

## THE EFFECT OF HURDLE RATE AND ORGANIZATIONAL INCENTIVE SYSTEMS ON COMMITMENT ESCALATION IN INVESTMENT DECISION MAKING

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### ABSTRACT

*Escalation of commitment is a decision to increase or expand the commitment to a project or a particular investment even though the investment project or indicate failure. The purpose of the research is to examine whether the existence of hurdle rates and incentive system in the organization influence the manager's decision to do escalation of commitment. The study used a 2x2 between subjects experimental design with 76 participants from under graduate accounting majors who are currently taking management accounting course. The results of the research showed that: (i) hurdle rates affect the actions of managers doing the escalation of commitment; (ii) the incentive policy of the organization affects the escalation of commitment.; (iii) the interaction between hurdle rates and incentive system of the organization doesn't affect the escalation of commitment*

**Keywords :** hurdle rates, organizational incentive system , escalation of commitment.

### ABSTRAK

*Eskalasi komitmen adalah pengambilan keputusan untuk meningkatkan atau memperluas komitmen terhadap suatu proyek atau investasi tertentu meskipun proyek atau investasi tersebut mengindikasikan kegagalan. Tujuan dari penelitian ini adalah meneliti dan mengetahui adanya kondisi hurdle rates serta diterapkannya kebijakan sistem insentif organisasi apakah berpengaruh dalam keputusan manajer untuk melakukan eskalasi komitmen. Penelitian ini menggunakan desain eksperimental 2x2 between subject dengan 76 peserta dari jurusan akuntansi S1 yang sedang mengambil mata kuliah akuntansi manajemen. Hasil penelitian menunjukkan bahwa: ( i ) hurdle rates mempengaruhi tindakan manajer melakukan eskalasi komitmen; ( ii ) kebijakan sistem insentif organisasi berpengaruh terhadap eskalasi komitmen; ( iii ) interaksi antara hurdle rates dan sistem insentif organisasi tidak berpengaruh terhadap eskalasi komitmen*

**Kata kunci :** tingkat rintangan, sistem insentif organisasi, eskalasi komitmen.

## 1. INTRODUCTION

In the business world, a manager plays an important role in making decisions, especially in various investment project companies. Managers must be able to make decisions correctly, because every decision taken is a measure of the success or failure of a manager. Decision making means making choices and making judgments. According to Robbins and

Mary (2010), decision making based on uncertainty forces managers to rely more on creativity, feelings and conscience. In addition, Soma and Restuti (2017) states that managers have a strong emotional sense of decisions made previously so that managers find it difficult to separate the decisions to be chosen. Managers will tend to increase commitment when managers will take decisions that they think are right. According to Santoso (2012), commitment escalation is defined as a phenomenon that explains that a person decides to increase his investment, even though new evidence explains that the decision that has been made is wrong.

Decision makers certainly do calculations and collect information in advance, because considering that the decisions taken have an impact on a failure or success in the future. Managers' decision-making to continue project financing can be seen from receiving information about the ongoing project. Escalation of commitment is a very serious obstacle in an organization, especially investment projects. Staw in Mulia et al ., (2015) explains that commitment escalation occurs when individuals and organizations choose a series of actions to stay afloat even though there are losses that are obtained where the opportunity to stay or leave the commitment both has uncertainty in the consequences.

A person's tendency to escalate this commitment can be explained through agency theory. Mursalim (2005) suggests that the agency theory view shows that a manager in making decisions is motivated only for personal interests, resulting in information asymmetry between principals. In investment projects, hurdle rates can provide managers with information about opportunities to determine the size of the object of the level of profitability of the project to be made and can also reduce the escalation of commitment (Santoso, 2012) . If the hurdle rates are set by the organization or company directly and all managers participate in setting the hurdle rate in an investment project, then the hurdle rates can reduce the escalation of commitment in an organization or company.

Decision making is an inseparable part of the success or failure of a leader in managing a business project. An example of a case in Indonesia regarding the escalation of commitment is the Hambalang project in 2004 which was presented in Sindo News (2016). In 2005 the Hambalang project consulting firm refused to build the project due to the fragile soil structure, thus suggesting not to build the project in the zone. However, in 2012 the Ministry of Youth and Sports continued the project, BPK found that there was an abuse of authority that caused the State to suffer a loss of 463 billion. In fact, there is information that states that the soil structure is fragile but is not known by other parties. In this case there is an escalation of commitment to making investment decisions for certain purposes and personal interests.

