

## Analysis of Differences in Audits with Recency Patterns and Audits Without Patterns on Tax Compliance

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### Abstract

*The purpose of this research is to examine analysis of differences in audits with recency patterns and audits without patterns on tax compliance. This study uses a quantitative approach using primary data. The data in this study were obtained using the experimental method. Students who participate in this study consist of several criteria to support the success of the experiment, first, students must come from the economics and business faculties with bachelor, master, and doctoral education levels. Second, students have completed taxation courses and have general knowledge of taxation. Thus, students who act as taxpayers will be able to fulfill the scenario in answering the research questions. Hypothesis testing is carried out to provide answers to problems in the research that has been prepared. The test tool used for each hypothesis in this study is the mann-whitney test. The results show that there is differences between audits with recency patterns and audits without patterns on tax compliance.*

### Keywords

audit; recency  
pattern; tax  
compliance



## I. Introduction

Tax compliance is the most important thing in the tax system. Tax compliance is the willingness of taxpayers to comply with the provisions of the law established in order to obtain a balance in the country's economy. Tax compliance is an important aspect for the state because it is related to state revenues. However, tax revenues each year do not reach the target set in the Indonesian State Revenue and Expenditure Budget. Tax revenue in 2018 was only 92% of the realization of the set target. This shows that there is a shortage of tax revenues of Rp108.1 trillion. In addition, the level of tax compliance in Indonesia in 2019 is still relatively low even though it has reached the target. In 2019, the ratio of realization of tax compliance to corporate taxpayers and non-employee individuals reached 72.52% of the target set at 70%. However, according to the analysis related to the achievement of general performance indicators of the Directorate General of Taxes, this compliance only covers formal compliance and does not cover all aspects in determining compliance.

One of the reasons the level of tax compliance has not been achieved is because the supervision has not been optimal in reaching taxpayers who report the annual notification letter, the follow-up of the priority data for the supervision of the submission of the annual notification letter has not been optimal and there are still tax payments below a certain nominal. Therefore, one form of supervision carried out by the Directorate General of Taxes is to conduct an audit. Audit is one of the important factors to improve tax compliance. This is evidenced by the many studies on tax audits in seeing the level of compliance for taxpayers.

Research by Alm et al. (2004) show that tax audit will increase taxpayer compliance. Taxpayers who are frequently audited by the tax authorities will pay more attention to their reporting by not committing fraud so that they will be more obedient in contrast to taxpayers who are rarely checked by the tax authorities will tend to be less compliant. This study is also in line with the research conducted by Yusof et al. (2014) which states that tax audits will also improve taxpayer compliance. On the other hand, if the audit is carried out for a long period of time, it will weaken the compliance of the taxpayer.

Bergman and Nevarez (2006) also show that tax audit will improve tax compliance. This is evident from the results of research where the examination carried out has no influence on non-compliance behavior but tends to lead to obedient behavior. This study assesses that the tax audit conducted will provide a positive direction to increase compliance. In addition, Advani et al. (2015) also states that tax audits are carried out by the tax authorities to assess taxpayer compliance and also to be able to implement the tax laws that have been set.

Research conducted by Niu (2011) shows that high tax audits will increase tax compliance. This can be seen from the results of research conducted where when a tax audit is carried out, a company will report a higher level of sales growth. In the audit year, companies will report sales with a higher percentage than companies that do not receive tax audits. The percentage of companies will decrease by about 1/3 percent each year after the inspection. This study states that the existence of a tax audit will increase tax compliance. In line with research conducted by Birskyte (2013) states that a high level of audit will increase individual state income tax compliance. The tax audit carried out will make the audited taxpayer more obedient so that it will increase state revenue by showing that the state will obtain significant savings in tax administration.

The results of previous studies that have been described prove that tax audits can improve tax compliance. Unfortunately, in previous studies that have been conducted both in Indonesia and in other countries, there has been no research that looks at tax audits with an audit time pattern that can maximize tax compliance. So this study tries to fill the void of the gap by involving the examination pattern variable.

The audit pattern of each taxpayer will adjust to the tax payer's audit period and can be seen from the provisions of the audit period that have been regulated in the tax law. The examination pattern can be formed from several checked and unchecked patterns. This study uses 6 possible patterns that can occur in audits for 3 tax years, namely continuously checked (+++), not checked continuously (---), not checked-not checked-checked (--+), checked-checked-not checked (++-), checked-not checked-not checked (+--), not checked-checked-checked (-++).

The examination pattern in this study uses a scheme from the order effect theory which was developed from the belief adjustment model theory. This model illustrates the adjustment of beliefs due to new evidence when evaluating evidence sequentially. Hogarth and Einhorn (1992) explain that in adjusting to new beliefs, individuals will consider the order of evidence. In tax audits, it is used as a consideration to adjust the beliefs made by the examiner. According to Hogarth and Einhorn (1992) the order effect scheme is used to provide a conceptual understanding of the evidence processing involved. At the time of examination, the order effect occurs because of the interaction between the information processing strategy and the characteristics of the examination task. In this study, the existence of different audit time patterns will also provide information for taxpayers that will change their perception of their compliance behavior.

