DOI: https://doi.org/10.29259/sijdeb.v4i2.87-94

SRIWIJAYA INTERNATIONAL JOURNAL OF DYNAMIC ECONOMICS AND BUSINESS

Escalation Of Commitment: Supporting Role From Accountants

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Abstract: Previous research has mostly examined the phenomenon of escalation of commitment in the context of decision making by managers in an investment project. However, in the capital budgeting process, before making investment decisions managers tend to consider information produced by accountants. This study examines the phenomenon of escalation of commitment using the perspective of supporting role of accountants as the party that provides information for investment decision making by managers, especially in the presence of sunk costs. This study uses a laboratory experimental method. The sample in this study are 156 undergraduate students majoring in Accounting who had passed Financial Accounting and Management Accounting courses. Based on the results of the independent sample t-test, it shows that accountants who experienced sunk cost conditions tend to provide reports that directed managers towards escalation of commitment behavior compared to accountants who do not experience sunk cost conditions. The presence of sunk cost makes accountants have better mind frame to get the possibility of profit compared with a definite loss so that the decisions they make tend to provide reports that lead to the escalation of commitment behavior.

Keywords: escalation of commitment, sunk costs, accountants

Introduction

One of the dilemmas in the decision making process is to consider the effects resulting from the decision. This dilemma is very strong when the decision to be made is to stop an unproductive behavior or make more efforts and resources to make an earlier decision action to create results (Whyte, 1986). This condition is also called as escalation of commitment. Under the conditions of escalation of commitment, decision makers are faced with a negative outcome or feedback regarding the actions that have been previously

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chosen and they must make a decision back about "whether to survive or withdraw from the action that was chosen previously" (Brockner, 1992). (Staw, 1974) states that when the outcome of a decision is detrimental, it is possible for someone not to change behavior, but critically change the negative consequences to make it look more profitable. This action is associated with the efforts of someone to rationalize their actions or psychologically defend themselves against real mistakes in decision making (Whyte, 1986).

(Keil, Depledge, & Rai, 2007) shows that previous studies have used the concept of escalation of commitment in many contexts, including investment in nuclear power plants, software projects, investment behavior of venture capitalists and new product development decisions. Previous study mostly examines the phenomenon of escalation of commitment in the context of decision making by managers in an investment project (Cheng, Schulz, Luckett, & Booth, 2003; Dewi & Supriyadi, 2012; Huang & Chang, 2010; Rutledge & Karim, 1999). Some studies tend to explain such behavior using self-justification theory (Brockner, 1992). (Cheng et al., 2003) states that the theory of cognitive dissonance is one of the basic theories used by self-justification theory in explaining the behavior of managers' escalation of commitment.

(Cheng et al., 2003) explained that for managers involved in the capital budgeting process, the decision to invest will produce cognition that represents an individual's beliefs about project profitability and his commitment to the investment decisions. This initial commitment is referred to as "generative cognition". When the manager then receives project feedback that is not consistent with this generative cognition (i.e. dissonant feedback), then "dissonant cognition" is created (representing the knowledge that the project is not as beneficial as expected and must be stopped) (Cheng et al., 2003). In this condition, managers have two dissonance reduction strategies. First, managers can accept dissonance cognition (ie receive dissonant project feedback) and reject generative cognition (change their opinions about their initial investment decisions), thereby stopping existing projects (Cheng et al., 2003). Second, managers can continue their commitment to the project (i.e. continue to accept generative cognition), and reject dissonant feedback, resulting in escalation of commitment (Cheng et al., 2003).

In the capital budgeting process, the managers before making an investment decisions tend to consider information produced by accountants. The accountant first analyzes and makes a feasibility study to support investment project decision making. Accountants usually use capital budgeting evaluation techniques, such as Net Present Value (NPV), Benefit/Cost Ratio (BCR), Internal Rate of Return (IRR), Profitability Index (PI), and Payback Period (PI) in evaluating investment project plans. The accountant also provides an analysis of indicators and financial projections for the investment project to ensure that economically feasible project is selected or continue by decision makers, especially managers. Therefore, in the context of escalation of commitment, indirectly, accountants have a supporting role in providing information for managers to make investment decisions.