This phenomenon shows that an agent must identify the projects being handled by making the best decisions for the success of a project in the future. However, managers tend to be less communicative about information when companies fail. Giving incentives in an investment project also affects the progress of the company. According to Handoko (2002:176) incentives are incentives offered to employees to carry out work according to or higher than the standards that have been set. If there is an organizational or group incentive, a work team is more able to exchange information and alternative options with others so as to produce better decisions to make decisions in a business project, especially when there is a commitment escalation phenomenon. The existence of an incentive system in the form of rewards in business projects affects every individual and can also motivate every manager to

work optimally in determining the decisions taken, especially when there is an escalation of commitment.

The idea of this research refers to the research of Mulia et al., (2015) which examines hurdle rates and framing on commitment escalation in capital budgeting by changing the framing variable into an organizational incentive system based on suggestions from researchers. The results of this research show that hurdle rates have an effect on commitment escalation and managers who accept negative framing will tend to take risks to continue the project because they think they will benefit in the future. Negative framing information means that the information is negative feedback on previous investment decisions will be in a loss position, and will view the next decision as a choice between losses that are certain to occur or losses that are not certain to occur (Whyte 1986).

This research was conducted by replacing one independent variable, namely framing , into an organizational incentive system for investment decisions based on suggestions from previous researchers. Based on previous research that examines the relationship between the incentive system and commitment escalation. Nayang (2012), found evidence that the provision of compensation and monitoring control is able to mitigate the behavior of project manager commitment escalation. while the existence of punishment is able to reduce the escalating behavior of the manager's commitment. From this research, this researcher wants to find out more about commitment escalation research. How is the relationship between hurdle rates and organizational incentive systems to the level of commitment escalation. Are the two related and affect the escalation or not. So this study wants to examine the effect of hurdle rates and organizational incentive systems on the level of escalation of manager commitment in the case of investment decision making.

Practically, the research wants to help and provide an overview for company executives or managers to better consider the design of their organization's management control and also to reduce excessive commitment to managers in carrying out projects that are no longer profitable, and are also expected to become knowledgeable in the field of behavioral accounting and useful as a reference for further research.

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

### **Agency Theory**

Jansen and Meckling in Eveline (2010), agency theory explains that in a company there is a buildup of contracts, on the one hand ( principal ) delegates tasks to another party, namely the agent to complete the task. Agency theory occurs when owners or shareholders ( principal ) and manager ( agent ) have different interests. A manager will make decisions to maximize their personal wealth, not company wealth. There is often a conflict between the manager and the principal on the basis of a manager's decision that can be measured easily to take more risk than the principal .

Managers are given the opportunity by the principal to make decisions for the benefit of the company but often managers have private information that is not known to the principal , resulting in information asymmetry between the principal and manager. In fact, the information obtained by managers is more accepted than the principal so that this can trigger opportunities for managers to act in their own interests (Sari & Kusuma, 2017).

Managers' motivation to commit fraud occurs when the manager's economic interests are different from the company's economic interests, so managers will be encouraged to make decisions for themselves. When managers think they will be rewarded more for their achievements, managers will tend to stay committed to maintaining their reputation. In addition, if the principal has the same complete information as the manager, the principal tends to be able to monitor and control every decision made by the manager. Managerial behavior based on self-interest explains that managers allocate additional resources to projects even though the project is detrimental.

### **Commitment Escalation**

Managers basically have a high sense of emotional attachment to decisions made previously so that managers find it difficult to separate decisions taken for the future (Bazerman in Mulia et al ., 2015). The feeling of dilemma is often felt by managers because of the uncertainty of the project being carried out and the manager thinking "what should be done". The phenomenon of escalation of commitment occurs when a manager makes a decision that is not profitable for the company in the future, continues a project whose level is below average, sales do not reach the target, the taking period is not on target (Cheng et al ., in Mulia et al. (2015) ).

In decision making, a manager is often faced with a dilemma between wanting to continue or stop a project that does not benefit the company and replace it with another project. However, often the economic interests of the principal and (agent) of the manager are different, resulting in managers acting in their own interests. Situations like this will often occur in the business world which is often referred to as commitment escalation. Escalation of commitment is a situation where a manager is faced with a choice to continue the project even though it is actually not profitable for the company, or it can be said that the manager maintains his initial commitment to maintain the project even though the project is no longer profitable. According to Staw (1981) commitment escalation can occur when an individual or organization is faced with two opportunities for a series of actions that have been taken in this case a series of actions that have been taken did not go as expected. A decision to continue and expand its initial commitment to an investment project or certain businesses that have been said to be no longer profitable and provide negative feedback, even though the decision will also result in the risk of future losses (Suartana, 2010).

