compliance [6]. According to Bayer et al. [5], taxpayers are aware of the adverse future outcome from declaring tax amnesty. However, tax amnesty has a positive signal that captures a government's determination to strengthening its future law enforcement [6, 16]. Tax amnesty funds increase a government’s budget, leading to increased domestic consumption and subsequently, to increased industrial growth [4].

This research focuses on the signal of tax amnesty information—the reaction of users of financial statements to amnesty tax information presented in the financial statements. Information received, such as the date of the Statement of Tax Amnesty (known as Surat Keterangan Pengampunan Pajak) and the amount recognized as tax amnesty assets and liabilities.

Research on tax amnesty in Indonesia mostly examines the market reaction to tax amnesty information and seeks to determine the signal of tax amnesty information [7, 8, 17]. Prior results are contradictory, however: Nia et al. (2017) find that tax amnesty has no significant effect on the perception of the returns of banks appointed to manage tax amnesty funds at the beginning stages. This may be based on the limited examination period when the policy was first introduced. However, Cahyono and Fitradiiansyah [8] and Agung et al. [17] find abnormal return results in the periods before and after the enactment of the law on tax amnesty. Their results show that the cumulative abnormal returns before the introduction of tax amnesty policies are higher than after the tax amnesty policies are implemented. This implies that the market reacts positively and expects that an amnesty tax policy will increase government revenue and support economic growth.

C. Hypotheses

The signal of tax amnesty asset and liability

The tax amnesty law prescribes that taxpayers declare the value of their assets, liabilities and redemption fees in Statement of Assets (known as Surat Pernyataan Harta). The redemption fee is equal to the redemption rate multiplied by the value of the net asset (assets minus liability). Companies that participate in the tax amnesty program record their tax amnesty amount using PSAK 70. Under PSAK 70, a company records its tax amnesty assets and liabilities in a Statement of Tax Amnesty. PSAK 70 also requires firms to disclose those amounts in the notes to their financial statements. Because the study of the value relevance of tax amnesty is still limited, we use the deferred tax approach as a basis for developing hypotheses. We use accounting for deferred taxes because of the differences in accounting and tax treatment impact the
presentation of a firm’s deferred tax assets or deferred tax liabilities. It is similar to tax amnesty in that there is a difference in the recording of an accounting asset that has not been recognized in a previous tax period, creating tax amnesty assets and liabilities.

Research on deferred taxes associated with signaling theory is divided into two camps: one that declares deferred tax is a positive signal and the other that sees it as a negative signal. There is a positive association between deferred tax assets and firm value, thereby causing unrecognized deferred tax assets to provide a negative signal about future profitability [18]. Deferred tax assets, however, have a positive correlation with firm creditworthiness [19] and firmly expected future cash flows [20]. Besides, disclosing net deferred tax liability on financial statement increases the value relevance of the deferred tax amount [21]. On the other hand, net deferred taxes are negatively associated with returns [20]. The arguments above suggest that a deferred tax asset has a positive signal, but net deferred tax is negatively associated with returns.

Generally, tax amnesty has a negative signal to the public. Firms with higher amounts of tax amnesty assets reduce their persistence of earnings, because the higher the value of their net tax amnesty, the higher the redemption fee that is paid. Redemption fees are recognized as a tax expense in the current year, reducing declared earnings. Furthermore, the reduced earnings of the current year lead to lower earnings credibility and market response to unexpected earnings. We state the hypothesis that:

1) H1: Earnings response coefficients are negatively associated with tax amnesty net assets and liabilities

a) Accounting treatment of tax amnesty

Based on PSAK 70, companies that participate in the tax amnesty program may choose the accounting treatment for tax amnesty assets and liabilities. The first option is accounting treatment under the existing PSAK, while the second option follows the provisions of PSAK 70. The difference between the two options is that in the first option, tax amnesty assets and liabilities are considered errors so that its implementation follows PSAK 25 or is applied retrospectively; whereas, in the second option, tax amnesty assets and liabilities are applied prospectively.

