

**THE TEACHING OF THE  
ECONOMIC PRINCIPLES COURSE  
A Behavioral Approach**

**MAX P. BEER**



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## ABSTRACT

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The desire to render college curricula and college teaching more effective has resulted in ever increasing debates about content and method of instruction of the Economic Principles Course. The purpose of this thesis is to examine the behavioral approach to the subject matter of a one quarter macro-principles course. In addition to the question of method the problematical aspects of content and purpose are also examined. The question of what to teach and to whom to teach it has not been resolved and an attempt is made in this thesis to provide a rationale for the development of a substantive content which would provide the student with means to make relatable interpretive use of the knowledge gained.



## CONTENTS

CHAPTER	Page
I. INTRODUCTION . . . . .	1
Problems of Content and Purpose of the Introductory Economics Course . . . . .	1
II. PROBLEM OF METHOD . . . . .	8
III. THE PROPOSED ECONOMIC MACRO PRINCIPLES COURSE. .	15
IV. SUMMARY . . . . .	39
NOTES . . . . .	41
BIBLIOGRAPHY . . . . .	43

## CHAPTER I

### INTRODUCTION

The teaching of the economic principles course has been the subject of ever increasing debates during the last decade. While the problem of content and purpose which are peculiar to the economic discipline occupy the center of attention, some economists have also ventured into the sphere of educational techniques. The exchange of ideas has contributed to the clarification of the problems involved without, however, resulting in agreement as to what content and what method of instruction is likely to maximize the effectiveness of the course.

The purpose of this thesis is to examine the behavioral approach to teaching and to apply the technique to the subject matter of a one quarter macro-principles course. The problematical aspects of content and purpose must also be examined since the improved instructional method may have pedagogical advantages but may leave unresolved the questions of what to teach and to whom to teach it.

#### Problems of Content and Purpose of the Introductory Economics Course

A premise of this thesis is that the present approach to the teaching of the principles course does not lead to an optimal outcome. The problem of identifying the objectives of the course is compounded



by the fact that the typical course is designed to serve a dual purpose. It purports to prepare prospective economics majors for advanced work and, at the same time, give other students a minimum of economic literacy as a means to effective and responsible citizenship. Although estimates suggest that only ten to fifteen per cent of those taking the introductory course will become economics majors, the course as it is being taught today is better suited to the needs of the fifteen per cent rather than the remaining eighty-five per cent. The assumption that the plethora of principles offered in the course will be sufficiently internalized by the non-major to enable him to arrive at sound judgments regarding economic issues and problems is not supported by the findings of those who have done some research in this field. Citing research performed by Whitney, Irwin Herrnstadt commented that "Professor Whitney appears to document what many of us have long suspected; namely that beginning students seem to learn very little economics."<sup>1</sup>

A major basic and unresolved question regarding content and purpose concerns the scope of the introductory course. Should the course cover the whole range of economic concepts and principles? Introductory texts are becoming steadily more voluminous and many concerned economists question the advisability of this trend.

According to Allan B. Mandelstamm:

We are giving the student too many 'principles.' Every year, it seems, more and more concepts, which previously had been reserved for the intermediate theory or even the advanced theory sequences, are being taught in the principles courses.<sup>2</sup>

Mandelstamm offers the suggestion that diminishing returns can apply even in the teaching of our own discipline. George J. Stigler argues:

An introductory course in economics makes its greatest contribution to the education of the students if it concentrates upon a few subjects which have been developed in sufficient detail and applied to a sufficient variety of actual economic problems to cause the students to absorb the basic logic of the approach.<sup>3</sup>

Stigler does not believe that the current encyclopedic texts tend to promote a lasting understanding of economic problems. Under the prevailing conditions the words of George L. Bach seem apt:

There is a great difference between what is taught and what is learned--that crowding a large number of concepts into a few lectures and chapters may prevent the student from understanding (in the sense of being able to retain and apply any).

And Gambs and Wertimer pointed out that:

Many competent sophomores, after being dragged through 800 large pages, . . . come out at the other end in a fog instead of in the light, having derived few educational values of any kind from a year of bewildering study. We find that the muse who presides over the art of leaving things out is more difficult to serve than the one who governs the art of including everything but the kitchen sink.<sup>5</sup>

A good case can be made for the assertion that the proliferation of principles taught is actually counter-productive. It leads to rote learning and becomes an obstacle in the path of acquisition of analytical skills which are essential to an understanding of the economic process. Trying to cover too much in a very detailed way may leave the student bewildered and frustrated. For many students the introductory course, if too theoretical in nature, effectively destroys any further interest in economics.

