

# The manager's decision in acknowledging and disclosing environmental liability: A Behavioral Model

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## ABSTRACT

*This study analyzes why managers accrue and disclose environmental liability, which involves managers' discretions. Using the framework of the Theory of Planned Behavior (Ajzen 1991), this research hypothesizes that a manager's intention to accrue and disclose environmental liability is influenced by: (1) attitudes (2) subjective norms, and (3) perceived behavioral control of the manager towards accruing and disclosing such information. The data was collected through a survey, employing a questionnaire modified from Weidman (2002). Responses from 50 corporate managers in Lampung Province were analyzed using structural equation model software package SmartPLS. This study finds that a manager's attitude towards environmental liability is positively associated with his/her decision to accrue and disclose environmental liability. However, there is no evidence that subjective norms and behavioral control are associated with such a decision. An additional test using attitude as a moderating variable provides evidence that both subjective norms and perceived control behavior are positively associated with the attitude towards environmental liability.*

## ABSTRAK

*Penelitian ini menganalisis faktor-faktor yang mempengaruhi manajer dalam mengakui dan mengungkapkan kewajiban lingkungan. Dengan menggunakan kerangka piker dari Theory of Planned Behaviour (Ajzen 1991), penelitian ini menduga bahwa niat manajer untuk mengakui dan mengungkapkan kewajiban lingkungan dipengaruhi oleh: (1) sikap (2) norma subyektif, dan (3) persepsian kendali perilaku dari seorang manajer terhadap keputusan tersebut. Data penelitian ini diperoleh melalui survei dengan menggunakan kuesioner yang dimodifikasi dari Weidman (2002). Jawaban atas kuesioner dari 50 manajer perusahaan di Propinsi Lampung dianalisis dengan alat uji structural equation model (SEM) dengan perangkat lunak SmartPLS. Hasil yang diperoleh menunjukkan bahwa sikap manajer terhadap pengakuan dan pengungkapan kewajiban lingkungan berhubungan positif dengan keputusannya. Tidak ditemukan bukti bahwa norma subyektif dan persepsian kendali perilaku mempengaruhi keputusan manajer untuk mengakui dan mengungkapkan kewajiban lingkungan. Meskipun demikian, ketika sikap manajer digunakan sebagai variabel pemoderasi, penelitian ini membuktikan bahwa norma subyektif dan persepsian kendali perilaku berhubungan positif dengan sikap manajer terhadap pengakuan dan pengungkapan kewajiban lingkungan.*

## 1. INTRODUCTION

This study tested whether attitudes, subjective norms, and perceived behavioral control of a manager affect the decision to recognize and disclose the environmental obligations. Public demands that the company go hand in hand in the activities and

programs of environmental sustainability. Such demand is due to the public increasing awareness of the importance of protecting the environment. Environmental case affects several companies in Indonesia, as in the case of pollution such as the waste plant by PT. Inti Indo Rayon in Sumatra

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Utara and the mud by PT. Lapindo Brantas. They are some real examples in this issue (Revianur 2014, Patnistik 2013, Kristiono 2006). In this case, the company cannot avoid obligation or debt caused by the company's environmental impact on their surrounding community.

The nominal degree of obligations has risen in the cases which can be in the billions, even hundreds of billions of rupiah. Such figure is a hugely apparent with its significantly impact on the company's performance. This creates corporate accountability to stakeholders and to protect investors and creditors from losses increased by the activity of companies that have a negative impact on the environment. The companies are required to disclose information about it.

Financial Accounting Standards (SFAS) No. 57 states that contingent liabilities should be recognized if they meet the conditions stipulated, namely: (1) the entity has a present obligation as a result of past events; (2) likely resulted in the settlement of an outflow of resources containing economic benefits; and (3) a reliable estimate of the degree of the obligation can be made. In this obligation, there is an obligation arising from a past event that has legal consequences (the Indonesian Accountants Association 2012).

Past studies indicate that the reporting of environmental information by companies in Indonesia is still very low, although the number increased from year to year (Sarumpaet 2009, Djajadikerta 2012). That is the fact of low level of disclosure of information about the environment by companies in many countries of the world, even the multinational companies (Fatima et al. 2015, Fontana et al. 2015, Dobler et al. 2015, Fazzini et al. 2016). Environmental information is information on activities or programs related companies or the environmental impact of the companies on the surrounding environment. Such information can be expressed in different media types, such as corporate websites, newspapers, magazines, and through the company's annual report.

This study focuses on the factors that motivate managers to recognize and disclose environmental information, particularly information on environmental liabilities, in the financial statements, the attitude, subjective norms, and perceived behavioral control. This obligation may arise from events that happened in the past, when the activities of the company's impact on the environment and raises the potential costs to society that must be accounted by the company. It is often in the form of contingent environmental liabilities, ie potential losses

is still uncertain, although it can be estimated probabilities.

Due to the uncertainty, the disclosure of contingent liabilities environment can cause doubts in the presentation and it is possible for the company not to strive to disclose it in the financial statements. This is intended to avoid bad perception of the investors or further demands from the public.

For example, Lampung is the province that has that have ethnic and cultural diversity among the various provinces in Indonesia (Central Bureau of Statistics 2014). The researchers assume that, by using managers for the respondents in Lampung province, this study may represent the condition of managers in Indonesia, in terms of cultural and ethnic diversity. Therefore, it can reduce the bias.