Both of these options represent the choices taken by management, and these options will impact presentation and disclosure in the financial statements. The declaration of assets in tax amnesty discloses assets or liabilities that companies have not reported in the previous tax period; a company makes corrections on the record of the past period. Accordingly, the correction of the previous accounting records indicates that the company acknowledged the error and corrected its accounting information of the previous period. This is in line with the concept of retrospective treatment. In this study, we use such restatement accounting information to develop hypotheses because the effect is similar to the retrospective treatment where a company adjusts of a previous financial report. Study on restatement financial reports conducted by Gleason, Jenkins, and Johnson [22] that find accounting restatement cause investors to reassess the financial statement information previously released. On the other hand, a prospective treatment presents the information of tax amnesty assets and liabilities as if it were a new acquisition in the current year; therefore, companies record them in the current financial statement.

In the context of tax amnesty, investors expect a company to correct the earnings of the previous year by retrospective treatment. Retrospective treatment impacts the adjustment of a company's retained earnings of the previous year, which better reflects that the company admits to the error of the previous period. Contrary to Gleason et al. [22], we expect that the market perceives firms that chose prospective treatment as ignoring past mistakes rather than correcting previously disclosed information. This perception will lead investors to correct their determination of earnings quality and will bring a weaker response to the unexpected earnings. Therefore, the market will respond negatively if a firm chooses prospective accounting. Besides, we suspect that companies will choose the second option for practical reasons. Based on the argument above, we hypothesize that:

2) H2: Earnings response coefficients are negatively associated with the prospective treatment of tax amnesty asset and liability.

a) Tax amnesty disclosure

Under PSAK 70, an entity is required to disclose information relating to tax amnesty assets and liabilities. The required disclosures are (1) the date of the Statement of Tax Amnesty and (2) the amount of tax amnesty assets and liabilities. Disclosure is made to clarify the information on tax amnesty sought by the company.

Study on tax disclosures conducted by Lenter, Slemrod, and Shackelford [23] that find that tax disclosures increase transparency, improving the tax system and reducing taxes. Robinson and Schmidt [24] find that low-quality disclosures increase proprietary costs. Huesecken and Overesch [25] found a significant positive cumulative abnormal return for firms that participated in tax disclosure avoidance, thus indicating that markets reward tax disclosure avoidance. Companies that participate in a tax amnesty program disclose their tax amnesty information in more detail. The hypothesis regarding the signal from disclosure of tax amnesty is similar to that of the disclosure of tax amnesty. The higher the tax amnesty disclosure, the more the public distrusts a company. A firm with greater disclosure provides more detailed information about tax amnesty, leading to weaker market response to unexpected earnings. To test this, we present the following hypothesis:

3) H3: Earnings response coefficients are negatively associated with tax amnesty disclosure

III. RESEARCH METHODOLOGY

As mentioned in the previous section, scholars offer contrary results whether tax amnesty has a significant effect on returns or not. This study uses the concept of value relevance and signalling theory to examine empirically the value relevance of tax amnesty information disclose on the financial statement. We test the market reaction using the cumulative abnormal return (CAR) and tax amnesty information separately. Tax amnesty information includes the amount of net tax amnesty from assets and liabilities, the accounting treatment for the
amnesty amount and the firm’s disclosure of tax amnesty. A significant influence of tax amnesty information on CAR would indicate that tax amnesty information has value relevance for the investor. The market response confirms the signal to tax amnesty information. Our research framework is as follows (Fig. 1):

![Fig. 1. Theoretical framework](image)

A. Research Method

This study uses a quantitative method employing secondary data. Our research instrument is company financial statements published on the Indonesia Stock Exchange website, regarding the amount of tax amnesty, accounting treatment and disclosure of tax amnesty information. The list of firms that participated in the tax amnesty program was carried out in a preliminary search of 2016 financial statements using the keyword "tax amnesty" or "pengampunan pajak". If there is a section on disclosure of tax amnesty in a financial statement, then the company is involved in the tax amnesty program. This study does not distinguish parent firm and subsidiary tax amnesty because consolidated financial statements are used. Stock price data, earnings, and firm characteristic data are obtained from the Thomson Reuters database.

