

(MTurk post)

Instructions:

You will complete a study that should take you about 20 minutes to finish. You must complete the entire study in one sitting. If you accept this HIT, please do not click the link to the study until you are ready to begin.

Please use a desktop or laptop computer, and a browser with JavaScript enabled, to complete the study. If you are unsure if you have JavaScript enabled, or need instructions on how to enable JavaScript, please visit this site: <http://enable-javascript.com>.

You will receive a guaranteed participation fee of \$2.00 for completing this study. As described later, you could also earn *additional* compensation – depending on the decisions you make during the study – that will range between \$0 and \$12. Please note that as long as you complete the study, your HIT will be approved. The decisions you make during the study will NOT affect this approval.

At the end of the study, you will also answer a few demographic questions and other questions related to your experience in the study.

In order to receive payment for participating in this study, you must do two things:

1. You must complete the entire study (all tasks, as described in the study's instructions). At the end, we will provide you with a unique *Study Code* that you should write down.
2. You must return to this page and enter your *Study Code* and submit the HIT.

Please review the following informed consent information. **You will begin the study by providing your consent to participate.**

INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR

Decision-Making Study

You are invited to participate in a research study of individual decision-making. You were selected as a possible participant because of your membership in Amazon Mechanical Turk and your interest in this study. Please read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Jason Brown, Patrick Martin, Geoff Sprinkle, and Dan Way from Indiana University. It is funded by Indiana University.

STUDY PURPOSE

The purpose of this study is to examine individual decisions.

NUMBER OF PEOPLE TAKING PART IN THE STUDY

If you agree to participate, you will be one of approximately XXX participants who will be participating in this research.

PROCEDURES FOR THE STUDY

If you agree to be in the study, you will do the following things:

1. Read a set of instructions that describes your task and the task setting.
2. Work on a task to earn compensation.
3. Complete a follow-up questionnaire to provide demographic information and information about your experiences completing the task.

The entire study should take approximately 20 minutes to complete. Please do not discuss any aspect of the study with anyone, as others will be completing the study at a later time. A full explanation of the purpose of the study and the expected findings will be available after all participants have had the opportunity to complete the study.

RISKS OF TAKING PART IN THE STUDY

While on the study, the risks are:

1. Possible loss of confidentiality

The researchers will take every possible precaution to prevent a loss of confidentiality. Your name will not be associated with any of your responses to the follow-up questionnaire and will only be analyzed after being combined with the responses from other participants. Although the questionnaire requires a response to each question in order to proceed, if at any time you do not wish to answer a question, you may discontinue the study.

BENEFITS OF TAKING PART IN THE STUDY

There are no direct benefits expected from participation in this study.

ALTERNATIVES TO TAKING PART IN THE STUDY

Instead of being in the study, you have these options: not participating in the study.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP).

PAYMENT

You will receive a fixed payment of \$2.00 for participating in this study. You will also have the opportunity to earn additional compensation based on decisions you make during the study.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study, contact the researcher, Patrick Martin at martinpr@indiana.edu.

For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at [\(812\) 856-4242](tel:8128564242) or [\(800\) 696-2949](tel:8006962949) or by email at irb@iu.edu

VOLUNTARY NATURE OF THIS STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision regarding whether or not to participate in this study will not affect your current or future relations with the investigators or with Indiana University.

SUBJECT'S CONSENT

Thank you for agreeing to participate in our research. Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. Additionally, this research is for residents of the United States over the age of 18*; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement.

****To begin the study, you will need to answer "Yes" to provide your consent to participate on the first page displayed when visiting the link to the study.****

Please do not click the study link until you are ready to begin.

General Instructions:

Thank you for your participation in this experiment. There are no tricks involved in any part of the experiment. All of the procedures used will be exactly as they are described in these instructions. The experiment should last approximately 20 minutes, and must be completed in one sitting. Before beginning, please remove any distractions that may affect your ability to complete the experiment. Others may be completing the experiment at a later time, so please do not discuss the experiment with anyone. During the experiment, you will not be able to go "back" to previous screens. If you would like to print a copy of all the instructions for reference during the experiment, you may access them [here](#) (a new window will be launched).

Each participant is guaranteed to receive at least \$2.00 as a participation fee. As explained below, you will have the opportunity to earn additional compensation (which will be between \$0 and \$12) during the experiment. Your total earnings, including the \$2.00 participation fee, will be paid to you via your Amazon Mechanical Turk account.

To protect your identity, we have randomly assigned you a participant number. This number will be used to collect information about your decisions during the experiment, and will be used to pay you at the end of the experiment.