### **Hurdle Rates**

Hurdle rates are a benchmark or benchmark used in companies in determining the minimum rate of return. When a principal delegates tasks to the manager (agent) in determining the decisions to be taken. Hurdle rates are often set by organizations for individual business divisions or entire organizations to provide individual managers with a generally accepted profitability measurement tool (Gunther in Mulia et al. 2015). The focus of the alternative control lies in the profitability measurement tool for the project, so that it can determine the minimum rate of return for all organizations, or with different industries with different strategies as well.

Hurdle rates are usually set by senior managers or committees that form part of the organization's capital expenditure approvals, which involve the manager on individual

projects being undertaken. Cheng et al. in Mulia et al., (2003) stated that the hurdle rates set by the project manager ( Self Hurdle Rates ) would be more effective as a strategy to reduce the escalation of commitment than the hurdle rates set by management ( organizational hurdle rates ).

### **Organizational Incentive System**

According to Hasibuan (2000), suggests that incentives are additional remuneration given to certain employees whose achievements are above standard achievements. In agency theory , when managers think they will be rewarded more for their achievements, managers will tend to stay committed to maintaining their reputation. This incentive is a tool used by supporters of the fair principle in providing compensation. Meanwhile, incentives are provided to encourage higher work productivity for its employees. Thus, the incentive system is a reward or award given by the company to managers or company employees for their achievements.

The owner of the company, especially the investment project company, wants the maximum and immediate return on the investment that has been invested in the company. Managers want their interests to be channeled in the form of providing adequate and maximum compensation, reward or incentive systems for their performance. The owner of the company assesses the performance of the manager based on his ability to handle investment projects, where an investment project does not always benefit, but there are many obstacles that he will face, especially the escalation of commitment faced by managers in an investment decision. When a manager can make the right decisions, the company will also provide incentives to managers, so that incentives can be used to motivate managers to be more careful and seriously consider the decisions taken for investment projects. According to Hasibuan (2000) , work performance is a result of work achieved by a person in carrying out the tasks assigned to him based on skills, experience, sincerity and on time. This work performance is a combination of three important factors, namely the ability and interest of a worker, the ability and acceptance of the explanation of the task delegation, as well as the role and level of motivation of a worker. So that the incentive to motivate the manager's performance is important for the company, especially in investment projects. Incentives can be formulated as adequate services to employees whose performance exceeds the standards that have been applied. The incentive system is a motivating factor for managers to further improve their performance, so that managers really take into account every action taken.

### **Hypothesis Development**

#### **The Relationship of Hurdle Rates Conditions to Commitment Escalation**

In the business world when running a project will require a lot of accurate and relevant information. So that a manager (agent) does not make decisions based on himself. The expected information can assist managers in making decisions for an ongoing project, so that the project benefits and maximizes profits. Any information obtained is not only the manager who knows it, but the principal must also know it, so that they know about the conditions of

the project being carried out. But often the project conditions in the field are unfavorable, so managers make the wrong investment decisions.

The condition of hurdle rates is the minimum rate of return that is important for a project, in the context of investment decision making, which is used by the organization for setting goals with a minimum rate of return. In a project, hurdle rates can be used as a benchmark for the project being undertaken, whether it is profitable or not in the future. The function of the hurdle rates is to reduce the escalation of commitment that can be seen from the object, whether it provides good feedback or not for the company. Alternative hurdle rates set by the organization is the use of hurdle rates set personally, which has a definition that they involve managers directly in the application for individual projects. (Cheng et al., in Mulia et al., 2015) stated that in conditions where there are no hurdle rates and in conditions where there is a strong commitment to the initial investment decision, project managers tend not to have clear guidelines on how to interpret negative feedback from next project performance. Thus, they tend to ignore inappropriate feedback indicating that the project should be terminated and show a tendency to escalate their commitment to the project by deciding to continue with the uneconomical project. However, the presence of hurdle rates can reduce the tendency of escalation through two mechanisms: the provision of objective feedback and by involving the project manager in setting the hurdle rate. (Mulia et al., 2015). Therefore, the addition of the self-determination process to the use of hurdle rates should lead to the greater condition that individuals or groups will accept negative project feedback and discontinue uneconomical projects.

H<sub>1</sub> : Conditions of hurdle rates will affect the manager's decision to escalate commitment.

### **Relationship of Organizational Incentive System to Commitment Escalation**

The organizational incentive system is the provision of compensation or bonuses to managers who perform well. According to agency theory, when a manager is faced with a big decision, with additional incentives from the principal, the agent will act as much as possible to maintain his reputation. An effective incentive system is able to measure employee effort and rewards are distributed fairly (Ikhsan and Ishak, 2005). The main function of incentives is to give responsibility and encouragement also to agents or employees. Incentives also ensure that employees direct their efforts towards achieving organizational goals. In various organizations decision making is from lower levels.