This research is expected to provide empirical evidence about the decision-making on environmental liability by managers when examining the influence of attitudes, subjective norms, and perceived behavioral control toward personal decision a decision maker. By using the survey method, this study examines the factors that influence the decision of the managers in the decision to admit and disclose environmental liabilities in the annual report of the company he leads. In particular, the research question posed is as follows:

"Do the managers' attitudes, subjective norms, and perceived behavioral control in making decisions affect the decision to admit and disclose environmental liabilities in the financial statements?"

Studies on motivation of environmental disclosure have been done in the literatures (Gargouri, Shabou, and Francoeur 2010, Sarumpaet 2009, Al-Tuwaijri 2003). Though, in general, the previous studies used archival method approach to research (secondary data), they still used regression models for the testing model. Such research generally describes the phenomenon exists through the numbers in the financial statements and the characteristics of the company. Unlike the previous studies, this study attempts to answer the same question, with a different approaches, namely to examine the factors that influence decision-making by managers in recognizing and expressing environmental obligations.

There is some contribution expected from the study, both from theoretical and methodological approaches here. One of the contributions of this study is to add empirical evidence in the use of behavioral theory to explain the manager's decision on the recognition and environmental obligations, namely by adopting Theory of Planned Behavior

(Ajzen 1991). So far, only one article by the American context that has used this theory to explain the phenomenon (Weidman et al. 2010). The use Indonesia as a developing country context presents new evidence from a different contexts to this phenomenon. Differences in this context also made another contribution in the form of a modification of case scenarios and questions used in the questionnaire, as well as described in the methodology section.

Other significant contribution was the use of survey methods in examining the phenomenon that has so far been done in previous studies. Researchers used the method with the assumption that the survey had a high level of external validity, so as to reduce the risk of bias that exist in the experimental method. In addition, the survey methods can also enrich the existing literature on the issue of environmental liability as far similar studies using the experimental method (Weidman et al. 2010).

Previous studies in the field of environmental disclosure in general use thinking of Agency Theory (Jensen and Meckling 1976), Stakeholder Theory (O'Dwyer 2002), Voluntary Disclosure Theory (Verrechia 1983), or the Political Costs Theory (Watts and Zimmerman 1986). These theories emphasize the importance of the role of outsiders (not a manager), that stakeholders in influencing the company's decision on disclosure of environmental information. The use of behavioral theory by using the manager as a unit of analysis in this study provides a new understanding by looking at the internal factors such as personality, moral values, and control over external pressures experienced by the manager before taking decisions in environmental disclosure.

Through an understanding of the factors that influence the decision of the manager over environmental liabilities, expected standard setters, and accounting regulations can anticipate the consequences of changes in regulations and accounting standards relating to the disclosure of environmental liabilities. Standard setter, for example, needs to know beforehand the subjective norms developed in the community before deciding whether the standards or new rules on disclosure of environmental information is well received by managers.

Likewise, investors and analysts can gain a better understanding of the diversity of manager motives and incentives in reporting environmental information. If during the previous findings of external factors as the motive - such as political costs, stakeholder demands, and incentives legitimacy-through this research, they can know that the manager himself has personal encouragement in mak-

ing the decision. This can help investors, particularly those who care about environmental sustainability efforts, in selecting stocks of companies that have managers with environmental care.

## **2. THEORETICAL FRAMEWORK AND HYPOTHESES**

### **Literature Review**

Studies on environmental information disclosure have been done since the 1980s, when researchers began to associate the issue of environmental disclosure with the environmental performance (Ingram and Frazier 1980, 1980 Wiseman, Wiseman 1982). Similar research has been spread more widely in terms of related issues and methodology, for example, research trying to find the link between the disclosure of environmental information and corporate governance and earnings management (Gargouri et al. 2010). The issue of environmental information disclosure is also often associated with different variables of company characteristics such as size, financial performance, market performance, and company's debts (e.g. in Gao et al. 2005, Mobus 2005, Clarkson et al. 2006, etc.). However, not many of them associated with the disclosure of environmental information of internal factors of decision makers. It is part of the manager who decides whether particular environmental information such as environmental liabilities is disclosed or not.

The previous studies that addresses issues of environmental disclosure in general using Agency Theory (Jensen and Meckling 1976), Stakeholder Theory (O'Dwyer 2002), or the Political Costs Theory (Watts and Zimmerman 1986). It used Agency Theory arguing that deciding the environmental information disclosure is affected by the relationship between agents (companies) and the principal (investors or owners of capital), therefore the issue of information asymmetry becomes important in the framework of this theory (Wiseman 1982, Deegan and Rankin 1996, Barth, McNichols, and Wilson 1997).

Such research uses the political cost with the assumption that the environmental information disclosure is driven by public pressure and generally relate characteristics of the company that is a proxy for the amount of political cost to the company such as the size and type of industry (Blacconiere and Patten 1994, Walden 1997). The arguments that are used within the framework of stakeholder theory in general is that the company tried to meet the demands of stakeholder so can enhance the good image by disclosing environmental information (Deegan and Gordon 1996, Neu et al. 1998,

Gray et al. 2001, Tilt 2001).