A second basic question relates to emphasis on theory vs. application. Should the course be taught on an abstract and largely theoretical level or should there be more stress on contemporary



economic problems? We should recognize that the non-specialist is really our audience in the principles course and that feeding him a concatenation of abstractions, which at least in part are unreal in nature, contributes little to his economic understanding. As

Herrnstadt says:

We spin many intricate webs that offer very modest explanations but take a great deal of the student's time to absorb even superficially . . . It is the unreal nature of our abstractions that warrants further consideration . . .<sup>6</sup>

An acquaintance with some theory is indispensable but if it cannot be logically integrated with real life economic situations it soon will be forgotten. Theory should be used with the idea of providing the terminal student with a synoptic view of the economic process, and not with the idea of making him into a fledgling economist. A theoretical core approach unencumbered with technical refinements and balanced with institutional aspects and relationships which can be bridged into direct observations may serve to make introductory economics more credible. The use of theory then should be circumscribed by the extent to which it enables the student to make relatable, interpretive use of the knowledge gained.

An additional basic and unresolved question concerns the role of value judgments. Should the economics instructor work within the constraints of positive economics or would a normative approach enhance the value of the course? The objective of the principles course should be to equip the student with an understanding of the principles underlying the discipline of economics and also to enable him to identify all foreseeable outcomes of a policy issue.

The academic discipline of economics attempts to be basically descriptive and explanatory. It is value free to the extent that it is a set of observations (what is and what will be under this or that situation) or a generalization (statement of relationship between two or more concepts, etc.). But the economic choices that every economic system must make are not value free. The basic problems of WHAT, HOW and FOR WHOM are not solved by the price system alone even in a free enterprise economy. Distortions are created not only by restrictive market structures (i.e. monopolies) but more significantly by government. Expenditures for public goods as well as government regulations rest largely on value judgments embodied in zoning laws, minimum wage laws, tax, subsidy, and transfer payment structures. All of these play a significant role in the allocation of resources and distribution of income. In addition the often ignored but economically powerful non-profit sector of the economy (educational institutions, medical institutions, foundations, etc.) does not operate wholly in accordance with the concept of the price determined allocation of resources.

According to Kenneth Boulding economics is a moral science since a moral or ethical proposition is a statement about a rank order of preference among alternatives which is intended to apply to more than one person.<sup>7</sup> Economists have entered the realm of moral judgments through welfare economics, and they have translated Adam Smith's metaphor about the beneficial "invisible hand" into a theory which represents the apotheosis of the laissez-faire system based on ideal competitive pricing.



According to Samuelson:

Under perfectly perfect competition, where all prices end up equal to all marginal costs, where all factor-prices end up equal to values of marginal-products and all total costs are minimized, where the genuine desires and well-being of individuals are all represented by their marginal utilities as expressed in their dollar-voting--then the resulting equilibrium has the efficiency property that "you can't make any one man better off without hurting some other man."<sup>8</sup>

Unfortunately, as Samuelson points out:

Laissez-faire perfect competition could lead to starving cripples; to malnourished children who grow up to produce malnourished children; to perpetuation of Lorenz curves of great inequality of incomes and wealth for generations or forever.<sup>9</sup>

A laissez-faire system can obviously not be relied upon to bring about a distribution of income on which a general agreement as to its ethics could be obtained. The pervading value assumptions of our society are in constant flux and students of institutions of higher learning would be ill served if those value assumptions were not subject to analysis and evaluation. Issues such as maldistribution of income and wealth, the increasing concentration of economic power in giant corporations and discriminatory tax burdens, to name only a few, are legitimate subjects for discussion in an economics class. The student as a citizen is best served if he possesses sufficient information to formulate his own value judgments. This end can best be achieved by an instructor who points to the inequities that exist in our system and questions our hierarchy of values without resorting to indoctrination.

In summarizing the problem of content and purpose it would seem appropriate to apply greater selectivity in the choice of course content. Confronting the students with an excessive amount of prin-

ciples does not result in an optimal learning outcome and may disincline the non-major from a further pursuit of the discipline.

The question of how much theory the course should embody is perhaps best answered by the given limits of cognitive absorption and the possible relatability to the real economy. In other words, while a knowledge of some theory is indispensable the extent to which we go in teaching it should be circumscribed by:

1. the student's capacity to incorporate it meaningfully within their cognitive structure within a given time period (semester or quarter)
2. its relevance to the understanding of the real economy and the students' function as individuals and as citizens.

On the question of positive versus normative economics it should be remembered that the dividing line between the two is not always clearcut. Many positive statements embody a value judgment. It is therefore unrealistic to expect that an instructor's value system can be completely divorced from his presentation of the subject matter. His normative judgments, however, should be limited to an identification of all positive and negative aspects and possible inequities of our economic system and of policy issues.