Hogarth and Einhorn (1992) also explain that the presence of new evidence will cause initial beliefs to be adjusted so that it will become an anchor for subsequent beliefs.

The process of anchoring and adjusting the new evidence will produce a recency effect on the order of examination evidence. The recency effect occurs when the taxpayer's confidence to behave in compliance or non-compliance is obtained from the order of examination in accordance with the last order in an examination.

Determining the right pattern of inspection time will have a big impact on the examination carried out. The major impact after the audit and persistence of reported tax obligations will increase after the audit is carried out. So this proves that the time pattern of tax audits is very important to check whether taxpayers have made tax compliance in accordance with applicable tax regulations. The problems above indicate that different examination time patterns will affect the results of the examinations carried out. This will also affect the level of taxpayer compliance.

## **II. Review of Literature**

### **2.1 Belief Revision and Belief Adjustment Model**

The belief revision theory describes a process of changing individual beliefs that are used as recognition of new information. Belief revision theory explains in depth about modeling starting with the determination of a certain set of propositions that are used as initial beliefs. Then, the belief is in balance continuously by obtaining an internal critique of the information obtained by the individual. Thus, the individual's initial belief can turn into a new belief in response to criticism of the latest information. Belief revision still needs a derivational approach to further clarify belief revision. The derivational approach is used to present arguments that will support the initial belief while acknowledging that the initial belief can be revised, rejected and can be canceled according to the information obtained.

Belief revision places a good understanding of the information obtained as the main source in establishing beliefs. This understanding can be a justification in the reasoning process. The reasoning process in a belief will adjust to the new information that is obtained. Kahneman and Tversky (1979) explain that belief revision is a process that makes an estimate of an individual's low initial belief so that a revision of the initial belief is carried out by evaluating the latest information and forming a new belief. In line with the explanation put forward by Pollock and Gillies (2000) which explains that belief revision is a continuous reasoning process that is in accordance with the latest information and new understandings related to the individual's initial beliefs, so that new beliefs are formed that are consistent or inconsistent.

Pollock and Gillies (2000) also state that belief revision explains questions about the sequence of information events that can be a trigger for a change in individual beliefs. This understanding of the sequence of information events adapts the general concept to include bias, and forms a psychological framework known as the belief adjustment model (Hogarth and Einhorn, 1992). The belief adjustment model generally explains that individuals will make a series of changes in their beliefs when the sequence of evidence from the initial information is received so that it will produce new understanding and can lead to a good result. This theory is based on the assumption that individuals have limited memory in processing information sequentially. The approach used in this theory is the anchoring and adjustment approach or model. This theoretical model posits that individuals will tend to change beliefs by using a process of anchoring to new evidence that is gradually obtained. After getting new evidence, the individual will make adjustments to the initial belief, so that the individual will determine a new decision. The explanation of this belief adjustment model complements the concept of belief revision. The belief adjustment model predicts

that inconsistent evidence will result in greater belief revision when presented after evidence is received inappropriately or of the opposite sign.

Belief adjustment theory explains that individuals will improve their current beliefs due to the influence of the sequence of evidence. The evidence in question is the complexity that has been evaluated, the consistency of the evidence obtained and the proximity of the evaluator to the evidence. Thus this theory has the characteristics of a task as a moderator in the relationship between evidence and the considerations that will be made by the individual. Hoghart and Einhorn (1992) explain that the traits that influence evidence can be in the form of a sequence of evidence (positive after negative, negative-positive or consistently positive-positive and negative-negative) and manner/format/mode (information is conveyed sequentially or sequentially simultaneously).

This theory generally explains that there is an influence of the order of information in the process of changing beliefs. The influence of the order of information arises due to the interaction between the characteristics in the assignment and the information processing strategy. Belief adjustment explains that when an individual receives new evidence or information, individuals will tend to make adjustments to their initial beliefs to make decisions according to the latest information in order. This theory predicts that this difference also occurs due to the effect of the reviewer on the assessment of the order of evidence. Recency effect will accompany a series of information or sequence of evidence that is obtained by individuals when the information is presented in stages.

## **2.2 Order Effect in Belief Updating (Recency Effect)**

In general, the sequence effect can be interpreted as a strategy carried out by economic activity actors to consider the information provided based on the presentation or order of the existing information. However, the influence of the order can often lead to bias in a consideration for making decisions. Bias can occur because the considerations taken by the activity actors require additional evidence or new information, which indicates that additional procedures are needed outside of the activities that should be. The order effect is explained based on the belief revision theoretical model developed by Hoghart and Einhorn (1986, 1987) which is explained in depth with the latest version, namely the belief adjustment model theory. The order effect in the belief adjustment model theory predicts that differences in individual decision making are caused by differences in the presentation of the order of evidence presented in different formats, namely in a sequential format or in a simultaneous format.