Studies with the theoretical framework above generally use an external perspective, the role of stakeholders in influencing the company's decision in the disclosure of environmental information. The incentive framework that addresses environmental disclosure by the decision-makers within the company's own internal environment. Up to the present, there is only one study on this topic (Weidman et al. 2010). Within this framework, the assumption that the factor used managerial behavior and moral values affects the decision on disclosure of environmental information.

### **Hypothesis Development**

#### **Attitudes towards the Recognition and Disclosure of Environmental Liabilities**

The theory of Planned Behavior (TPB) is a continuation of the Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1980, Fishbein and Ajzen 1975). TRA tries to explain the individual's background when performing an action. According to this theory a person's actions are based on rational thinking. TRA stated that the behaviors of open (overt behaviors) are the result of intentions and behavioral intentions determined by the attitudes against the norms of behavior and subjective norms.

TPB recognizes a person's behavior that can not always be fully controlled by the perpetrator. The occurrence of the behavior can be due to the limitations that may exist internally (e.g. due to a lack of skills or knowledge of a person) or externally (e.g. due to lack of resources, opportunities or cooperation from other parties). To accommodate the activities under conditions of the perpetrator does not feel in control of the behavior. In addition, TPB introduces the additional constructs as antecedents of the behavioral intention, namely perceived behavioral control. This theory states that the individual's intention to perform certain behaviors would be higher if he perceives that he has control over the behavior (Ajzen 1991).

TPB and TRA assume that someone's attitude that liked or disliked a particular behavior is the result of intention to behave or not (Ajzen 1991, Fishbein and Ajzen 1975). Thus, an attitude is a hypothetical construct that causes a person to behave in certain ways. Attitude is the best predictor of intention or the intention when the attitude is directly in accordance with the target behavior intention (Fishbein and Ajzen 1975). Various studies agree that influence attitudes in determining the intention to perform certain behaviors (Shep-

perd et al. 1988). By measuring the attitudes of managers to the recognition and disclosure of environmental liabilities, this study hypothesized as follows:

Ha.1: the more positive the manager's attitude to the recognition and disclosure of environmental liabilities, the stronger the intention to recognize and disclose environmental obligations.

#### **Subjective Norms towards the Recognition and Disclosure of Environmental Liabilities**

Both TRA and TPB argue that social pressure to perform certain behavior can significantly affect the behavioral intention and social pressure. This is called subjective norms. Subjective norm is usually measured by asking respondents how important they approve or disapprove others to their behavior. They are asked how they are usually concerned with the other views.

Theory of Planned Behavior (Ajzen 1991) states that the moral intensity has affected the subjective norm construct. Thus, it is expected that the subjective norm were lifted up by the importance of others' views that are perceived by respondents. It also affects the intention to recognize and disclose environmental obligations. This leads to the following hypothesis.

Ha2: The higher the subjective norms towards the recognition and disclosure of environmental liabilities, the higher the manager's intention to recognize and express it.

#### **Perception of Control Behavior over the Decision to Recognize and Disclose Environmental Liabilities (Self-Efficacy)**

Ajzen (1991) stated that the perception of control behavior is consistent with the concept of self-efficacy. Bandura (1997) concerned the perception of how well a person can execute certain actions. Several studies support the notion that a person's belief that he master a situation (self-efficacy) affects the intention, beyond the influence of attitude and subjective norm. (Chang 1998, Ajzen and Madden 1986). Chang (1998) noted that without the perception of the ability to do the obligations of an action, the intention to carry it out can be gone. Thus, the higher the ability of self-assurance manager, the more likely he does an action.

HA3: The higher the manager has perceived behavioral control in recognizing and expressing environmental liabilities, the higher his intention to have the recognition and disclosure of environmental liabilities.

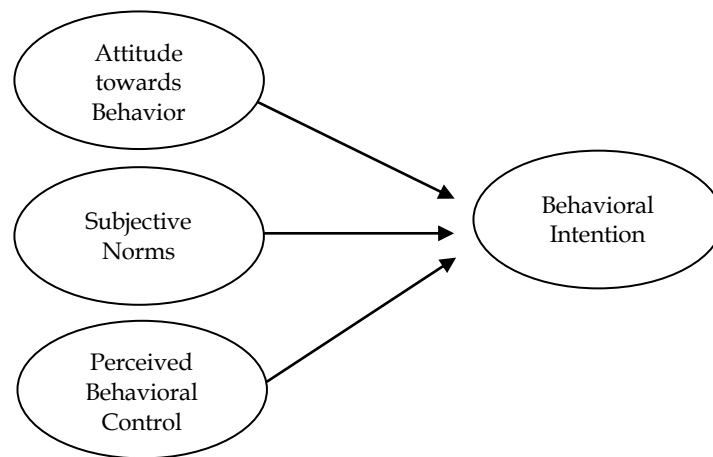


Figure 1  
Research Model Using Theory of Planned Behavior(Ajzen 1991)