Agency theory assumes that all individuals act in their own interests. Company owners are assumed to be only interested in increasing financial returns or their investment in the company. Meanwhile, managers are assumed to receive satisfaction in the form of financial compensation and the conditions that accompany the relationship. So that the provision of an incentive system can motivate managers to do more in providing good performance for the company and tend to be more careful and be able to act decisively when experiencing escalation, choosing to stop projects that are not profitable for the company. In the decision making of the incentive system determined by the organization, there is cooperation between the principal and agent which can make it easier to find alternatives and information to reduce the escalation of commitment.

H<sub>2</sub> : The organizational incentive system will affect the manager's decision to escalate commitment.

## **Interaction of Hurdle Rates and Organizational Incentive System on Commitment Escalation**

When the manager (the agent) is faced with a situation where he has to make his decision, the possibility of the manager will stop the project or continue the project, in conditions like this where the incentive system can help managers to be more motivated to perform well. According to Apriwandi (2012), the importance of incentives affects the level of commitment to achieving goals, because an individual's commitment will increase if the value of the goal is high and they have high hopes for achieving these goals. In addition, research conducted by Zaputri (2013) and Erawati (2014) states that incentives have an effect on employee performance. Thus, Incentives can also influence the agent's decision to continue or stop the project being carried out.

When managers are motivated by the existence of an incentive system in the company, managers can set minimum hurdle rates in a project that is on the verge of experiencing losses. The existence of organizational incentives can increase the direct involvement of project managers in setting hurdle rates for use in evaluating project profitability. So it can also evaluate the future performance of the project against the initial investment decision. Therefore, when faced with inappropriate feedback, project managers are likely to terminate the project, as long as the project termination action is consistent with the initial decision making about the project.

H<sub>3</sub> : Interaction between hurdle rates and organizational incentive system will affect commitment escalation decision making.

### **3. RESEARCH METHODS**

#### **Research Design**

The design of this study used a 2×2 experimental study between subjects. This study uses hurdle rates and organizational incentive systems as independent variables and commitment escalation variables as the dependent variable. The subject is an undergraduate accounting student who is taking financial management and management accounting courses at the Faculty of Economics and Business, Satya Wacana Christian University, Salatiga. Where the student subject is projected as a project manager in an investment project company. The reason for using this sample is because it is assumed that students who are taking the course better understand the meaning of investment than those who have not taken the course.

#### **Variable Operational Definition**

In this experimental research using independent variables and dependent variables that have a relationship with each other. The dependent variable is the escalation of commitment. Commitment escalation is the act of a manager who maintains his initial commitment to a project even though the project is in an expected economic condition indicating that the project should be terminated (Koroy, 2008). While the independent variables are: (1) Hurdle rates are performance techniques used for projects that can be evaluated such as the use of Internal Rate Return (IRR), Net Present Value (NPV),

Accounting Rate Return or commonly referred to as hurdle rates (Cheng et al., in Mulia et al., 2015); (2) Organizational incentive system are one of the main methods that can overcome agency problems and help align the goals of agents and principals (Harrison and Harrell, 1993).

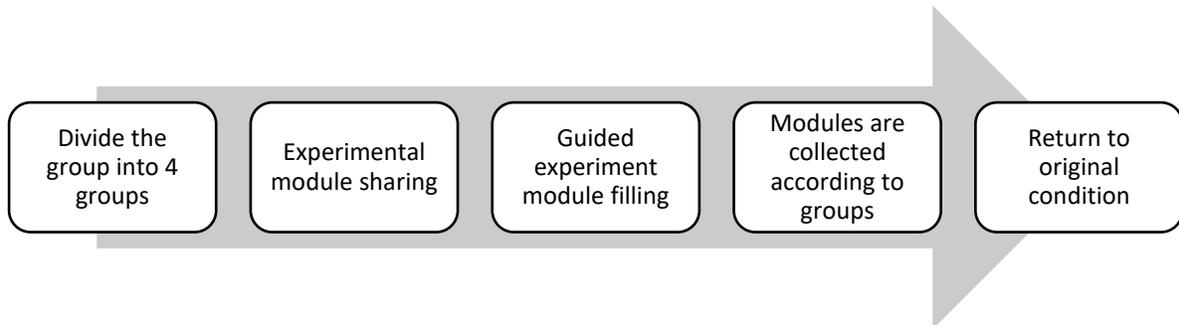
In addition, there are two conditions that will be faced by the subject. The first is where the company uses hurdle rates to reduce the escalation of commitment and the second is where the company uses an incentive or reward system to reduce commitment escalation. The rewards given by the company are in the form of cash, compensation and bonuses to managers for their performance.