## CHAPTER II

### PROBLEM OF METHOD

The determination of what an educational goal should be is largely a value based process whereas instructional questions are amenable to empirical solutions. However, little progress has been made toward a solution of either the question of ends or means. The ability to identify optimal conditions of learning remains the greatest unresolved problem in education. Despite a flood of thousands of books and articles written on the subject it would be presumptuous to claim that we are much nearer a final solution to this question than we were fifty years ago.

However, the search for improved instructional methods has yielded some new approaches which may carry us a step nearer the desired goal. The most promising of these instructional theories is predicated on the use of behavioral or performance objectives. These educational objectives offer us a precise and unambiguous way of answering such a question as "What do we want our students to know upon completing the course?" The answer points the way to directing the students as to what they are to learn. In other words, the purpose of writing objectives is to identify in clear terms the outcomes of learning that are desired. A virtue of this approach lies in eliminating our present "adversary system" of education which keeps the student in the dark as to what exactly we expect of him. We would be

hard pressed to identify educational advantages inherent in the present system.

The origin and explanation of the term "behavioral objective" leads to the classification of educational objectives; Bloom and Krathwohl separate them into three domains--the cognitive, the affective, and the psychomotor:

1. Cognitive-- Objectives which emphasize remembering or reproducing something which has presumably been learned, as well as objectives which involve the solving of some intellectual tasks for which the individual has to determine the essential problem and then re-order given material or combine it with ideas, methods, or procedures previously learned. Cognitive objectives vary from simple recall of material learned to highly original and creative ways of combining and synthesizing new ideas and materials.<sup>10</sup>

Bloom and Krathwohl found that the largest proportion of educational objectives fell into this domain.

- a. Affective-- Objectives which emphasize a feeling tone, an emotion, or a degree of acceptance or rejection. Affective objectives vary from simple attention to selected phenomena to complex but internally consistent qualities of character and conscience.<sup>11</sup>

A large number of such objectives in the literature are expressed as interests, attitudes, appreciations, values, and emotional sets or biases. No learning takes place in an individual until he becomes aware of a stimulus. This is the lowest level listed by Krathwohl in his analysis of the affective domain.

3. Psychomotor-- Objectives which emphasize some muscular or motor skill, some manipulation of material and objects, or some act which requires a neuromuscular coordination.<sup>12</sup>

Evaluating the extent to which learning occurs involves an important principle related to the learning process. Regardless of the way in which an objective has been stated, there is no way of de-

termining whether or not it has been achieved until there is an observable, overt behavior on the part of the learner. Without some concrete evidence, there is no way of knowing whether or not learning has taken place. But behavior cannot properly be evaluated unless we identify the behavior that we accept as proof that learning has taken place. This end is best achieved by expressing the objective in behavioral terms.<sup>13</sup>

The term behavioral objective was first used by behavioral psychologists who trained animals to achieve a desired terminal behavior in which the behavior itself was the goal for the learning process. The principles applied were then adapted to train human beings for specific tasks. The learning sequence was broken down into small steps that could be arranged in a logical order to bring about the desired behavior. If the desired outcome was not achieved during the first time around the individual was recycled through the same process, or "looped back" in Skinner's language.<sup>14</sup> This type of psychology defines learning as behavior that is changed in conformity with predicted measurable outcomes.

There is fundamentally little in the aforementioned process that differs from a description of an ordinary learning sequence. If nonetheless a prescriptive quality can be detected, it is to be found in the specificity of objectives. Every instructional sequence contains either an explicitly stated or an implied objective; but behavioral objectives require clearly enunciated statements of the desired outcomes of the instructional program.

The term performance objectives is frequently substituted for



behavioral objective by those who identify the latter term with what they consider dehumanizing tenets promulgated by behavioral psychologists. Which term is given preference is of little consequence as long as the student understands what is expected of him.

In economics cognitive objectives based on knowledge and intellectual skills are emphasized but we should not lose sight of the fact that any educational objective contains an affective element involving attitudes, emotions, and volition. Measuring affective outcomes separately from cognitive objectives is impeded by the fact that emotional states tend to be internalized and therefore not subject to easy measurement. Teachers generally feel more comfortable with facts and principles than with affective goals but it is precisely in this domain that the teacher must assume a great deal of responsibility for the educational outcome. Together with those responsible for content and purpose of the introductory course he will, through his approach to the teaching task, elicit specific responses in the students, for it is apparent that attitudes can be shaped. Both content and method of instruction may weigh heavily in the determination of students' attitudes. While for purpose of analysis we separate the affective from the cognitive domain there exists in reality no fundamental separation. Behavior is of a piece. In Sheerer's words