Our sample is all companies listed on Indonesia Stock Exchange in 2016 that participate in the tax amnesty program. Sample selection was performed using a purposive sampling method with the following criteria.

1) The firm listed on the Indonesia Stock Exchange on 2016
2) The firm participated in tax amnesty between July 2016 to March 2017
3) The company has complete data of tax amnesty disclosure

This study uses only data from 2016 because the tax amnesty program was introduced in 2016. Table I outlines the sample selection criteria.

B. Data Analysis

This study uses linear regression analysis processed by Stata 13. We examine whether the tax amnesty information has value relevance for investors through an indirect effect of tax amnesty moderating the relationship of unexpected earnings with CAR. The cross-section equation model (1), based on the model by Dechow et al., [3] is as follows:

\[
CAR = \alpha + \beta_1 UE_i + \beta_2 TA_i + \beta_3 PROS_i + \beta_4 DISCTA_i + \\
\beta_5 UE_i \times TA_i + \beta_6 UE_i \times PROS_i + \beta_7 UE_i \times DISCTA_i + \\
\beta_8 SIZE + \beta_9 ROA + \beta_10 MBV + \epsilon
\]  

(1)

According to H1, H2, and H3, in Equation 1, \(\beta_5\), \(\beta_6\), and \(\beta_7\) are expected to be negative, respectively.

The definitions of the variables are provided in Table II.

<table>
<thead>
<tr>
<th>Identification</th>
<th>Number of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies listed on the Indonesia Stock Exchange in 2016</td>
<td>530</td>
</tr>
<tr>
<td>Fewer firms not participating in the tax amnesty program</td>
<td>(352)</td>
</tr>
<tr>
<td>Equal those that participated in the tax amnesty program</td>
<td>173</td>
</tr>
<tr>
<td>Less incomplete tax amnesty data disclosures</td>
<td>(31)</td>
</tr>
<tr>
<td>Total number of firm observation</td>
<td>142</td>
</tr>
</tbody>
</table>
IV. RESULTS

A. Descriptive Statistics

Table III presents a summary of the descriptive statistics for all of the variables. The average cumulative abnormal return (CAR) after the financial reporting period published decreased by 2%. The highest value of tax amnesty reported is Rp303 billion, and the lowest is Rp30 million.

Regarding the dummy variable, 95.77% of the companies (136 out of 142) chose the prospective option for the accounting treatment of tax amnesty. Also, 61.27% of the companies (87 of 142) disclose tax amnesty information following PSAK 70. This data shows that compliance with disclosure requirements is not significantly higher.

B. Correlation Analysis

Table IV shows the correlation matrix between the variables. To avoid a multicollinearity problem, the correlation coefficient between two variables should be below 0.80. All of the variable pairs have a correlation coefficient below 0.8, indicating there is no problem of multi-collinearity.
C. Empirical Results

Table V shows the results of estimating regarding hypotheses H1, H2, and H3. Hypothesis 1 predicts that the market reaction to unexpected earnings is higher for firms with a higher net of tax amnesty asset and liability. The test of the variables for Hypothesis 1 looks at the interaction of unexpected earnings (UE) and TA, which is positive and significant (p < 0.05), rejecting Hypothesis 1. This indicates that markets react more strongly to earnings surprises of firms with higher net tax amnesty assets and liabilities.

| Model: CAR = \alpha + \beta_1UE + \beta_2TA + \beta_3PROS + \beta_4DISCTA + \beta_5UE\times TA + \beta_6UE\times PROS + \beta_7UE\times DISCTA + Size + ROA + MBV + \epsilon |
|---|---|---|---|
| Variable | Exp. sign | Coefficient | Prob. |
| UE | .0004805 | 0.006*** | |
| TA | −.000011 | 0.940 | |
| PROS | −.0363753 | 0.247 | |
| DISCTA | −.0358485 | 0.513 | |
| UE\times TA | − .0001157 | 0.046** | |
| UE\times PROS | −.002082 | 0.041** | |
| UE\times DISCTA | −.0005115 | 0.049** | |
| SIZE | −.0001296 | 0.495 | |
| ROA | −.0016473 | 0.211 | |
| MBV | .0051517 | 0.273 | |
| Constant | .1419399 | 0.373 | |