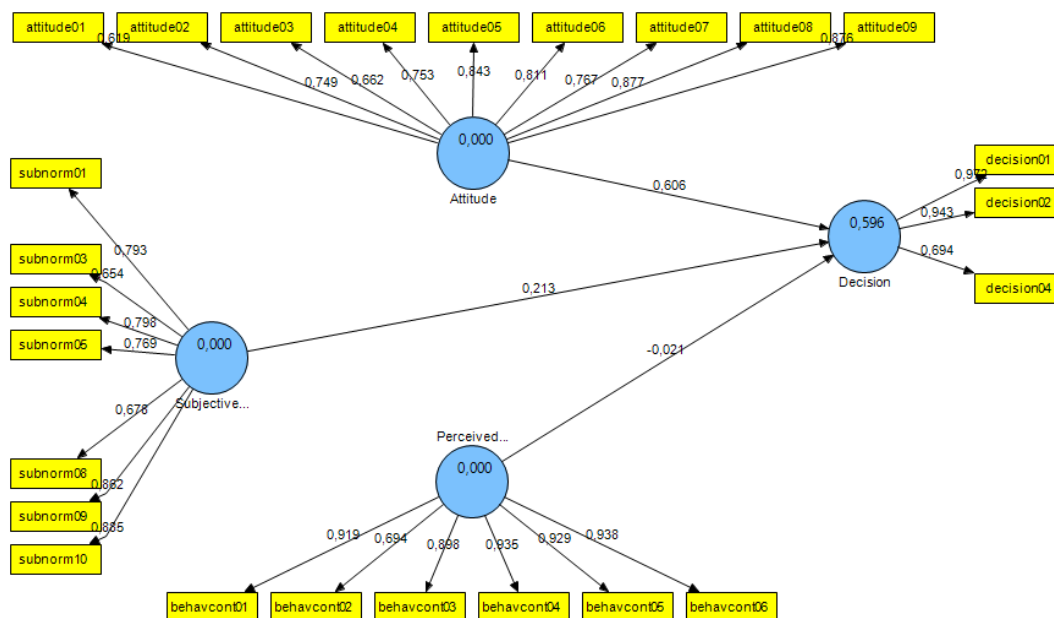


Figure 2  
Results Using PLS Algorithm

### 3. RESEARCH METHOD

#### Research Model and Its Instruments

The framework for developing the hypothesis is based on the Theory of Planned Behavior (Ajzen 1991). This can be drawn in Figure 1, namely the individual's behavioral intention is influenced by three factors, namely: the attitude toward the behavior, subjective norms, and perceived behavioral control. The third factor is the dimension of behavioral intention and then related to the research instrument to measure the parameters of each dimension.

This study used survey methods to answer the research question or research purposes. By using

this method, the researchers try to examine the factors that affect the manager's intention to behave, i.e. in deciding the recognition and disclosure of environmental liabilities.

The questionnaire is based on the Likert scale (1-7) prepared by adopting and modifying it as used in previous studies (Weidman 2002). Although modifications were conducted in terms of use cases, the framework is still the same as based on the Theory of Planned Behavior, by including the intention to take a decision as the dependent variable and three independent variables, namely: (1) the attitude, (2) subjective norms, (3) perceived behavioral control. The questionnaire is hypothet-

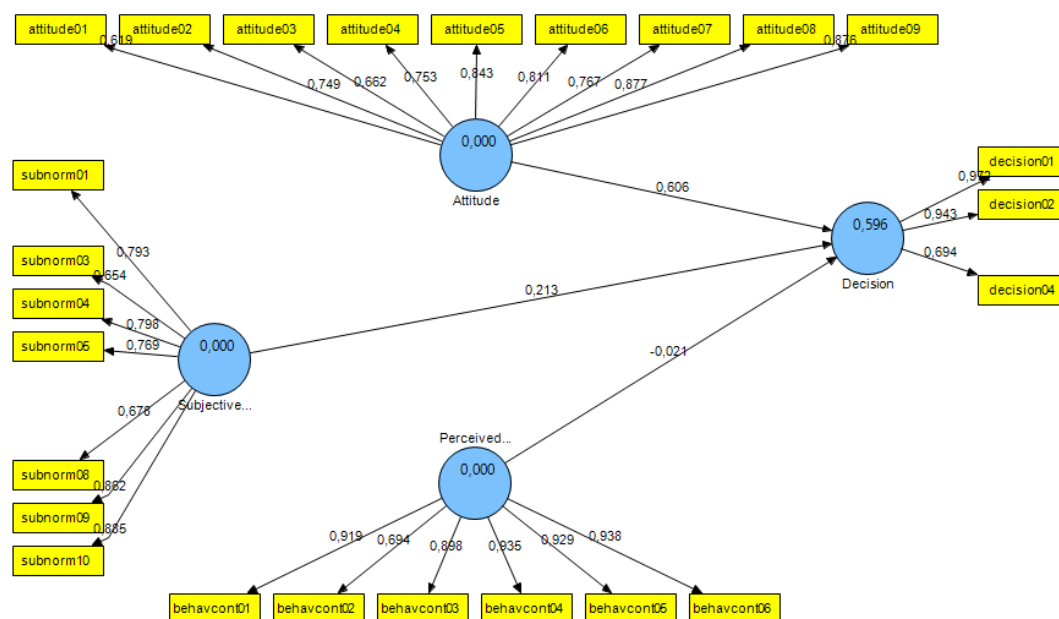


Figure 3  
Results Using Bootstrapping

Table 1  
Operational Variables

Notation	Variable Names	Definition
decision	Decision	The manager's intention to disclose or environmental responsibilities
attitude	Attitude	The Manager's attitude towards disclosure and approval of environmental responsibilities
subnorm	Subjective Norms	Subjective Norms by the Managers related to the disclosure and approval of the environmental responsibilities
behavcont	Perception of Behavioral Control	The Manager's perception towards his behavioral control in approving and disclosing the environmental responsibilities

Note: Likert-Scale is used for all Variables (7 points).

ical case, which describes potential environmental liabilities, followed by questions to measure the variables. The case represents a scenario from the financial managers' perspective and provides information, describing the strength to support and oppose the disclosure of contingent liabilities.

