Classroom
EXPERNOMICS

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FROM THE EDITORS

This is the inaugural issue of what we hope will become a regularly published newsletter dedicated to the dissemination and exchange of information and ideas concerning the use of classroom experiments and other experiential methods in teaching undergraduate economics courses.

In February, we sent letters to everyone who has participated in the NSF Seminars on Classroom Experimentation in Economics at the University of Arizona, soliciting expressions of interest in such a newsletter. We were gratified to receive responses from approximately twenty-five people, several of whom also offered to contribute descriptions of classroom exercises which they had devised. We extend our thanks to John H. Beck of Gonzaga University, Harold O. Fried and Daniel Levy of Union College, and David E.R. Gay of the University of Arkansas for their contributions to this issue.

If you are one of the people who responded positively to our earlier letter, we thank you for your interest; we will keep you on our mailing list. If you did not respond to our earlier letter, we are sending you this initial issue of the newsletter, but we need to hear from you if you wish to continue to receive future issues.

We also would be happy to send this newsletter to anyone else who shares our interest in the use of experimental/experiential exercises in the classroom.

Our initial plan is to publish this newsletter twice yearly (Spring and Fall). We would appreciate hearing your reactions to this initial issue. And, of course, we would welcome any contributions which you might be willing to make to our next issue. To ensure their inclusion in the Fall issue, such contributions should reach us by November 1, 1992.

G.D., J.N.

If you would like to receive this newsletter, but are not currently on our mailing list, please contact:

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AN EXPERIMENTAL TEST OF PREFERENCES FOR THE DISTRIBUTION OF INCOME

John H. Beck*

This study investigates the question of how much income redistribution individuals desire in society with random differences in individual incomes. The experiments confronted individuals with choices of lotteries determining their own payoffs -- to determine individual risk aversion -- and with choices of lotteries determining payoffs to everyone in the group -- to determine preferences regarding the distribution of income. Comparison of the results reveal whether preferences for income redistribution are based solely on an individual "insurance motive" or involve preferences for a more equal distribution of income within the group than is explained by individual risk aversion. The results show that the subjects were risk averse but they did not display the extreme risk aversion implied by a Rawlsian maximin rule. The experiments produced conflicting evidence regarding the question of whether individuals favor a more equal income distribution than can be explained by individual risk aversion.

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Instructions

PART A

This experiment consists of three parts, A, B, C. At the end of the period, there will be a random drawing to determine which part will be used to determine individual payoffs.

If Part A is used, your payoff will be determined by the roll of a die at the end of the period. If the die shows 1, 3 or 5, you will receive the amount in the column headed "odd"; if the die shows 2, 4 or 6, you will receive the amount in the column headed "even." Payoffs will be made privately so you will know only your own payoff. You must choose which row in the table -- A, B, C, etc. -- will be used to determine your payoff.

	Odd	Even
A	$25.00	0
B	$23.05	$1.15
C	$21.20	$2.20
D	$19.45	$3.15
E	$17.80	$4.00
F	$16.25	$4.75
G	$14.80	$5.40
H	$13.45	$5.95
I	$12.20	$6.40
J	$11.05	$6.75
K	$10.00	$7.00
L	$9.05	$7.15
M	$8.20	$7.20
N	$7.45	$7.15
O	$7.08	$7.08

Fill in your name and circle the letter of the row which you want to determine your payoff.

Name _____

PART B

In this part of the experiment your payoff will also be determined by a roll of a die at the end of the period according to the same schedule used in Part A, which is reproduced below. If the die shows 1, 3 or 5, you will receive the amount in the column headed "odd"; if the die shows 2,4 or 6, you will receive the amount in the column headed "even." The die will be rolled separately for each individual in the class. Payoffs will be made publicly so everyone knows how much everyone else receives. Unlike Part A, each individual will not be able to choose a different row to determine the payoff. Each of you must choose which row in the table -- A, B, C, etc. -- you want be used to determine the payoffs for everyone in the class. Before throwing the die to determine individual payoffs, one of these forms will be drawn at random; the row designated on that form will be used to determine individual payoffs for all students in the class. You are not allowed to make any transfers of part of your payoff to other students in the class after the experiment is concluded.

	Odd	Even
A	$25.00	0
B	$23.05	$1.15
C	$21.20	$2.20
D	$19.45	$3.15
E	$17.80	$4.00
F	$16.25	$4.75
G	$14.80	$5.40
H	$13.45	$5.95
I	$12.20	$6.40
J	$11.05	$6.75
K	$10.00	$7.00
L	$9.05	$7.15
M	$8.20	$7.20
N	$7.45	$7.15
O	$7.08	$7.08

Fill in your name and circle the letter of the row

which you want to determine the payoffs for all members of the class.