**Data Source**

This study uses primary data, namely data obtained directly from the source. Primary data were collected through experiments in the form of research instruments in the form of cases. Laboratory experiments are the manipulation of independent variables and control other variables that have the potential to affect the dependent variable (Nahartyo, 2013: 3). The instrument used in this study is a Likert Scale of 10-100 (10 = stop the project to 100 = continue the project). Before conducting laboratory experiments, researchers conducted a *pilot test* which aims to determine whether the given case can be understood by the subject or not.

**Research Arrangement**

The experimental flow is carried out in four stages according to what has been arranged in Chart 1. Subjects were randomly divided into four experimental groups with different treatments as presented in Table 1. Each group will be divided into a different room but with the same room conditions. Treatment of room conditions to make randomization effective, that only different manipulations were received by the subject.



**Figure 1 Experiment Flow**

Source: Primary Data Processed

Manipulation treatment of *hurdle rates variable* is described by treatment of *hurdle rates* conditions (existing and non-existent conditions). Furthermore, manipulating the existence of an organizational incentive system and the absence of an organizational incentive system.

**Table 1 : Research Experiment Matrix**

		Hurdle rates	
		With Hurdle Rates	No Hurdle Rates
Organizational Incentive System	Yes	Group 1	Group 2
	No	Group 3	Group 4

Source: Primary Data Processed

After all subjects were in the experimental laboratory room, the subject received an assignment module as a company manager which contained different tasks according to the treatment of each group. Giving different treatments aims to adjust to the research matrix so that the impact of each treatment affects the experimental group in determining the manager's decision to escalate commitment.

In this study, the subjects were asked to act and think as if they were in the situation described in the module and as a manager of the company PT Astra which was handling a project that was only 6 years. The first stage, subjects were randomly divided into four groups with different treatments. Subjects received assignments that had been prepared with the treatment of *hurdle rates conditions* and the organizational incentive system presented differently in each group.

The initial assignment, the subject was asked to do the task of checking manipulation with the aim of knowing whether the subject had acted in accordance with the treatment given by the researcher. Subjects are asked to give a decision to continue the project or stop the project when there is a problem with product competition that is superior to competitors and the company's economic prospects that show an increase in production costs. Therefore, this study wanted to find out whether the subject escalated commitment when the company implemented an organizational incentive system policy or did not implement an organizational incentive system.

Groups that get hurdle rates conditions (group 1 and group 3) are assigned to continue or stop the project without other people knowing that the information obtained is about the failure or success of the project. On the other hand, groups that accept conditions without hurdle rates (group 2 and group 4) are asked to make a decision to continue or stop the project by presenting the possibility of certain savings or the possibility of recovering the investment.

Groups that received treatment with an organizational incentive system (group 1 and group 2) received information that the company they worked for implemented an organizational incentive system policy. On the other hand, subjects who received treatment without an organizational incentive system policy (group 3 and group 4) received information that the company did not implement an organizational incentive system policy.

The group that gets the two independent variable interactions, the treatment received by each group is different. For example, one group will find that there is no organizational incentive system policy applied in the company, and the hurdle rates faced by managers .

### Analytical Technique

In the first stage of testing the subject's profile with descriptive statistics. The second stage, testing the effectiveness of randomization with One Way Analysis of Variance (ANOVA). This test is intended to provide confidence that only manipulation has an effect on escalation and not because of differences in demographic characteristics. Hypothesis testing ( $H_1$  and  $H_2$ ) in this study was conducted using an independent sample test T-test with a supporting hypothesis if the probability is below 0.05, which means that there is a significant difference in the commitment escalation decision between the experimental group and the control group. The next hypothesis ( $H_3$ ) is tested using the test using Two Way Analysis of Variance (ANOVA) with a significance limit of 5%. Two Way Analysis of Variance (ANOVA) is a parametric statistic that has the advantage that it is drawn from a normally distributed population and has a homogeneous variance so that hypothesis testing gives sharper results than using nonparametric statistics.

## 4. RESULT AND DISCUSSION

### Overview of Research Subjects

The experiment was held at the Satya Wacana Christian University Faculty of Economics and Business for students in management accounting and financial management classes. Subjects who have received treatment and passed four manipulation questions on roles, assignments and on the manipulation of conditions that have been given are 76 students and the data is ready to be processed. The characteristics of each subject consist of 3 categories, namely age, cumulative achievement index, and semester. The profiles of subjects who have participated in this study are showed in Table 2.