The questionnaire was prepared based on the instruments used Weidman (2002) for the design of the study with experimental method modified for this study. Major modifications done in the case provided in the questionnaire by adjusting the conditions that exist in Indonesia. Weidman (2002) using hypothetical cases, which include cases of environmental pollution by the company, caused by leakage of oil storage tanks in the basement (underground storage tank). To make respondents more familiar with the cases in the questions, the researchers replace the hypothetical case of pollution into cases of river pollution due to leaks and spills of crude oil. In addition, minor modifications were carried out on a number of questions to better suit

the conditions in Indonesia. Estimated time spent working on these instruments is 15-20 minutes.

First, the questionnaire was given to two researchers in the field of management accounting and environmental accounting to evaluate the suitability of the topic and language (wording) is used. Then a pilot test was conducted to 5 people managers to test the suitability of the questionnaire. Revision was done twice by the input of researchers and pilot tests before they were distributed to the respondents. The survey results were tested using test equipment Structural Equation Model (SEM), with software partial least square (SmartPLS). To assure consistency of the respondents in answering questions, the questionnaire also used questions inverse (reverse wording of question) by negating the question. Inconsistent respondents were excluded from the sample to maintain the validity of research data.

### Subjects and Samples

The subjects of this study are the managers of com-

**Table 2**  
**Characteristics of the Respondents**

	<b>Respondents</b>	<b>Total</b>	<b>%</b>
Male/Female	Male	22	44.00%
	Female	28	56.00%
Age range	21-30 years	10	20.00%
	31-40 years	19	38.00%
	41-50 years	19	38.00%
	51 above	2	4.00%
Education	Senior High School	0	0.00%
	Undergraduates (S-1)	38	76.00%
	Masters (S-2)	12	24.00%
	PhD (S-3)	0	0.00%
Position	Line Managers	20	40.00%
	Division Managers	12	24.00%
	Branch managers	9	18.00%
	Directors	9	18.00%
Total Sample		50	100%

panies that are considered to have a major role in decision-making. The samples used were 75 managers of companies in Lampung province. Questionnaires were distributed directly or through email. Of the 64 managers were given a questionnaire, 10 people did not restore, and 4 did not answer with complete or correct. Thus, the total number of questionnaires that can be used is 50.

Questionnaires were distributed directly or through email. Most of the questionnaires were distributed to managers who are students in the program of Master of Accounting, Master of Management and Professional Accounting Education at the University of Lampung. As for the others, attended to the location of the company or via email using the directory obtained from the Chamber of Commerce Industry (Kadin) Lampung.

Table 1 presents the variables used in this study. There is a dependent variable, namely the decision and three independent variables, namely the attitude, subjective norms (*subnorm*), and perceived behavioral control (*behavcont*). The definition and measurement of each variable is also presented.

Decision is measured through the manager's intention to recognize and disclose environmental obligations. This study follows the Fishbein and Ajzen (1975), measuring the intention to procedures that put the subject on the dimensions of subjective probability in the link between the individual and his actions. In general, the respondents were asked if they would perform an action, in this case to recognize and disclose environmental obligations.

Attitude is a bipolar affective scale of one's position on the object, behavior or specific events

(Fishbein and Ajzen 1975). The way to measure the attitude is by asking the respondents to rank certain behaviors at a scale that ranges from very desirable (very good) to highly undesirable (very bad).

Subjective norm (*subnorm*) is based on the belief on the importance of other people that approve a certain behavior, coupled with the motivation to fulfill the wishes of others that are considered important (Fishbein and Ajzen 1975). The attitude and subjective norm were also measured by asking the how important other people agree or disagree when they perform certain behaviors.

To measure perceived behavioral control (*behavcont*), this study needs to understand the constraints of doing things, which can come from inside (internal) or outside (external). Constraints on the inside can be the absence of information, the ability or expertise. Constraints on the outside may be due to being no opportunity to carry out certain behavior, a lack of resources or dependence on others (Ajzen 1991). Perceived behavioral control was measured by asking the respondents the extent to which they feel they have control over the behavior in question and the ease or difficulty in carrying out their behavior. In the context, the respondents were asked about their belief in the authority and knowledge in making decisions about the recognition and disclosure of environmental liabilities.