In this experiment, you will act as a division manager for a firm that manufactures a variety of products. Since you have authority over investment decisions in your role as division manager, you will be presented with information about potential projects to consider implementing in your division, and will make a series of decisions about which of those projects you would prefer to implement. As explained in more detail below, your compensation for this part of the experiment will be based on the performance of one of the projects you select for possible implementation.

There will be three parts to the experiment:

1. Instructions and a brief quiz to check your understanding of these instructions.
2. The project selection task, described in more detail below, that you will complete to earn additional compensation.
3. An anonymous questionnaire about your experience.

Task Instructions:

For the duration of this experiment, assume you are a division manager in your firm. As part of your responsibilities as division manager, you make periodic decisions regarding investments in new projects within your division. Each division's required rate of return on investment is 10%, and so evaluations of a division manager's performance include comparisons of the performance of that division's projects to the required return. For the upcoming period, you have a budget of \$700 to invest in a new project for your division.

Once the project selection task begins, you will be presented with information about different projects that can possibly be implemented in your division. Projects will be presented in pairs – Project A & Project B – and you will select one of the two projects from each pair that you would like to implement. You will repeat this process for a total of ten pairs of projects.

All projects presented to you require the same investment (\$700). The information presented to you for each project will indicate: (1) the range of possible levels of income the project could generate in the coming period, (2) the likelihood of the project generating each particular outcome, and (3) the **residual income** that results from each particular outcome.

Residual income is an important measure used by your firm to evaluate the performance of projects chosen by division managers. As such, it will be used to determine your bonus compensation, in the manner described on the next page. Residual income represents the income generated by a project in excess of your division's required rate of return on investment of 10%. It can therefore be calculated in the following manner:

$$\text{Residual income} = \text{Income generated by project} - (\text{Required rate of return} \times \text{Investment in project})$$

To illustrate, consider the following example: Project A generates \$170 in income. Since your division's required rate of return is 10%, and all projects you will consider in this experiment require a \$700 investment, the residual income for project A is:

$$\$170 - (10\% \times \$700) = \$100$$

Information for a sample pair of projects has been provided below to allow you to become familiar with the type of information you will see during the actual project selection task:

Possible outcomes represent the range of income that could be generated by the project

Each likelihood represents the chance that the project will generate each corresponding amount of income, based on a random draw. For example, Project A has a 1% (or 1 out of 100) chance of generating \$170 in income, a 3% (or 3 out of 100) chance of generating \$150 in income, and so on. Note that all likelihoods sum to 100% for each project.

Project A

Possible Outcomes	Likelihood	Residual Income
170	I (1%)	\$100
150	III (3%)	\$80
140	IIII (5%)	\$70
120	IIIIII (6%)	\$50
115	IIIIII (7%)	\$45
110	IIIIIIII (8%)	\$40
105	IIIIIIIIII (15%)	\$35
95	IIIIIIIIII (15%)	\$25
85	IIIIIIIIIIII (20%)	\$15
70	IIIIIIIIIIII (20%)	\$0

Project B

Possible Outcomes	Likelihood	Residual Income
240	IIII (5%)	\$170
230	IIII (5%)	\$160
210	IIIIIIII (10%)	\$140
175	IIIIIIII (10%)	\$105
135	IIIIIIIIII (15%)	\$65
100	IIIIIIIIII (15%)	\$30
75	IIIIIIIIII (15%)	\$5
30	IIIIIIII (10%)	-\$40
10	IIIIIIII (10%)	-\$60
0	IIII (5%)	-\$70

Residual income, an important measure used by your firm to evaluate performance, is the income generated by the project in excess of your division's required return on investment. It is calculated as: Income generated by project – (Required rate of return x Investment in project). In your case that equates to: Project outcome – (10% x \$700). The residual income of the project chosen for implementation in your division will determine your bonus compensation, as described in detail on the next page.

As stated previously, you will be presented with ten pairs of projects and will select one project from each pair that you would prefer to implement. Once you have finished making all ten selections, you will complete a questionnaire about your experience, and will then learn the outcome of your implemented project and your compensation for the experiment.

Compensation:

Your compensation will be calculated using the following rules (you may refer to these rules during the experiment by [accessing or printing them here](#) - a new window will be launched):

As mentioned earlier, you will receive \$2.00 for your participation in this experiment, plus additional compensation earned as a result of the decisions you make during the experiment. This additional compensation will be in the form of a bonus that will be calculated based on the performance of the project implemented in your division.

Please note that while you will be indicating your preference for implementing one of two projects from ten separate pairs of projects, **one randomly selected project** from your ten choices will actually be implemented. The performance of that single project will be determined randomly based on the likelihoods of each of the project's outcomes (as described previously), and the project's performance will then determine your bonus compensation for the experiment.