**Table 2 : Subject Profile**

Information	Total	Percentage
Age :		
18 years	12	15,8%
19 years old	50	65,8%
>20 years	14	18,4%
GPA :		
2,50-2,99	13	17,1%
3,00-3,50	35	46,1%
>3,50	28	36,8%
Semester :		
<5	68	89,5%
5-7	6	7,9%
8	2	2,6%

Source: Primary Data Processed

Table 2 shows information on subject profiles by age category which has 12 people aged 18 years (15,8%), 50 people aged 19 years (65,8%) and 14 people aged 20 years and over (18,4%). In addition, the cumulative achievement index using the interval measurement level is 2,50-2,99 totaling 13 people (17,1%), 3,00-3,50 totaling 35 people (46,1%), and >3,50 totaled 28 people (36,8%). The majority of subjects are currently taking the study

period in semester <5 totaling 68 people (89,5%), and semester 5-7 totaling 6 people (7,9%) and the remaining semester 8 only 2 people (2,6%).

**Table 3 Commitment Escalation Variable Statistical Value**

	N	Minimum	Maximum	Mean	Std. Deviation
Commitment Escalation	76	40,00	100,00	69,74	16,33

Source: Primary Data Processed

Based on table 3 is a descriptive statistical analysis of the dependent variable, namely the escalation of commitment, which obtained an average value (*mean*) of 69,74 . The minimum and maximum data values for the commitment escalation variable are 40 and 100, respectively , with a standard deviation of 16,33.

**Table 4 : Commitment Escalation Statistical Test Results**

	Total	Percentage
Above Mean 69,74	46	60%
Below Mean 69,74	30	40%

Source: Primary Data Processed

Statistical testing based on table 4 is a test on the commitment escalation variable which shows the number of subjects who carry out commitment escalation. Previously it was calculated that the average (*mean*) of subjects who escalated commitment was 69,74 so it can be seen that the number of subjects who did escalation commitment was 46 people (60%) and the remaining 30 people (40%) did not escalate commitment.

### Randomization Test

Demographic randomization testing of subject profiles will use the One Way Anova Test . This test is carried out to determine whether the subject's demographic factors will influence decision making, which are presented in Table 5.

**Table 5 : One Way Anova Test Results**

	Mean Square	Sig.	Information
Age:			
Between Groups	695,167	0,068	No effect
Within Groups	249,447		
Grade Point Average (GPA):			
Between Groups	103,846	0,678	No effect
Within Groups	265,648		
Semester:			
Between Groups	447,059	0,182	No effect
Within Groups	256,245		

Source: Primary Data Processed

Based on the three predetermined indicators, namely age, GPA, and semester, all three did not meet the significance value ( sig. ) less than alpha ( 0,05 ). Groups on age characteristics have no effect on decision making for commitment escalation with a significance of 0,068 . Likewise with the GPA and semester groups with a significance of 0,678 and 0,182. These results can be concluded that the three indicators do not affect the decision making escalation of commitment to the conditions that are being faced by the manager.

## Hypothesis Test 1

### The Relationship of Hurdle Rates Conditions to Commitment Escalation.

The conditions to be tested in hypothesis one are the existence of hurdle rates and no hurdle rates. In conditions of hurdle rates , managers will be faced with project loss information received by managers, resulting in information asymmetry between managers and principals so that principals cannot supervise managers (group 1 and group 2). Meanwhile, there are no hurdle rates conditions (group 3 and group 4). Testing the first hypothesis using an independent sample t-test by comparing the existence of hurdle rates and no hurdle rates. The results of testing the first hypothesis can be seen in table 6.

**Table 6 : Hypothesis Testing Results 1**

	mean	Std. Deviation	t	Sig. (2-tailed)
Hurdle rate conditions				
There are hurdle rates	37,37	11,315	5,894	0,000
No hurdle rates	62,11	23,268		

Source: Primary Data Processed

Table 6 shows that the group of subjects who used hurdle rates had an average of 37,37 . Subjects who are in this condition tend to stop the ongoing project. Meanwhile, the group without hurdle rates had an average of 62,11 . The results of statistical tests explain the value of Sig. (2-tailed) equal variances assumed in the t-test for Equality of Means is 0,000 smaller than alpha (0,05), so it is concluded that it is significant at 5% probability. The results of these tests indicate that with hurdle rates, managers tend not to escalate commitments, while without hurdle rates managers tend to escalate commitments.

In an investment project when the company does not take into account the level of profitability that will be obtained and the minimum return that will be obtained by the company, the manager will tend to continue the unprofitable investment project. In addition, managers will feel more free to make decisions that they think are right in accordance with the initial principles in carrying out their projects. Meanwhile, managers who do not take into account hurdle rates tend not to be at risk if the losses are incurred, and do not fully anticipate the project being carried out.

The results of this study are in line with the results of research conducted by Mulia et al ., (2015) which states that the use of hurdle rates will tend to have an effect in stopping the project. Managers who enter this situation will generally re-evaluate their initial decisions and increase their commitment even though it is past information whose degree of usefulness is not appropriate for the present time so that there is no relevant reason to increase commitment to the decision.