Name _____

_____

_____

PART C

In this part of the experiment your payoff will be determined by another roll of a die at the end of the period according to the same schedule used in Part A, which is reproduced below. If the die shows 1, 3 or 5, you will receive the amount in the column headed "odd"; if the die shows 2, 4 or 6, you will receive the amount in the column headed "even." The die will be rolled separately for each individual in the class. Payoffs will be made publicly so everyone knows how much everyone else receives. Unlike Part A, each individual will not be able to choose a different row to determine the payoff. The entire group must unanimously agree on which row in the table -- A, B, C, etc. -- will be used to determine the payoffs for everyone in the class. If the group does not reach unanimous agreement within 15 minutes, the payoffs from Part C will be zero. You are not allowed to make any transfers of part of your payoff to other students in the class after the experiment is concluded.

	Odd	Even
A	$25.00	0
B	$23.05	$1.15
C	$21.20	$2.20
D	$19.45	$3.15
E	$17.80	$4.00
F	$16.25	$4.75
G	$14.80	$5.40
H	$13.45	$5.95
I	$12.20	$6.40
J	$11.05	$6.75
K	$10.00	$7.00
L	$9.05	$7.15
M	$8.20	$7.20
N	$7.45	$7.15
O	$7.08	$7.08

BEANS AS A MEDIUM OF EXCHANGE

Harold O. Fried and Daniel Levy*

Purpose of the Experiment

The experiment is designed to simulate an environment where something that is very similar to fiat money (i.e., is homogeneous, durable, portable, storable, divisible, has no intrinsic value of its own, etc.) will be accepted in market transactions and thus will have a "value."

Description of the Experiment

The class is divided into groups of 2-4 students and various food items are distributed to them. See the sample menu for an example. The students are told that they can make whatever exchange they wish. Each group is given a Transaction Record Form in which they are asked to record any transaction they make.

The transaction period is divided into two subperiods. The students are not allowed to eat until after the end of the second subperiod. Each subperiod lasts about 3-4 minutes. At the beginning of the first subperiod we announce that at the end of the first subperiod every group will have to pay a certain number of beans as a tax. This makes beans valuable. At the same time we also announce that they will have to pay an additional tax in the second subperiod, but the amount of that tax will be announced at the beginning of the second subperiod.

Future Extensions

Currently we are in the process of revising and modelling the beans experiment. Hopefully, we will have a working paper providing more details sometime in the near future. Any comments or ideas about improving the experiment are obviously welcome.

Table 1. A Menu and Initial Endowment Allocation for a 25 Student Class

Group #1
3 Tuna Salad Sandwiches
3 Ham Sandwiches
3 Plastic Spoons

Group #2
Haagen-Dazs ice cream, one quart
16 oz *Organic Nasoya Well Water Tofu*
3 Plastic Spoons

Group #3
2 Chef's Salads
3 Plastic Spoons
100 Beans

Group #4
Plastic Plates (25)
Plastic Knives (25), Spoons (3), and Forks (25)
Oreo Cookies

Group #5
Ice Cubes in a Plastic Bag
Salad Dressing (24 Servings)
Cream Cheese (6 packs, 8oz each)
3 Plastic Spoons

Group #6
8 Bagels (various tastes)
Plastic Cups (10)
3 Plastic Spoons
150 Beans

Group #7
2 Chef's Salads
3 Two Liter Diet Coca-Cola
3 Two Liter Coca-Cola Classic
3 Plastic Spoons

Group #8
Napkins (pack of 50)
Domino's Pizza (8 Slice Pie)
4 Plastic Spoons

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TEACHING PRIVATIZATION IN THE SOVIET UNION: AN EXPERIMENTAL ECONOMICS APPROACH

David E.R. Gay*

During the spring 1991 semester I developed a discovery approach, or experimental economics approach, to an issue of restructuring the Soviet economy. It was innovative because students discovered the advantages of stock markets and how properly designed incentives encourage better work. This was done in the context of a proposal being considered in the USSR to reform the Soviet economy.

In the fall of 1990, my colleague Tom McKinnon returned from the Soviet Union and reported a Soviet proposal to improve incentives by issuing bonuses in "USSR stock" for the overall economy. Such stock differed crucially from U.S. stock because its value depended on the success of the overall economy, instead of a specific firm, and, once received, the stock could not be resold. Presumably the USSR stock limited ownership could provide an incentive for workers to seek a return on the investment and to have a vested interest in job and firm performance.