Bonus compensation will range between \$0 and \$12 and will be determined using the **residual income** of the project implemented in your division, according to the following:

Bonus compensation = \$2 for project performance that meets the division's required return (i.e., Residual income of \$0), and an additional \$2 for each additional \$70 in Residual income. This can be summarized in the following schedule:

Residual income from implemented project	Bonus
Less than \$0	\$0
\$0-69	\$2
\$70-\$139	\$4
\$140-\$209	\$6
\$210-\$279	\$8
\$280-\$349	\$10
\$350-\$419	\$12

For illustrative purposes, consider the following total compensation calculation examples:

1. The project randomly chosen for implementation from a participant's set of ten selected projects attains an outcome of \$165. Residual income for the project is therefore: $\$165 - (10\% \times \$700) = \$95$. The participant's total compensation for the experiment is:

Bonus based on residual income of \$95	= \$4.00
Participation fee	= \$2.00
Total compensation	= \$6.00

2. The project randomly chosen for implementation from a participants' set of ten selected projects attains an outcome of \$35. Residual income for the project is therefore: $\$35 - (10\% \times \$700) = -\$35$. The participant's total compensation for the experiment is:

Bonus based on residual income of -\$35	= \$0.00
Participation fee	= \$2.00

Total compensation = \$2.00

Knowledge Check:

You will now complete a brief quiz to test your knowledge of the instructional material you just read. If you miss a question, you will be returned to the instructions and will have the opportunity to browse the material again before re-attempting the quiz.

1. How many separate pairs of projects will you be presented with during your project selection task?
 - a. 3
 - b. 5
 - c. **10**

2. Of the projects you select for possible implementation, **one** will be selected at random for implementation, and your bonus compensation will be determined by the performance of that one project.
 - a. **True**
 - b. False

3. What is the range of possible bonuses you can receive based on the performance of the project randomly chosen for implementation in your division?
 - a. \$0-\$6
 - b. **\$0-\$12**
 - c. \$2-\$6
 - d. \$2-\$12

4. Your bonus compensation is based on the performance of the project implemented in your division, as measured by:
 - a. **Residual income**
 - b. Net cash flows
 - c. Return on investment

5. Residual income measures the income generated by a project _____.
 - a. In excess of \$0
 - b. **In excess of the division's required rate of return**
 - c. In excess of the previous project's return

As a reminder, bonus compensation will be determined by the following:

\$2 for project performance that meets the division's required return (i.e., Residual income of \$0), and an additional \$2 for each additional \$70 in Residual income.

6. What would your total compensation be (**including** your \$2 participation fee) if the project randomly chosen for implementation in your division generated residual income of \$150?
 - a. \$4
 - b. \$6
 - c. **\$8**
 - d. \$10

7. What would your total compensation be (**including** your \$2 participation fee) if the project randomly chosen for implementation in your division generated residual income of \$50?
- a. \$2
 - b. \$4**
 - c. \$6
 - d. \$8

You will now be presented with your ten pairs of projects. From each pair, you will select the one project you would prefer to implement in your division.

<Project selection task>

Please consider the following projects. Indicate which project you would prefer to implement by clicking the button under the project, and then clicking “Next.”

Project A			Project B		
Possible Outcomes	Likelihood	Residual Income	Possible Outcomes	Likelihood	Residual Income
165	I (1%)	\$95	240	(10%)	\$170
160	(3%)	\$90	230	(10%)	\$160
155	(5%)	\$85	210	(10%)	\$140
150	(6%)	\$80	175	(10%)	\$105
145	(7%)	\$75	135	(10%)	\$65
140	(8%)	\$70	100	(10%)	\$30
135	(10%)	\$65	75	(10%)	\$5
130	(15%)	\$60	30	(10%)	-\$40
125	(20%)	\$55	10	(10%)	-\$60
120	(25%)	\$50	0	(10%)	-\$70

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Next

For reference, your bonus compensation will be determined in the following manner:

Residual income from implemented project	Bonus
Less than \$0	\$0
\$0-69	\$2
\$70-\$139	\$4
\$140-\$209	\$6
\$210-\$279	\$8
\$280-\$349	\$10
\$350-\$419	\$12

[Repeat 10 pairwise selections, randomly determined order]

<After task>

You have completed the project selection task. Please click “Next” below and complete the anonymous follow-up questionnaire.

After you complete the questionnaire, you will be provided with a unique Study Code that you must enter on the HIT assignment page in order to submit the HIT and receive your compensation.

<PEQ>