### Test Instruments

To analyze the results of a survey of data collection in the first phase, all were tested using Structural Equation Model (SEM), with software Partial Least Square (SmartPLS) developed by Herman Wold (in Yeniyay and GÄokta 2002). Use of PLS is the reason

**Table 3**  
Descriptive Statistics of Research Variables

Value of Variables	decision	attitude	subnorm	behavcont
Modus	7	7	7	7
Median	6	6	6	6
Maximum	7	7	7	7
Minimum	1	1	1	1
Mean Score	5.377778	5.332261	5.16358	5.726852
Standard Deviation	1.695065	1.447481	1.772101	1.306307

Note: n = 50; decision=Decision is proxied by intention; attitude; subnorm, behavcont.

**Table 4**  
AVE and Communality

	AVE	Communality
Decision	0.771752	0.771751
Attitude	0.604591	0.604591
Subnorm	0.609960	0.609960
Behavcont	0.791373	0.791373

that this software can be tested even by using a very small sample. Other software for SEM, such as LISREL or EQS requires a sample size is 100, even some researchers requiring more than 200 (Haenlein and Kaplan 2004).

#### 4. DATA ANALYSIS AND DISCUSSION

##### Characteristics of the Respondents

The characteristics of 50 respondents are presented in Table 2, showing that the gender proportion of respondents is fairly balanced, which is 44% male and 56% female. Most of them are in the productive age, between 31-40 years (38.00%) and 41 to 50 years (38.00%). Most of their education levels are undergraduate (S1), about 76.00% and the rest is a master degree (S2), about 24.00%. No respondents were below the undergraduate (senior high school). Thus, the researchers also assume that the respondents could understand the description in instruments.

##### Analysis of Descriptive Statistics

Table 3 indicates that most respondents answered very strongly agree (modus score= 7) for a decision on the environmental liabilities. It can be interpreted that most respondents stated that they intend to recognize and disclose environmental liabilities in the financial statements with notes to the financial statements (CaLK). Keep in mind that there are two items the question of decision variables are invalid after a thorough examination of the validity of the software SmatPLS. This will be discussed in the discussion on the validity of the test instruments.

Based on Table 3, it can also be interpreted that the respondents tend to be homogeneous for each

variable. This is shown for example by the values of the median, mode, median, and standard deviations were less likely to differ greatly. If referred to the data characteristics of the respondents, the diversity of the characteristics of the respondent has been good enough, spreading the age and occupation of respondents that are quite uneven, as presented in Table 4. Therefore, the researchers assume that the sample selection is quite good and not bias. Homogeneity of respondents is natural and not caused by a non-random sample selection.

##### Testing the Data and Research Model

For the test data and research model, a model of structural (inner model) and the measurement model (outer model) were designed, as suggested in the literature (Hartono 2009, Haenlein and Kaplan 2004). The construction is done by using a path diagram Smart PLS software so that the design is done either, then the later stages were done as follows.

##### Goodness of Fit - Outer Model

Testing the measurement model (outer model) was done before testing the hypothesis to predict relational ties in the structural model. This test is used to verify the indicators and latent variables to be tested further (Haenlein and Kaplan 2004). The test is done in two phases, namely testing the construct validity (convergent and discriminant) and testing internal consistency (reliability) construct. Validity test was done to determine the ability of research instruments measure what should be measured. Yet, the reliability test was to measure the consistency of the measuring instrument in measuring



**Table 5**  
**Cross Loading**

	<b>attitude</b>	<b>behavcont</b>	<b>decision</b>	<b>subnorm</b>
attitude01	0.619073	0.412671	0.366749	0.413729
attitude02	0.749409	0.551517	0.564338	0.582706
attitude03	0.661680	0.385734	0.438386	0.396190
attitude04	0.752782	0.600347	0.594860	0.613104
attitude05	0.842584	0.671593	0.733487	0.709713
attitude06	0.811449	0.641580	0.572618	0.676025
attitude07	0.767137	0.647153	0.628561	0.681119
attitude08	0.876567	0.767744	0.583065	0.796260
attitude09	0.875607	0.694184	0.727335	0.734810
behavcont01	0.723540	0.918503	0.544177	0.756039
behavcont02	0.361832	0.693873	0.302646	0.398000
behavcont03	0.654945	0.898404	0.584417	0.642179
behavcont04	0.701732	0.934937	0.528107	0.732625
behavcont05	0.804319	0.928613	0.661842	0.822915
behavcont06	0.807442	0.937855	0.600518	0.783706
decision01	0.795521	0.680249	0.972395	0.735583
decision02	0.707371	0.635938	0.942631	0.644288
decision03	0.452593	0.217386	0.693651	0.377765
decision04	0.725570	0.703584	0.460104	0.792940
decision05	0.510890	0.594233	0.488208	0.654237
subnorm01	0.569740	0.620983	0.438690	0.797616
subnorm02	0.572565	0.421049	0.607310	0.768715
subnorm03	0.469742	0.453627	0.337683	0.677626
subnorm04	0.762374	0.733373	0.672244	0.862208
subnorm05	0.780802	0.776263	0.641396	0.885011
subnorm06	0.619073	0.412671	0.366749	0.413729
subnorm07	0.749409	0.551517	0.564338	0.582706
subnorm08	0.661680	0.385734	0.438386	0.396190
subnorm09	0.752782	0.600347	0.594860	0.613104
subnorm10	0.842584	0.671593	0.733487	0.709713

Source: Processed data by SmartPLS, v 2.0.

a concept or it can also be used to measure the consistency of respondents in answering the questions in the questionnaire item or research instrument (Hartono 2009).