. . . behavior may be conceptualized as being embedded in a cognitive-emotional-motivational matrix in which no true separation is possible. No matter how we slice behavior the ingredients of motivation-emotion-cognition are present in one order-or-another.<sup>15</sup>

To be useful in designing course lessons educational objectives have to communicate to the students the desired outcome of some unit of

instruction. The precisely stated and observable behavior must be associated with particular tasks or problem solutions. Tests or examinations reveal the degree to which the objectives have been achieved. To have any meaning at all the tests must measure performance in terms of the enunciated behavioral or performance objective, in other words, the stated performance objective is the test. The role of behavioral objectives is twofold. First it is an attempt to improve communication between teacher and student. Second, it is to state unequivocally the desired outcome of the instructional process. Communication is more effective when objectives are stated behaviorally than when they are stated non-behaviorally. Using behavioral objectives imposes upon the instructor a higher professional discipline. There is little room left for ambiguity rather than specificity, for rambling discourse rather than concision. Above all it will bring him closer to the realization that the sole purpose of all teaching is learning.

"Stating behavioral objectives is, then, primarily an attempt to increase teaching effectiveness through clarification and mutual understanding about the desired instructional outcome."<sup>16</sup> As a result of this the instructor now assumes at least some responsibility for the educational outcome instead of placing it entirely on the student.

To compose a behavioral objective is to utilize a four-step process ranging from a statement of a specific non-behavioral objective to a behavioral objective; this will increase the proficiency in writing behavioral objectives.<sup>17</sup> To illustrate the process: First, state a specific non-behavioral objective such as--I want my students to learn what is the determining factor of the effect of a price in-

crease on total revenue. Secondly, formulate statements with behavioral verbs, e.g. the student will describe what determines the effect of a price increase on total revenue. Thirdly, add defined conditions to the statement with behavioral verbs such as--given a price increase that results in an increase in total revenue the student will state whether the demand for the product is price inelastic or price elastic. Finally, add a performance standard and you will have behavioral objectives, i.e. given a price increase that results in an increase in total revenue the student will state whether the demand for the product is price inelastic or price elastic. A one hundred per cent correct response will indicate achievement of this objective. The effectiveness of verbs used in writing specified objectives depends on their clarity. Words like to know, to understand, to learn, etc., do not meet the criterion of clarity. These words can have many meanings. An effort has been made to present a single definition for each verb that may be used in constructing performance objectives in order to enhance communications among those engaged in writing such objectives.<sup>18</sup> This approach may be of some value in teaching disciplines with a loose logical structure. In economics which is a structurally well developed discipline the meaning of such words as construct, define, identify, describe, etc., should be inherent in the task to be performed.

In the cognitive domain objectives can be written on different levels of complexity. The following six levels are ranked in an ascending order of difficulty:

1. Knowledge--involves recall of specifics;
2. Comprehension--the learner can make use of certain material



or of an idea without necessarily seeing its fullest implication;

3. Application--involves the use of abstractions in particular concrete situations, such as the application of scientific principles to concrete phenomena;
4. Analysis--requires the breaking down of a communication into subcomponents so that the relationship among these elements is made clear;
5. Synthesis--entails the putting together of elements to form a new, original entity;
6. Evaluation--describes behaviors in which judgments are made about the value of material or methods used for given purposes.<sup>19</sup>

While any level of achievement can be incorporated in a performance objective, care must be taken that tests do not in any way deviate from the objective. The objective must be the test. As Mager puts it, "Don't expect a learner to be able to exhibit skill B simply because you have given him practice in skill A."<sup>20</sup>

The use of performance objectives is well suited to the discipline of economics. Economics yields a relatively tight structure and lends itself well to teaching systematic knowledge. It may well be that the effectiveness of behavioral objectives is influenced by the theoretical structure of the particular discipline. The theory is not necessarily an educational panacea for all levels of learning and for all ages of learners.

## CHAPTER III

### THE PROPOSED ECONOMIC MACRO PRINCIPLES COURSE

The behavioral objectives have been written for an elective one-quarter macroeconomics course comprising forty class hours. Its content is based mostly on the eighth edition of Paul Samuelson's Economics but other texts have also been consulted for further information. However, the approach to Samuelson's text is selective, in view of the fact that the text is all-inclusive and best suited for prospective economics majors. The proposed procedure is to stress those concepts deemed to be of importance to a basic general understanding of economics and to delete details that are of secondary significance. The following subjects are considered to form an indispensable foundation for the knowledge of macroeconomic principles and will therefore be stressed:

- 1) National Income Theory
- 2) Unemployment
- 3) The Public Sector and Taxes
- 4) Inflation
- 5) Money
- 6) The Banking System and Deposit Creation
- 7) Monetary Policy
- 8) Fiscal Policy
- 9) The Theory of Economic Growth

#### 10) International Trade and the Balance of Payments.

An attempt is made to present the subject matter in a logically ordered fashion in order to enhance sequential learning of related content. Some of the behavioral objectives stress recurring economic problems. In addition topical problems should be discussed since they enhance the utility and value of the course not only by virtue of raising the general interest quotient but also by providing opportunities for acquiring at least a rudimentary competence in judging economic policy questions.

