

Experiment Instructions

1 Introduction

This is an experiment in the economics of market decision-making. The instructions are simple, and if you follow them carefully and make good decisions, you might earn a considerable amount of money. In this experiment, we are going to conduct a market in which you will make decisions to buy, sell, or hold three different "commodities," called X , Y , and Z in a sequence of trading periods. On the *Market Summary* page you will find a link called "Earnings Info." Following this link to your earnings information page you will find a link to a chart labeled "Payoff Chart" which will help determine the value to you of any decisions you might make.

How trading takes place Commodity X is traded in market X , and commodity Y is traded in market Y . The currency used in these two markets is the third commodity, Z . All prices are quoted in terms of Z . Your final payoff, however, will be in cents, which depends upon your end of period "inventories" of X and Y , and your inventory of Z , listed as " Z on hand." Your current inventories can be seen on your Market Summary page.

Minimum price There is a minimum price for X and Y of 5 z . If you're buying (selling) X , you may only submit bids (asks) of 5 or more units of z . The same goes for Y .

2 The Payoff Tables

You will be provided with a Payoff Chart and a Payoff Table. Your Payoff Chart is a graphical representation of your Payoff Table. Your dollar payoff is determined by your holdings of exactly two of the three commodities at the end of each period. What those commodities are, however, will differ from individual to individual. For example, some people's payoff will be determined by the amount of X and Y they hold, whereas others will be determined by Y and Z .

How to read the payoff table The values listed in the following EXAMPLE payoff table generally have nothing to do with the values in your actual payoff table, but they should help you read the actual table. In the EXAMPLE TABLE, values depend upon the final holding of only two of the three commodities, α , β , while the third, γ , is worth nothing (The value per unit of γ is listed at the bottom of the table.). Of course α and β can be any pair of the three commodities (X , Y , and Z). Suppose that you have decided to hold 8 units of α , 14 units of β , and 4 units of γ . Your dollar payoff in this case is determined as follows. Notice first that the 4 units of the third commodity are worth nothing in this case, so these units contribute nothing to your final payoff. Now, find the column corresponding to 8 units of α and the row corresponding to 14 units of β . Read the entry for the total payoff, 800. This would be your dollar payoff for that period. If you held 9 units of α and 14 units of β , your total payoff would be 1200 instead of 800.

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|----------------|----------|------------|------------|-------------|--------------|--------------|
| 17-20 | 1200 | 1200 | 1200 | 1210 | 1400 | 1400 |
| 13-16 | 800 | 800 | 800 | 1200 | 1200 | 1400 |
| 9-12 | 600 | 600 | 800 | 800 | 1200 | 1200 |
| 5-8 | 200 | 600 | 600 | 800 | 800 | 1200 |
| 1-4 | 200 | 200 | 600 | 600 | 800 | 1200 |
| 0 | 0 | 200 | 200 | 600 | 800 | 1200 |
| β/α | 0 | 1-4 | 5-8 | 9-12 | 13-16 | 17-20 |

(Value of $\gamma=0$ per unit)

Table 1: Payoff Table

3 Endowments

At the beginning of each period of the experiment, you will be given an endowment. Your endowment can be seen on your Market Summary page. At the beginning of each period your endowments will be refreshed. You cannot carry over any goods across periods.

4 How the System Works

In order to buy anything, you must have enough cash in z on hand. Unless you are endowed with z at the beginning of the period, you can only acquire z by selling something. If you do not have enough z to buy units in market X , you must first sell some of your units in market Y in order to obtain the z to buy in market X . The number of units of commodities an individual might want to sell or the number of z the individual might want to retain depends upon the individual.

5 Time and the End of the Experiment

The market system is organized as follows. The market will open in a series of trading periods. The first period is a practice period. The practice period does not involve money. The transactions do not count. Period lengths can be changed so you should check the clock regularly.

6 Some things to remember

This will be a fairly long experiment. You can expect some periods where you make quite a bit of money, and some periods where you don't make much money. If you're in a bad period, just be patient. And remember that seemingly small amounts of money add up over the course of the experiment.

We will start the practice period in a few minutes. To make sure that our accounting is working properly, and more importantly, that you know how the system works, I want you to put in some bid and ask orders at a price of 25 Z . So if you have X or Y , put in an ask for 25; if you have Z , put in a bid at 25 for either X or Y . This way transactions will take place and you can see how the system works, and we will also know that you understand how the system works.