### The test of Construct Validity

The researchers used reflective indicators assessed by the loading factor, average variance extracted (AVE) and Communality for validity. Some experts recommend using value AVE and communality that is above 0.50, which means the probability indicator in a construct other variables enter into the lower (approximately 0.5) so that the probability of the indicators are converging and it can be entered in the construct in a larger purpose, namely in over 50 percent (Haenlein and Kaplan 2004, Jaya and Sumertajaya 2008).

The test result can be seen that the AVE and communality for the whole construct decision, attitude, *subnorm* and *behavcont* each had a factor load-

ing are above 0.60, which means that it meets the test convergent validity.

### Discriminant of Validity

The way to measure validity discriminant of the measurement model was done by comparing the root of the AVE of a construct that should be higher than the correlation between the latent variable or by looking at the cross loading measurements and the constructs. It indicates that each indicator in a construct can vary with indicators in other constructs and accumulate in question construct.

To rate the cross loading as in Table 5, it also shows the validity discriminant is good for decision, attitude, *subnorm* and *behavcont*, since the correlation value against the constructs is higher than the value of the correlation indicator of other constructs (a list of questions for each variable. It can be concluded that all the latent constructs in this study can predict the indicator on the block they

**Table 6**  
**Reliability Test**

Susi Sarumpaet: The manager's decision ...

	Cronbachs Alpha	Composite Reliability
Decision	0.846572	0.908578
Attitude	0.917033	0.931496
Subnorm	0.891861	0.915487
Behavcont	0.946020	0.957526

Source: Processed Data by SmartPLS, v 2.0.

**Table 7**  
**The Values of Coefficient dan Signifikcance of Equation Model**

	Coefficient	t-Statistics ( O/STERR )	Conclusion
attitude -> decision	0.8620	4.5643	H1 supported
subnorm -> decision	0.0240	0.0258	H2 unsupported
behavcont -> decision	-0.1160	0.4256	H3 unsupported

**Table 8**  
**Values of Coefficients and Significance of Additional Model**

	Coefficient	t-Statistics	Conclusion ( $\alpha=5\%$ )
subnorm -> attitude	0.4160	3.4333	Significance
behavcont -> attitude	0.4950	3.6734	Significance

are better than the indicator in the other block.

### The Reliability Test

To test the reliability this study tested the consistency of indicators in a single latent variable. This test uses the value of Cronbach's alpha and composite reliability values. To make sure that a construct is reliable, the value of Cronbach's alpha and composite reliability values must exceed 0.70 (Hartono 2009).

SmartPLS of output, as shown in Table 6, indicates that the entire construct decision, attitude, *subnorm*, and *behavcont* for environmental liabilities have Cronbachs alpha values above 0.80. Similarly, the composite value reliability, all of which values are above 0.80. Thus, it can be stated that all the instruments are reliable.

### Goodness of Fit - Inner Model

In reference to the literature on PLS, inner testing for the model in this study was done by using PLS Algorithm and bootstrapping (e.g. in Haenlein and Kaplan 2004). Figure 2 displays the results of these tests, in the form graph. In this figure, it shows the value of R<sup>2</sup>, the coefficient constructs, and loading factor of each construct. Inner model also describes the relationship between latent variables based on a substantive theory. The structural model was evaluated using R<sup>2</sup> to construct dependent variable. The R<sup>2</sup> described in the dependent variable should be above 0.10 so that it can be stated that both as the dependent constructs (Hartono 2009).

The value of R<sup>2</sup> constructs a decision to recognize and disclose environmental obligations that is

of 0.59. This means that the independent variables could explain the construct of decision with the value of 59.60%, while the rest might be due to other variables.

### Hypothesis testing

To test the hypothesis, the value of t-statistics is generated from PLS output compared with the value of the t-table. PLS output estimated latent variables that are linear aggregate of indicators. Figure 3 shows the results of hypothesis testing which was done by bootstrapping the PLS. The results are as follows.

As shown in Table 7, it can be seen that only pertma hypotheses are supported, with a value of 4.563 t-tests. Thus, it can be concluded that the more positive attitude of the managers towards the recognition and disclosure of environmental liabilities, the stronger their intention to recognize and disclose environmental obligations. This finding is consistent with the theoretical framework based on the Theory of Planned Behavior (Ajzen 1991) that one's intention to act in a behavior is influenced by his attitude to such behavior.

This study found no evidence to support the second hypothesis that was suspected to show positive relationship between subjective norms and behavioral intention. With the t value of 0.0258, the study found that the respondent's perception about the benefits (alient referents) of others' views to admit and disclose environmental obligations. This does not affect the intention to recognize and disclose environmental obligations. Although the data shows the high descriptive respondents' high de-

scriptive attitudes and intentions in the recognition and disclosure of environmental liabilities, there is no evidence that it is influenced by subjective norms prevailing in the vicinity.

Table 7 also shows that the third hypothesis is not supported in this study, which looks at the value of t-test of 0.4256. This study found no evidence that a higher degree of confidence self-efficacy perception managers to the recognition and disclosure of environmental liabilities, the higher the likelihood they perform recognition and disclosure of environmental liabilities.