The proposed course is experimental in design and open-ended. The selection of the substantive content and its translation into performance objectives is subject to continuous evaluation and testing in order to ascertain the degree of success of the course. It should also be remembered that performance objectives only identify the desired outcome of the learning process; they are no substitute for a text book.

If large classes dictate objective tests in order to facilitate computer grading, most performance objectives can be translated into multiple choice, matching, and true or false questions. Care has to be taken however to assure that the correct answer is either identical or nearly so to the originally stated objectives. The creation of semantic confusion would defeat the whole purpose of the undertaking. The minimum performance acceptable expressed as a percentage for each objective will not be stated in this paper. What the desired minimum should be rests to a considerable extent upon the value judgment of the instructor and it is also circumscribed by the nature of the test.



## Statement of Performance Objectives

### Central Problems of Every Economic Society

The student will understand that economics is chiefly concerned with the way a society chooses to employ its limited resources.

Specifically the student will:

1. draw a production possibilities curve indicating public goods on the vertical axis and private goods on the horizontal axis. Indicate at point A how many units of public goods and how many units of private goods society is producing at full employment. Then assume a shift away from public goods to the production of more private goods. Indicate by point B. Indicate by point C a substantial amount of unemployment in the economy. Indicate by point D an increase in the production possibility of that society;
2. state the economic fact which the production possibilities curve indicates;
3. state why rationing devices are necessary in any society;
4. explain in one sentence the real price of any good in economic terms;
5. state the fundamental difference between the allocation of resources in the private sector and in the public sector;
6. identify two goods that come closest to the meaning of free goods;

### National Income and Product

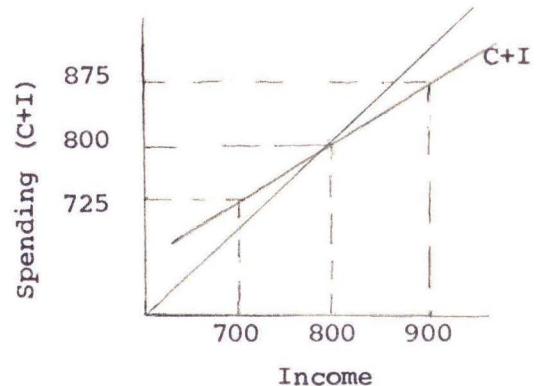
The student will gain an understanding of the National Income Accounts. He will become familiar with the components of GNP and will

understand why we cannot include the values of all goods and services produced unless we do it on a value added basis. He will be able to differentiate between money GNP and real GNP. Specifically, the student will:

1. define the meaning of Gross National Product;
2. state the two methods by which GNP can be arrived at;
3. state the reason why the value of steel that goes into an automobile is not included in GNP unless we compute GNP on a value added basis;
4. state the reason why the sale of a second-hand good is not included in GNP;
5. state why the sale of a bond is not included in GNP;
6. be given a figure for money GNP and a price index related to the chosen base year; he will compute the real GNP in terms of the base year value of the dollar;
7. list the components of aggregate demand that constitute the expenditure approach to GNP;
8. name two types of payments that would come under the heading of government transfer payments;
9. explain the difference between gross investment and net investment;
10. name the total income earned by the factors of production;
11. define the term "disposable income;"
12. state two reasons why GNP is no infallible measure of national welfare.

government temporarily out of the picture. The student will get to know the equilibrium condition and the consequences of disequilibrium. Specifically, the student will:

1. define the two ways of equilibrium determination of national income;
2. identify from a chart similar to the one at the right
  - a. the equilibrium level of income,
  - b. the income at which unintended investment takes place,
  - c. the income at which unintended disinvestment takes place;
3. state at which level of income the economy a) is likely to be on an upward trend, and b) at which level it may be headed for a recession;
4. state whether disturbances in GNP are caused mainly by fluctuations in consumption spending or changes in investment spending (leaving the government out of the picture);
5. state the main underlying reason that prompts business to invest;
6. explain the direction of the shift of the C or I curves resulting from an increase in consumption or investment.