In the phenomenon of escalation of commitment, there is a possibility of managers making escalation of commitment decisions due to the influence of information (cash flow statements, expense reports, profit projections, etc.) provided by accountants (Fukofuka, Fargher, & Wang, 2014). The ambiguity of information provided by accountants, especially related to negative feedback on investment projects can also trigger managers' escalation of commitment. (Mccain, 1986) states that escalation most likely to occur when negative

feedback on investment is ambiguous and future directions is unclear. Decision makers may be overly influenced by cognitive biases that cause them to interpret situations in ways that inhibit the recognition of problems so that they perform escalation of commitment behavior (Keil et al., 2007). The manager might not be doing escalation of commitment if the information provided by the accountant will not lead to the continuing unfavorable project (Fukofuka et al., 2014).

The results of previous studies indicate that the presence of sunk costs increases the likelihood of escalation of commitment (Sharp & Salter, 1997; Whyte, 1993). As long-term projects develop, the level of sunk cost will definitely increase but the benefits of the project remain uncertain (Fukofuka et al., 2014). (Whyte, 1993) states that while from a rational economic point of view sunk costs are irrelevant to future decisions, the presence of sunk costs in the context of decisions can influence decision-makers to take risks. The study result of (Whyte, 1993) using student samples in individual and group contexts shows that the presence of sunk costs significantly increases the likelihood of project escalation.

This study aims to strengthen the external validity of the results of experimental research conducted by (Fukofuka et al., 2014). This study examines the escalation of commitment phenomenon by using the perspective of supporting role from accountants as the party providing information for investment decision making by managers. This study also examines the effect of the presence of sunk cost in influencing the tendency of accountants to provide information that directs managers to the escalation of commitment behavior.

Literature Review

Escalation of Commitment

Escalation of commitment is the tendency for decision makers to hang on a failed action (Brockner, 1992). Escalation of commitment is considered as a bias in investment decision making. This is because decision makers use irrational considerations in their investment decisions, they do not base on the benefits of the decision (profits) but on other aspects that are less relevant such as fear of getting poor performance evaluation due to investment decision mistakes taken earlier (Dewi & Supriyadi, 2012).

Hypothesis Development

The result of Fukofuka et al. (2014) shows that the presence of sunk cost motivates accountants to provide reports that direct managers to the escalation of commitment behavior. The existence of sunk costs will make accountants influenced by perceptions of risk and rewards that they are likely to receive. Accountants experiencing sunk cost conditions will be in a negative frame so their thinking tends to be better at gaining the possibility of profit compared to a definite loss (Fukofuka et al., 2014). This causes them to tend to provide reports that direct managers to continue projects that are less profitable. The first hypothesis in this study is as follows:

H₁: accountants who experience sunk cost condition will show a greater tendency to provide reports that lead to the continuation of investment projects compared to accountants who do not experience sunk cost condition.

Methods

Research Design

This study uses a laboratory experimental method. The research subjects will work on one of two experimental tasks (condition without sunk costs and condition with sunk costs) that are given randomly. Each subject will do an experimental assignment in a class according to the time limit provided.

Research Subject

The subjects of this study were undergraduate students majoring in Accounting. The subject of this study is that students have passed the courses in financial accounting and management accounting. Students who have passed both courses are appropriate and good proxy for accountants in this study as they are considered capable of understanding the financial reporting process related to an investment project. The experimental task adopted in this study was a case reporting on the results of the project at the basic level so students tend to still be able to be relied on to make the report (Fukofuka et al., 2014). Previous studies used quite a lot of students as experimental research subjects related to escalation of commitment ((Booth & Schulz, 2004; Cheng et al., 2003; Dewi & Supriyadi, 2012; Fukofuka et al., 2014; Harrell & Harrison, 1994; Rutledge & Karim, 1999).

Experimental Design

This study adopts the experimental scenario of escalation of commitment from the study Fukofuka et al. (2014). In the experimental task, all subjects were asked to play the role of a chief accountant who provided investment project progress reports. The report will be used as a basis for decisions by managers to continue or discontinue investment projects.