Notes: CAR (cumulative abnormal return): the total difference between firm actual return and market return for two months (April-May) in 2017 after the 2016 financial statements are published; UE (unexpected earnings): the difference of earnings per share in 2016 and 2015; TA (tax amnesty): ln of total asset minus liability of tax amnesty or ln of total additional paid-in capital from tax amnesty; PROS (prospective): a dummy variable set to 1 if the firm selects the prospective option, 0 if retrospective; DISCTA (Disclosure tax amnesty): % of disclosure items; SIZE: ln of total assets; ROA: income before extraordinary items divided by total assets; MBV: ratio of market value at fiscal year-end to book value of common equity.

***significant at 1% level; **significant at 5% level; *significant at 10% level.

The third result shows that investor response to unexpected earnings is lower for firms with higher disclosure of tax amnesty. In contrast to Huesecken and Oversch [25], we find investors respond negatively to the tax amnesty disclosure of unexpected earnings. Investors do not trust the accounting records of firms that participate in the tax amnesty program. The more a company reveals tax amnesty information, the higher the investor's distrust of the company and the greater the investor's perception of the credibility of the lower current earnings.

Overall, the results reveal that investors respond negatively to unexpected earnings that contain tax amnesty information. These findings show that tax amnesty information has a negative signal to investors, which is consistent with Posner [15] and DasGupta and Mookherjee [6], who stated that tax amnesty is considered a negative signal, indicating weak law enforcement and a government’s failure in tax collection procedures. Furthermore, tax amnesty information has value relevance to investor decisions, while prior research does not find a significant effect of tax amnesty [7].
VI. CONCLUSION

This paper examined the value relevance of tax amnesty information as accounting information. Companies in Indonesia that participated in the first years of the new tax amnesty program disclosed their prior years’ tax amnesty assets and liabilities and then paid some redemption fees. This event was recorded and presented on the financial statement. We used three indicators to measure tax amnesty information: the amount of tax amnesty, the choice of tax amnesty treatment for accounting and the disclosure of tax amnesty on financial statements.

The results showed that the market did not respond the tax amnesty information directly but indirectly responded through its reaction to unexpected earnings. This confirms that tax amnesty information has a value relevance and sends a negative signal to investors. Investors make adjustments to correct for unexpected earnings resulting from tax amnesty information.

Our study provides some insight for the DSAK, revealing an impact of the accounting treatment selected for tax amnesty assets and liabilities. Companies should use a retrospective treatment to correct accounting information in previous periods instead of a prospective treatment that recognizes errors in the recording of previously unrecognized assets and liabilities. Besides, the research value relevance of accounting information is helpful to companies because it provides useful information to the users of the financial statement.

Our study has some limitations. First, we only examined the value relevance of tax amnesty in Indonesia, so the results may not be generalized to other countries. Thus, we suggest that further research expand tax amnesty samples to include other countries. This method may use other tax amnesty information as a variable to test the value relevance of tax amnesty, as well. Second, we examined the value relevance of tax amnesty information after financial statements were published. Future research can examine the value relevance of tax amnesty information in the three phases of the tax amnesty period in Indonesia and examine difference-in-difference analyses of the market reaction at the difference stages. Third, this study used signalling theory to explain the value relevance of tax amnesty information; further studies can explore the information of tax amnesty by using other theories, such as a behavioral theory. Finally, our measurement of tax amnesty information is made by the accounting information related to the disclosure of tax amnesty information, and we have not yet found a value relevance study on tax amnesty using the same measurements.

REFERENCES