#### Income Determination: The Simple Multiplier Theory

The student will understand why an increase in net investment will increase national income by a multiplied amount. Specifically, the student will:



### Savings, Consumption and Investment

This unit provides an introduction to National Income Theory. The student will learn the determinants of consumption and the relationship between saving and investment. Specifically, the student will:

1. from a given table stating various amounts of income and consumption determine the various corresponding average propensities to consume expressed as a percentage;
2. show graphically by drawing a consumption function, the break-even point where consumption equals income, the segment that constitutes saving and the segment that constitutes dis-saving;
3. name the function that describes the extra amount that people will want to spend on consumption if given an extra dollar of income;
4. name the function that describes the fraction of each extra dollar that goes to saving instead of to consumption;
5. determine the MPS if the MPC is  $\frac{3}{4}$ ;
6. evaluate whether the government contemplating a tax cut to stimulate the economy would be more interested in the APC or the MPC, and give an explanation of this;
7. name the most important single fact about saving and investment activities;
8. name the components that in economic terms constitute investment.

### National Income Theory

National Income Theory states that income is determined by aggregate demand. Aggregate demand is here defined as  $C + I$  leaving

1. state the simple multiplier formula;
2. illustrate the multiplier process by showing the effect on income and consumption of an increase in investment of \$1000; four time periods and an MPC of 80% will be assumed;
3. state the total increase in income resulting from an increase in investment of \$10 million given an MPC of 75%;
4. give a graphical representation of the multiplier effect (an upward shift in the investment function);
5. state whether the multiplier process applies only to an increase in spending or if it applies equally as well to a decrease;
6. state the approximate actual order of magnitude of the multiplier for the U.S. economy;
7. state whether the multiplier principle applies only to a change in investment or whether it applies as well to any autonomous schedule shift (C or G);
8. define the meaning of
  - a. autonomous investment,
  - b. induced investment;
9. evaluate whether sizeable induced investment will take place during an increase in output while the economy is operating at a capacity utilization of seventy five per cent;
10. illustrate the Paradox of Thrift by plotting a saving-investment function;
11. state the reason why the equilibrium level of national income need not be desirable;
12. name the gap that exists when anticipated total expenditures

- (C+I) are greater than the value of full employment output valued at current prices;
14. indicate what will tend to rise as a result of an increase in total expenditure when the economy is operating at
    - a. less than full employment,
    - b. full employment;
  15. describe the effect on aggregate demand which would result from an excess of planned savings over planned investment;
  16. describe the effects upon income if a country purchases more goods and services from foreigners than it sells to them;

With respect to the role of government, the student will:

17. explain what will happen to the level of income if there is an increase in government expenditures (taxes remaining unchanged);
18. plot the effect of the above on an income and expenditure chart;
19. describe the effect of a tax increase on aggregate demand (leaving investment and government expenditures unchanged);
20. state the equilibrium condition
  - a. without government,
  - b. with government;
21. name two measures the government can take (fiscal policy) when attempting to wipe out a deflationary gap.

### Unemployment

A decrease in aggregate demand will result in a downturn of the economy resulting in unemployment. While most of our unemployment results from business fluctuations there are different types and



aspects of unemployment with which the student should be familiar.

Specifically, the student will:

1. name the type of unemployment that results from automation;
2. explain the possible connection between excessive wage demands by labor unions and possible unemployment caused by automation;
3. name the type of unemployment that applies to people whose skills may be in oversupply, or are no longer needed, or who have no skills or who may be living in economically depressed areas;
4. state whether the above mentioned type of unemployment is generally effectively reduced by government deficit spending bringing about increased aggregate demand;
5. identify the level of unemployment that in the U.S. is equated with full employment;
6. name the type of unemployment that may affect academically trained people as a result of greater numbers graduating from college than can be employed in their respective fields of endeavor;
7. state how the economic cost of unemployment falls upon the economy as a whole and not just on the unemployed;
8. state the approximate number comprising the total labor force in the U.S.

#### The Public Sector

The student will become familiar with the characteristics of public goods, externalities and the economic role the government plays.

Specifically, the student will:

1. state the approximate percentage of GNP devoted to public goods;
2. state the qualities of public goods that make them unsuitable to be supplied by the private sector, and give an example of such a product;
3. give an example where externalities involve a cost and state whether in such cases
  - a. the producer's price is higher or lower than it should be,
  - b. the output is larger or smaller than socially justifiable;
4. give an example of externalities involving a benefit;
5. identify a public good that represents a redistribution of income in favor of the poor;
6. name two examples of the government's role as a stabilizer of the economy;
7. state whether the public debt expressed as a percentage of GNP has decreased or increased since WW II;
8. state the factor that may act as a constraint on the size of the public debt.