This experimental case scenario consists of two versions, namely the first version containing information about sunk costs and the second version without information about sunk costs. Each version consists of two parts, the first part is an experimental case scenario, the second part contains the respondent's identity and a manipulation check. Manipulation check aims to find out whether the research subject understands well the situation and conditions faced before making a decision on an experimental case (Dewi & Supriyadi, 2012). Manipulation check in this study was done by asking four statements that were confirmatory about the conditions of the experimental case. The manipulation check statement in this study consisted of case scenarios showing that the project was 90% complete, the case scenario shows that your colleagues respect you very much, the case scenario shows that you are responsible for preparing the initial report that is used to decide whether the project should be carried out, and the case scenario shows that the General Manager (GM) wants the project to be completed. The subjects of this study were asked to determine whether the statement was true or false and then indicate its relevance on a 7-point Likert scale (1 = irrelevant to 7 = highly relevant).

Research Variable

The variables of this study consisted of dependent and independent variable. The dependent variable of this study is the tendency for accountants to facilitate the manager's

escalation of commitment behaviour (willingness to provide reports that lead to the continuation of investment projects). The dependent variable of this study was measured by question items at the end of each experimental case scenario in the form of "respondents willingness to provide reports that lead to the continuation of investment projects". Respondents gave answers to these questions on a 1-10 Likert scale (Fukofuka et al., 2014). Scale 1-5 shows unwilling while scale 6-10 shows willing.

The independent variable in this study is sunk cost. In this study, sunk cost is measured using manipulation condition in form of the availability of sunk cost information in experimental case scenario. Subjects in the sunk cost condition were informed that the company had spent 90% of the budget allocation and the project had finished 90%, while subjects in the condition without sunk cost were not given information about the budget allocation and project completion status (Fukofuka et al., 2014).

Findings

Overview of Research Data

The number of students participating as subjects in this study were 272 students. The research subjects used as samples to be analyzed in this study were participants who completed all research procedures and passed the manipulation check. Participants who are able to pass or answer correctly all manipulation check questions are participants who are able to understand the experimental case well. These participants are good samples in the experimental method because they will make decisions based on the situations and conditions encountered in the case scenario of the experiment. Table 1 presents participant data in this study:

Table 1. Experiment Participant Data

| Table 1. Experiment Participant Data | | | | |
|---|-------|------------|--|--|
| Description | Total | Percentage | | |
| Number of Experiment Participants | 272 | 100% | | |
| Participants who did not complete the entire experimental | 15 | 5,51% | | |
| procedure | | | | |
| Participants who did not pass the manipulation check: | | | | |
| Group with sunk cost condition | 23 | 8,46% | | |
| Group without sunk cost condition | 78 | 28,68% | | |
| Number of samples did not pass the manipulation check | | 37,14% | | |
| The participants used as samples to be analyzed: | | | | |
| Group with sunk cost condition | 89 | 32,72% | | |
| Group without sunk cost condition | 67 | 24,63% | | |
| The number of final sample | 156 | 57,35% | | |

Based on Table 1, from 272 participants who participated in this research experiment, there were 15 participants who did not complete all the experimental procedures or as much as 5.51%. Table 1 also shows that 101 participants or 37.14% did not pass the manipulation check of this research experiment so that they were excluded from this study sample. The high level of samples that did not pass the manipulation check was because the participants were less thorough in completing the experimental tasks and did not follow the experimental procedures properly. The final number of samples to be analyzed in this study were 156 participants or 57.35%.

Demographic information of the experimental participants in this study is shown in Table 2. The experimental participants of this study were divided into two groups: a group with sunk cost condition as many as 89 participants and a group without sunk cost condition of 67 participants. Most of the participants in this study were women with a total of 68 participants or 76.40% in the group with sunk cost condition and 50 participants or 74.63% in the group without sunk cost condition. Most of the participants in this study were 20 years old as many as 50 participants or 56.18% in the group with sunk cost condition and 37 participants or 55.22% in the group without sunk cost condition.