Nevertheless, there are two interesting findings to observe the results of additional testing. It is to change the attitude position into the mediating relationship between subjective norms and perceived behavioral control to the intention disclosure of environmental liabilities. Although the relationship is not hypothesized, these additional tests provide evidence of the positive and significant correlation in testing this structural model, as shown in Table 8.

Figure 3 and Table 8, the attitudes toward environmental liability into a mediating variable in the relationship between the subjective norm and perceived behavioral control to the intention in the manager's decision to admit and disclose environmental obligations. In other words, subjective norms and behavioral control do not directly affect the manager's decision to recognize and disclose environmental obligations, but with the attitude of the manager, both these variables still affect the decision.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study is concerned with the attitudes, subjective norms, and controls the behavior of the intentions of managers in decisions on environmental liabilities, using theoretical framework developed by Ajzen (1991) in the Theory of Planned Behavior. The test results of the structural model and the hypotheses developed conclude some of the findings. First, there is a positive relationship between the mindsets of environmental liabilities and the intention to decide the recognition and disclosure of environmental liabilities. These findings are consistent with the framework used, that one's intention to disclose environmental liabilities influenced by the attitude to such behavior.

Second, there was no significant relationship between subjective norms on environmental obligations and control over the behavior of the decision towards environmental obligations. It can be sus-

pected there are other factors that encourage managers to disclose environmental liabilities other than subjective norms and behavioral control over environmental liabilities. The framework can be in different theories that may provide additional understanding of the managers' motivation to disclose environmental liabilities.

Third, although the relationship between subjective norms and behavioral control over environmental liabilities is not related to the manager's decision to recognize and disclose environmental obligations, it can be significant when mediated by the manager's attitude. In other words, subjective norms, and perceived behavioral control affect the manager's attitude to disclose environmental liabilities. It is probable by our culture that tends to be collectivist, namely a person's attitude is more likely to be influenced by the norms prevailing in the surroundings and one's perception of the ability in controlling behavior.

The main limitation of this study lies on the relatively small sample size ( $n = 50$ ). Although the PLS can accommodate a relatively small number of respondents, better results are expected to be obtained through a larger sample and more variables with a reciprocal relationship. Further research can be done for improving this finding by increasing the number of respondents.

The results of this study are expected to contribute to the policy makers and standard setters, particularly in consideration of policies and strategies to increase transparency in the reporting of environmental information by companies, for example, a better understanding of the attitudes of managers who are influenced by the norms and subjective perception of control behavior can petrify standard setter bodies in Indonesia to consider the use of wider stakeholder in promoting the transparency of financial statements, particularly in reporting environmental liabilities.

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## APPENDICES

## Questions Used in the Latent Variables

No.	Variables	Questions
1	decision01	I'll admit a number of contingent liabilities on the conditions in the financial statements
2	decision02	I will reveal the contingent liability in the notes to the financial statements (NFS)
3	decision03	I opted not to recognize a number of contingent liabilities on the above conditions
4	decision04	Normally, I reported these conditions to the stakeholders of the company through the company's financial reporting
5	decision05	I am NOT going to reveal in full (fully disclose) of the contingent liabilities over the condition in NFS

No.	Variables	Statements
1	attitude01	Generally recognized contingent liabilities environment is something that should be done
2	attitude02	NFS arranges full disclosure of contingent liabilities in the environment as the thing that should be done
3	attitude03	The full in NFS regarding disclosure of contingent liabilities in the general environment is preferred
4	attitude04	Acknowledging the monetary amount of material to the environment is a contingent liability in the financial statements responsibility
5	attitude05	Full disclosure regarding environmental contingent liabilities show responsible financial reporting
6	attitude06	In general, people around me would think that I should admit the environmental contingent liabilities
7	attitude07	In general, people around would think that I should fully disclose contingent environmental liabilities
8	attitude08	Acknowledging the ethical obligations of contingent environmental liabilities
9	attitude09	Acknowledging the full contingent environmental liabilities is ethical obligations

No.	Variables	Condition
1	subnorm01	The Company has made a provision to anticipate the demands of future costs
2	subnorm02	It would adversely affect the stock price / cost of debt
3	subnorm03	Companies will be rated environmentally-responsible and good
4	subnorm04	It will be asked how the company estimates costs / liabilities in the financial statements
5	subnorm05	Company has fulfilled its obligations to provide full information to financial statement users
6	subnorm06	Increasing the risk of litigation or court
7	subnorm07	It adversely affects the earnings of the current period
8	subnorm08	Show a conservative approach to the financial statements
9	subnorm09	Increasing regulatory oversight of the company
10	subnorm10	Encouraging management to pay more attention to the environmental issues

No	Variabel	Statements
1	behavcont01	I will have the power to admit and disclose contingent environmental liabilities
2	behavcont02	It would be easy for me to make a decision
3	behavcont03	Authority granted pursuant my position enough to admit and disclose contingent environmental liabilities
4	behavcont04	I believe I have the knowledge, skills, and knowledge to recognize and disclose contingent environmental liabilities
5	behavcont05	As a finance executive, I will have the moral obligation to recognize and disclose contingent environmental liabilities
6	behavcont06	It is the principle for me to admit and disclose contingent liabilities environment