#### The Economic Role of Government--Taxes

The student will gain a knowledge of the various types of taxes, tax principles, and the final incidence of most indirect taxes. Specifically, the student will:

1. give an example of the benefits received tax principle;
2. state why the benefits received principle is not suitable as a general tax principle;
3. define "direct" and "indirect" taxes;

4. assign three types of tax rates to a tax base rising from \$10,000 to \$15,000, which would be indicative of
  - a. a proportional tax,
  - b. a progressive tax,
  - c. a regressive tax;
5. list the types of taxes usually imposed by:
  - a. the states,
  - b. the municipalities;
6. state on whom the incidence of the portion of social-security taxes paid by the employer is likely to fall;
7. identify the type of local tax that today is least based on the ability to pay principle;
8. identify the type of tax paid by corporations that cannot properly be called a cost of doing business;
9. describe the implication, if any, that the capital gains tax has on effective progressive tax rates.

### Inflation

Inflation is the second major problem area of macroeconomics. The student will familiarize himself with the theories of inflation and the impact of inflation on the various segments of the economy. Specifically, the student will:

1. list the necessary conditions for Demand-Pull Inflation to occur;
2. illustrate Demand-Pull Inflation on a graph;
3. identify from a given list of four variables the one that is most often responsible for Demand-Pull Inflation;
4. state the reason why the export sector in the U.S. is unlikely to exert an inflationary pressure although it does so in some other countries;



5. name the degree of inflation reflected in a yearly price increase of 1 1/2% to 2%;
6. on an income-expenditure chart show the expected effect of the surtax enacted during the administration of President Johnson;
7. list the causes leading to a cost-push or sellers' inflation;
8. illustrate cost-push or sellers' inflation on a graph;
9. state whether falling employment is most likely to result from Demand-Pull or Cost-Push inflation and explain the reasons;
10. draw a Phillips curve reflecting trade-offs existing before 1968 [approximately 2% on vertical axis (Price) and approximately 4% on the horizontal axis (Unemployment)], and then draw in the curve which reflects today's conditions. Student will state whether the experience of the last two years confirms the relationship between higher price and employment;
11. plot the bail-out effect on a cost-push diagram and explain the underlying thought;
12. list two types of escalator effects;
13. illustrate and explain the ratchet effect;
14. explain why wage increases in the manufacturing sector even when offset by equal productivity increases tend to have a long run inflationary effect, and support the contention with figures by showing the effect on prices of equal wage increases in the manufacturing and service sectors;
15. name the type of inflation that results from changes in consumer tastes and demands, and explain why in the expanding industry

prices rise while in the declining industry wage and price rigidities prevail, thus showing no price reduction and a general upward creep;

16. show how much in purchasing power a person will repay for each dollar borrowed if the consumer price index was equal to 100 when the person borrowed, and had risen to 125 when he repaid the loan;
17. indicate whether owners of flexible value assets or fixed value assets are likely to suffer from inflation;
18. state what the long run effect on real output will be if the rate of savings slows down as a result of inflation;
19. indicate whether as a result of GNP moving up from \$900 billion to a trillion dollars merely through higher prices makes the economy in the aggregate either better or worse off in terms of real income or whether the effect is neutral (assuming no change in employment);
20. define the term "deflation";
21. name the categories of income earners and wealth holders who usually gain financially from a deflationary period.

### Money

In this unit the student will learn what money is, what controls its supply and the relation of money to aggregate demand. Specifically, the student will:

1. give a definition of money;
2. state the approximate percentage of the demand-deposit component of the total money supply;

3. define  $M_2$  (broad definition);
4. define "near money";
5. state who, broadly speaking, controls the supply of money;
6. state the three main functions of money;
7. state how many times a money stock of \$200 billion has to turn over (velocity) in order to finance a GNP of \$800 billion;
8. name two countries where in the past increases in the money supply led to galloping or hyperinflation;
9. state the reason in terms of the relevant component of the equation of exchange;
10. state the formula for velocity in terms of PQ and the money supply;
11. estimate how big a money supply will be needed to finance a possible GNP of \$1.5 trillion in 1975, assuming present income velocity to be about 4.8 and assuming a rising trend in velocity.