The result of a change in belief will produce a recency effect when the individual considers the latest evidence received more than the initial evidence. In contrast, the primacy effect occurs when individuals consider the initial evidence received more than the last evidence in an information sequence. In this belief adjustment theory, it can be observed that the recency effect is determined in 3 dimensions, namely the type of evidence, the complexity of the evidence, and the number of evidence series.

The belief adjustment model explains that in presenting the evidence received can be in the form of step by step, in which the individual will make a change in belief after being given some evidence from a series of separate information. In addition, the presentation of evidence can be in the form of an end-of-sequence pattern, where individuals will make changes in beliefs when the information obtained is presented in the form that has been collected. Individuals making changes to their initial beliefs will be greater if the information presented is in a step-by-step format, compared to an end-of-sequence format. This is because presenting evidence with a more frequent time will provide more opportunities for anchoring and adjustment, besides that individuals will also over-adjust the information items provided more often.

### III. Research Method

This study uses a quantitative approach using primary data. The primary data in this study is in the form of a manipulation instrument from independent variables given to research respondents with the aim of testing the formulated hypotheses (Pandia et al., 2018; Pandiangan et al., 2018).

The data in this study were obtained using the experimental method. Experiments are used for research that examines a phenomenon by engineering or manipulating conditions through certain procedures which then analyzes the results of these manipulations and interprets them (Asyraini et al., 2022; Jibril et al., 2022; Otiva et al., 2021). Experiments are seen as an active and most powerful research method that can be used to explain the causality relationship of independent and dependent variables. In the experimental method the causality relationship between these variables can be manipulated (treatment) using a more precise randomization technique so that it will provide a more precise measurement of the dependent variable (Otiva, 2018; Pandiangan, 2018; Pandiangan et al., 2021).

Experiments were arranged using a pretest-posttest control group design with post-test and prototype-test. Pretest and posttest were applied to two groups, namely the experimental group and the control group. Both groups have the same role because the participants are taken randomly from the same population (Pandiangan, 2015; Pandiangan, 2022). The significant control of this experimental research can be seen from the manipulation of the independent variables, namely examination (checked and not checked) and examination patterns (+++;--+;+--+;--+).

Students who participate in this study consist of several criteria to support the success of the experiment, first, students must come from the economics and business faculties with bachelor's, master's, and doctoral education levels. Second, students have completed taxation courses and have general knowledge of taxation. Thus, students who act as taxpayers will be able to fulfill the scenario in answering the research questions.

Hypothesis testing is carried out to provide answers to problems in the research that has been prepared. The test tool used for each hypothesis in this study is the mann-whitney test. The mann-whitney test is used in testing the null hypothesis which states that there is no real difference between the two groups of data and where the data are taken from unrelated samples (Otiva et al., 2018; Pandiangan et al., 2022; Tobing et al., 2018).

### IV. Results and Discussion

#### 4.1 Research Participants

This experiment was conducted online through online media, namely google form on November 10-18, 2020, involving 238 bachelor, master, and doctoral education levels students who had met the criteria, namely students who had completed taxation courses and had general knowledge about taxation.

A total of 290 prospective participants received a google form link that was distributed through social media. However, only 274 people (94.9%) actually filled out the google form link until the last stage of the experiment.

There were 238 participants (86.9%) who met the criteria and 36 participants (13.1%) who did not meet the criteria. Data obtained from participants who meet the criteria can be declared valid and can be used at the stages of data analysis and hypothesis testing, while data obtained from participants who do not meet the target are not declared valid and cannot be used at the stage of analysis and hypothesis testing. There were several things that caused the participants not to meet the experimental criteria, namely the



participants did not fill out the module on the google form completely and correctly and the participants were inconsistent in answering the manipulation check questions given.

#### 4.2 Mann-Whitney Test Results

**Table 1.** Mann-Whitney Test Results

	Mean Difference	Mann Whitney	
		Z	Asymp. Sig.
Hypothesis	+22.04	-3.271	0.001

The results show that there is differences between audits with recency patterns and audits without patterns on tax compliance. This can be seen from the mean difference in tax compliance for the two patterns, which is +22.04, which indicates that the value of tax compliance with a recency pattern is 22.04 higher than an audit without a pattern. The results of the mann whitney test showed a value of  $Z = -3.271$  and a p-value of 0.001 ( $<0.05$ ).

#### V. Conclusion

The results show that there is differences between audits with recency patterns and audits without patterns on tax compliance.

Based on the limitations described above, this study suggests several things to overcome these limitations. First, to overcome the lack of understanding of the respondents, the next researcher can use real taxpayers as research respondents. And further researchers can conduct experimental research directly, so that respondents will understand more about the treatment given. Second, further researchers can use unchecked variables to see if there are differences in the level of taxpayer compliance with and without auditing patterns.

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