Each student received token rubles for the six rounds of investment choices. Part of the salary was paid as an incentive to be divided by the student for savings, an owned asset with a 10% return, or to be used in USSR stock, a non-owned asset which could not be sold. Each player could decide to hold more stock in any given round but once invested in USSR stock it could not be reduced. After their choices were recorded and tabulated, a randomly selected rate of return determined the return paid on the stock. If the return on USSR stock was 12% then each share yielded a return which the student could add to the pool of new investment money. However, the USSR stock principal could never be used or decreased but the student could invest the interest.

Starting with 100 rubles each student decided how much would be invested in a savings account with a guaranteed 10% return (a claim on the principal) versus USSR stock with an uncertain return (but no claim on the principal). In succeeding rounds everyone received additional rubles which could be invested in the privately-owned asset of a savings account or the commonly owned USSR stock. After each round the student computed how many rubles from the savings account, the return from USSR stock, and new rubles would be split between the savings account and the USSR stock in the next round.

The highest earnings were made by students who did not invest any rubles in USSR stock. The USSR stock could have a competitive return if its yield was high enough for the entire game. A high yield was unlikely for the entire game. The winners received a modest prize and class recognition.

Both classes participated in the rounds of investment choices. In one class the members chose to put almost 75% of their available funds into private savings while in the other class almost 85% of the funds were put into private savings.

In their debriefing essays, students identified why they put some funds into the USSR stock. They included a feeling of patriotism to support "their nation," a hope of building the future, social pressure to help, and an overly optimistic estimate of the returns

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from USSR stock. Virtually everyone recognized that their total available rubles from private savings were much higher than leaving money in USSR stock. The USSR stock wasn't a powerful incentive. Its return depended on the overall economy instead of a specific firm. Since investors were unable to transfer its ownership they could not claim the principal.

ELECTRONIC BULLETIN BOARD AVAILABLE FOR CLASSROOM EXPERIMENTERS

Several people who responded to our initial letter suggested that we consider establishing an EMAIL network or an electronic bulletin board to expedite communications among our readers (which seemed to us to be an excellent idea). In fact, however, such a system is already available, and we invite our readers to exploit it.

With the assistance of Professor Donald Wells and Shawn Lamaster, we have received permission to use the Economic Science Laboratory Bulletin Board System (ESLBBS) of the Economic Science Laboratory at the University of Arizona to facilitate communications between any individuals who 1) are interested in classroom experiments, and 2) have the ability to access to the ESLBBS either through InterNet or via a modem phone call to Tucson, Arizona.

In the near future we will be establishing a Special Interest Group (SIG) on the ESLBBS for people who would like to contact others to share information or ideas, or discuss classroom experiments. If you would like to receive information about the ESLBBS, including instructions on how to access the ESLBBS and our SIG, contact John Neral at (301) 689-4265 or 689-4386.

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The Economic Science Association's Electronic BBS

The Economic Science Association, along with the Economic Science Laboratory, has set up the **ESLBBS**. ESLBBS is an electronic bulletin board system designed specifically for use by the Economic Science Association and interested parties. Access to this system is FREE and available through the "internet", or via modem phone call to Tucson, Arizona. The primary motivation for this central exchange is to be a clearing house for experimental software applications that may be released to the public domain, and to promote discussion and interaction by those that use, or attempt to use these software packages.

Currently, there are two ways to connect to the ESLBBS. One is to dial up on a 2400 baud (or less) modem to (602) 621-4240. The other is connect via the international "internet" computer network. Practically every university and college is connected to the internet. The internet address for the connection to the ESLBBS is:

idx.telcom.arizona.edu

Typically, from a VAX VMS ($) prompt, or an IBM VM/CMS machine, you would type:

telnet idx.telcom.arizona.edu

to establish a telnet session over the internet. Assuming you have gotten this far, you will receive the following on your screen:

University of Arizona IDX-3000o
Communication Problems? Call 621-7999.
Select host: VM1, IVAX, UAVAX or RVAX

Thu Oct 25 14:50:24 1990
Port ID: ECON 100_1 at 9600 baud
>**ESLBBS** <----**you type ESLBBS**

Connecting ECON 100_1 to ESLBBS 100_5

Auto-sensing ANSI.....

Welcome to the Economic Science Lab's Electronic BBS

The Economic Science Laboratory BBS
(#72793409)
Running The Major BBS by GALACTICOMM ONLINE 9600 BAUD AT 15:20 25-OCT-90

If you already have a User-ID on this system, type it in and press RETURN. Otherwise type "new".

At this point please type **new** and answer the questions asked. Also, please go into the Registry of Users option R from the main menu and enter your information so others can communicate with you.

You may use a "handle" for your user id if you wish, but please enter your correct name and address, etc. in the Registry of Users.

If you need any help, please call:

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