## Hypothesis Test 2

### The organizational incentive system will influence the manager's decision to escalate commitment

The second hypothesis assumes that when the subject is not faced with the organizational incentive system policies implemented by the company, the subject has the confidence to continue escalating commitment. The test was carried out using a Sample T-test with the group receiving the treatment there was an organizational incentive system policy (group 3 and group 4) and no organizational incentive system policy was applied (group 1 and group 2). The results of hypothesis testing are presented in table 7.

**Table 7 : Test Results Hypothesis 2**

	mean	Std. Deviation	t	Sig. (2-tailed)
Organizational Incentive System Policy				
There is an incentive system	45,79	20,485	3,587	0,001
No incentive system	63,95	23,543		

Source: Primary Data Processed

Table 7 shows that the group of subjects who use the organizational incentive system has an average of 45,79 . Subjects who are in this condition tend to stop the ongoing project. While the group without an incentive system organization has an average of 63,95 . The results of statistical tests explain the value of Sig. (2-tailed) equal variances assumed in the t-test for Equality of Means is 0,001 smaller than alpha (0,05), so it can be concluded that it is significant at 5% probability. The test results indicate that the existence of an organizational incentive system, managers tend not to escalate commitment, while without an organizational incentive system managers will escalate commitment.

In this process, it cannot be separated from the agency theory perspective that the investment manager does not do this individually but in the setting of the interests of the capital owner who gives responsibility for managing his capital to the agent in this case the investment manager so that the motivation to take various actions including rationalization of irrational decisions. carried out to maintain reputation as an investment manager, not only incentive motivation but also individual reputation and is expected to have a long-term effect.

Apriwandi (2012) also stated that the importance of incentives affects the level of commitment to achieving goals, because an individual's commitment will increase if the value of the goal is high and they have high hopes for achieving these goals. In addition, research conducted by Zaputri (2013) and Erawati (2014) states that the existence of incentives has an effect on employee performance. So that when there are incentives applied by the company to provide rewards, facility allowances and others, it is felt that it creates a sense of loyalty to the company so that it will tend to influence managers to stop investment projects.

### Hypothesis Test 3

#### Interaction of Hurdle Rates and Organizational Incentive System on commitment escalation

The third hypothesis predicts that the two independent variables, namely hurdle rates and the organizational incentive system, will influence the manager's decision to escalate commitment. Testing the third hypothesis using the Two Way Anova test, namely by comparing the difference in mean (average) between the groups that have been divided on the two independent variables. The results of hypothesis testing are shown in table 8.

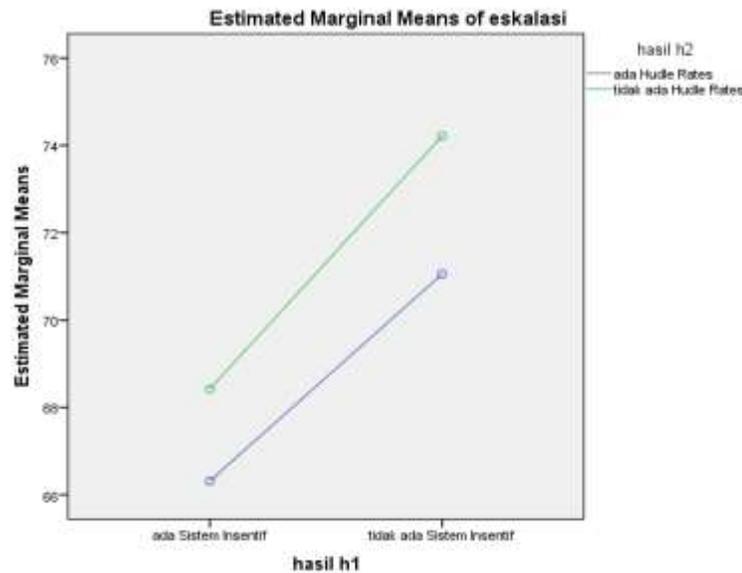
**Table 8 : Hypothesis Testing Results 3**

Source	Mean Square	Sig.
Corrected Model	663,158	0,476
Intercept	372400,000	0,000
Organizational incentive system	526,316	0,161
Hurdle rates	131,579	0,482
Negative Information* Adverse selection	5,263	0,888

Source: Primary Data Processed

Based on Table 8 obtained the value of Sig. Corrected Model of 0,476 is greater than alpha ( 0,05 ) which means that the two independent variables, namely the organizational incentive system and hurdle rates, together have no significant effect on the dependent variable. Intercept Model with Sig. 0,000 is smaller than alpha ( 0,05 ) which means that the value of changes in the dependent variable can change if the presence of the independent variable does not affect the dependent variable.