Table 2. Demographic Information of Experimental Participants

| Description Gender | | With Sunk Cost | | Without Sunk Cost | |
|---------------------------|--------------|----------------|--------|-------------------|--------|
| | Men | 21 | 23,60% | 17 | 25,37% |
| | Women | 68 | 76,40% | 50 | 74,63% |
| | 18 years old | 1 | 1,12% | 0 | 0% |
| Age | 19 years old | 25 | 28,09% | 15 | 22,39% |
| | 20 years old | 50 | 56,18% | 37 | 55,22% |
| | 21 years old | 10 | 11,24% | 12 | 17,91% |
| | 22 years old | 1 | 1,12% | 2 | 2,99% |
| | 23 years old | 1 | 1,12% | 1 | 1,49% |
| | 24 years old | 1 | 1,12% | 0 | 0% |

Hypothesis Testing

The hypothesis of this study states that accountants who experience sunk cost condition will show a greater tendency to provide reports that lead to the continuation of investment projects (lead to manager to do escalation of commitment) compared to accountants who do not experience sunk cost condition. Independent sample t-test was used to test the hypothesis of this study. Table 3 presents the group statistics sample of the group with sunk cost condition and the group without sunk cost condition in this study.

Table 3. **Group Statistics**

| | The Presence of Sunk Cost | N | Mean | Std. Deviasi |
|------------|---------------------------|----|-------|--------------|
| Escalation | of With Sunk Cost | 89 | 7.775 | 1.521 |
| Commitment | Without Sunk Cost | 67 | 6.388 | 2.276 |

Based on Table 3 it can be seen that the mean value of the tendency of accountants to facilitate the behavior of manager's escalation of commitment (willingness to provide a report that leads managers to accept the continuation of investment projects) in the group with sunk cost condition is 7.775 while for the group without sunk cost condition is 6.388. A mean value of 1-5 indicates the accountant is not willing to provide a report while a mean value of 6-10 indicates the accountant is willing to provide a report. In absolute terms it is clear that the mean value of accountant tendencies facilitating the escalation of commitment behavior in the group with sunk cost condition is different from the group without sunk cost condition. Based on the mean values in Table 3 it can be seen that accountants who are in a sunk cost condition tend to facilitate the escalation of commitment behavior or tend to provide reports that lead to the continuation of investment projects compared to accountants who are not in sunk cost condition. The difference in mean values is then statistically proven through the independent sample t-test. Table 4 presents the results of the independent sample t-test.

Table 4. The Results of Independent Sample T-Test

| | | | | Escalation of Commitment | |
|-----------------|-------|-------------------------|-------|--------------------------|-------------|
| | | | | Equal | Equal |
| | | | | Variances | Variances |
| | | | | Assumed | Not Assumed |
| Levene's Test F | | F | | 11.019 | |
| for Equalit | ty of | Sig. | | 0.001 | |
| Variances | | | | | |
| | | | | | |
| t-test | for | t | | -4.557 | -4.316 |
| Equality | of | df | | 154 | 108.61 |
| Means | | Sig. (2-tailed) | | 0.000 | 0.000 |
| | | Mean Difference | | -1.387 | -1.387 |
| | | Std. Error Difference | | 0.304 | 0.321 |
| | | 95% Confidence Interval | Lower | -1.988 | -2.024 |
| | | of the Differences | Upper | -0.786 | -0.750 |

Table 4 shows that the value of F_{count} levene's test is 11.019 with a significance level of 0.001 (significance value < 0.05) so it can be concluded that H_0 is rejected, which means that the variance of escalation of commitment between the group with sunk cost condition and the group without sunk cost condition is different. These results indicate that the analysis of the independent sample t-test test of this study must use the assumption of equal variances not assumed. Based on Table 4 it can be seen that t-value on equal variances not assumed is -4.316 with a significance value of 0.000 (significance value < 0.01). These results indicate that the hypothesis of this study is supported. Thus it can be concluded that accountants who experience sunk cost condition tend to provide reports that leads manager to the behavior of escalation of commitment. The results of this study support the results of study conducted by Fukofuka et al. (2014) and Garland (1990). The presence of sunk costs makes accountants in the frame of mind is better to get the possibility of profit compared to the exact losses so that the decisions they make tend to provide reports that direct managers to the behavior of escalation of commitment.

Conclusion

This study aims to examine the phenomenon of the sunk cost effect and escalation of commitment by using the perspective of supporting role from accountants as the party providing information for investment decision making by managers. Based on the results of independent sample t-test, the hypothesis of this study was supported. Accountants who experience sunk cost conditions tend to provide reports that leads manager to the behavior of escalation of commitment. The supporting role of accountant in the manager's escalation of commitment behavior is to provide financial reports or information to continue an investment project that has been carried out previously, even though there are indications that the investment project will fail in the future.

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