The incentive system shows Sig. 0,161 and the hurdle rates condition shows Sig. 0,482 which is compared will be greater than alpha (0,005), but with the interaction of the organizational incentive system and the hurdle rates condition shows Sig. 0,888 is greater than alpha (0,005). The results of the interaction test concluded that the organizational incentive system and the hurdle rates conditions did not significantly influence the manager's decision to escalate commitment. Organizational information system interactions and hurdle rates are depicted in Figure 1.



Source: Primary Data Processed

**Figure 2 Plot Diagram of Organizational Incentive System Interaction and Hurdle Rates Conditions on Commitment Escalation**

The figure shows that there is no interaction between the two independent variables on the dependent variable. This is likely to happen when managers who are given an incentive system feel that their responsibilities as managers are at stake from the projects being carried out so that organizational success for managers is closely related to principal satisfaction . Strong commitment for managers does not always go well so that it trains managers mentally not to act in their own interests and maximize their own benefits.

## 5. CONCLUSION

This study observes and examines the effect of hurdle rates on commitment escalation and examines one of the additional variables, namely the organizational incentive system. With the implementation of the policy of the organizational incentive system will affect the actions of managers to escalate commitment. This research was conducted using an experimental study. The conclusion of this study shows that first, the existence of hurdle rates conditions significantly affect the actions of managers to escalate commitment. Managers who correctly calculate the minimum rate of return will have an overview of the project being carried out, so that the required or expected profit from an investment plan expressed as a percentage can be used by managers to make project decisions that are being carried out. This is a condition where the manager can know for sure the project that is being carried out. In addition, when managers feel they have high self-confidence and are free to make decisions, it results in actions not to escalate commitments which they think are correct in accordance with the conditions of the project being carried out by ignoring the initial commitment in carrying out the project.

Second, the implementation of the organizational incentive system policy significantly influences the manager's actions to escalate commitment. This is based on the reason that the manager's level of loyalty in carrying out company projects that give him rewards. In addition, returning to the manager's responsibility based on a commitment to the interests of the company, not personal interests. Managers who have a great responsibility for not acting in their own self-interest and calculating the benefits for the company will act loyally and ignore the initial commitment to the project being carried out.

Third, there is no interaction between hurdle rates and policy conditions organizational incentive system so that it does not affect the actions of managers to escalate commitment. This happens because managers who correctly calculate the hurdle rates feel they have a responsibility as a manager whose position is at stake from the project being carried out. This responsibility focuses on organizational and company success which is closely related to principal satisfaction. Managers who have confidence in their responsibilities will not neglect their duties to continue to prioritize the interests of the company by escalating commitments. In addition, managers who have strong loyalty to the company will increase their initial commitment when they feel that it is no longer profitable for the company.

This study examines the effectiveness of hurdle rates in influencing the level of escalation in investment decision making. The results show that hurdle rates are effective in reducing commitment escalation. This hurdle rate will be the basis for all investment decisions. If the return on an investment project (often used the term IRR/Internal Rate of Return) is equal to or higher than the hurdle rate, then the project is feasible from a financial perspective. This hurdle rate must be determined carefully because the error in determining the hurdle rate can have a negative impact on the company. If the estimated hurdle rate is too high, it has the potential to reject profitable projects, but if it is too low it will make the actual unprofitable projects continue to run. Another, more accurate approach is to calculate the hurdle rate for each project or calculate the hurdle rate for each business unit or each division. In line with the findings of Mulia et al., (2015) that self-set hurdle rates will be more effective than organization-set hurdle rates in reducing commitment escalation, confirming the superiority of self-set hurdle rates over the form of organization-set hurdle rates. These results imply that hurdle rates can be an effective control mechanism, resulting in a lower level of commitment escalation where project managers have the opportunity to self-set hurdle rates. Another finding of the organizational incentive system from this study states that providing incentives to managers directly or in the form of rewards tends to be a manager's tendency to discontinue projects that indicate failure rather than continue.

Several limitations of the study need to be considered in assessing the results of this study. What is related to this research is that this research is an experimental study, in which the task given to participants is a simplification of the task of making investment decisions. Therefore, the job description does not include all the information considered in a real investment situation. Furthermore, the manipulation of the pressure exerted on the subject may be different from the pressure in the real world, and also the timing of the experiment is different due to the adjustment of the class schedule of the course. However, efforts have been made to provide conditions and manipulations as closely as possible so as to minimize the occurrence of differences. Future research should examine the characteristics and traits

of a person, for example, such as self-confidence, honesty, and responsibility. This can be accurate when knowing a person's personality in decision making.

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