#### The Banking System and Deposit Creation

The student will gain an insight into the functioning of the modern banking system and he will understand how the banking system "creates" bank deposits--the most important component of our money supply. Specifically, the student will:

1. name the two most important functions of commercial banks;
2. list the components of our "central bank" and name its governing body;
3. state who owns our central banks;



4. indicate the main function of legal reserve requirements;
5. define the term "fractional reserve requirements" and state present legal reserve requirements for member banks against Demand Deposits for
  - a. Reserve City Banks,
  - b. Country Banks;
  - c. reserve requirements against time deposits;
6. identify three institutional aspects that have contributed to the safety of our banks;
7. illustrate the process of deposit creation on three T accounts representing
  - a. original bank
  - b. 2nd generation banks,
  - c. 3rd generation banks;

Assuming an original deposit of \$5000, 20% reserve requirement, and that banks may acquire assets in the form of loans and/or investments, the student will indicate on the bases of the 3 accounts the total of new deposits, new loans and investments, and new reserves created as a result of the original deposit of \$5000;

8. indicate the total of new deposits, new loans and investments and new reserves that have been created in the banking system as a whole as a result of the original new deposit, assuming that the process of deposit creation would go on until no bank anywhere in the system had reserves in excess of the 20 per cent reserve ratio to deposits;
9. express the expansion ratio in a simple formula;
10. determine how much the money supply (new money) has increased as a result of the deposit;

11. identify three reasons why the expansionary ratio in our example is overstated;
12. illustrate how the money supply contracts;
13. state the reasons why money is a debt;
14. state what effect a 100 per cent reserve requirement would have on the banking system's ability to create money;
15. state who determines how much currency shall be in circulation;
16. state the reasons why savings institutions cannot expand the money supply in the manner commercial banks can.

#### Monetary Policy

The student will gain a knowledge of the modern objectives of the Federal Reserve System and the available tools to achieve these objectives. Specifically, the student will:

1. state the four major objectives of monetary policy;
2. enumerate the three main tools of monetary policy that are available to the Federal Reserve System;
3. state how the Fed could employ the three major tools to stimulate aggregate demand;
4. indicate which of the three tools is the most flexible and most widely used;
5. indicate which of the tools has the greatest impact;
6. identify the tool that is not an infallible indicator of the Fed's intention since it often follows the market;
7. state the immediate effect on reserves and the money supply

- when the Fed buys in the open market
- a. from commercial banks,
  - b. from the public;
8. identify the funds that member banks may have on deposit with the Fed over and above those required by law;
  9. state the result on the banking system's ability to expand the money supply of a desire on the part of the public for more cash;
  10. choose from a list of alternatives the one that correctly identifies the probable effect on Treasury securities' price and effective yield resulting from open market purchases;
  11. calculate from a given set of interest rates the resulting change in value of a security leaving the maturity date out of consideration;
  12. describe the line of causation running from an increase in  $M$  to an increase in GNP in the neo-Keynesian model; a chain reaction  $M \uparrow \rightarrow$  may be used;
  13. describe the conflict between the objectives of price stability and full employment;
  14. state the quantity theorists' simple rule of monetary policy and their main reason for rejecting discretionary monetary policy;
  15. identify two minor weapons at the disposal of the Fed and indicate
    - a. how they are applied,
    - b. what the desired outcome is;
  16. state in one or two sentences how the abolition of Regulation Q might affect the savings and loan industry.



### Fiscal Policy

The prime complement to monetary policy is fiscal policy. Fiscal policy can be defined as alterations in tax revenue and/or government expenditures which are intended to affect the level of aggregate demand. The student will gain an understanding of the instruments used, their impact and the problems involved in their use. Specifically, the student will:

1. explain why it may be necessary to increase  $M$  to prevent the fiscal policy multiplier from being partially offset when government increases expenditures, expecting thereby to expand GNP through the multiplier effect, (assuming no change in taxes);
2. indicate whether increased government expenditures or tax cuts are a more powerful weapon of fiscal policy; a brief statement containing data for the following will be given: the amount of increased expenditures, the amount of the tax cut and the MPC (the answer has to be computed);
3. illustrate why a balanced budget does not have a neutral impact on NNP; a brief statement will be given stating the amount of the identical increase in  $G$  and  $T$  and the MPC; the student will calculate the amount by which the economy will expand;
4. indicate under what conditions a government deficit will have an inflationary effect;
5. identify the three "automatic stabilizers" and describe how each of them works;

6. indicate why actual or realized budget deficits or surpluses are limited as a guide to the performance and impact of fiscal policy;
7. define the concept of the full employment surplus (or deficit);
8. state whether a full-employment budget ideally should show a corresponding surplus or deficit in case private saving should exceed private investment at full employment;
9. define the terms
  - a. fiscal drag,
  - b. fiscal dividend;
10. name the possible attendant undesirable condition of full employment.

#### Problems of Stabilization

The results of monetary-fiscal policy thus far have been mixed. The student will gain an insight into the problems involved in stabilization policies. Specifically, the student will:

1. describe in a paper of not more than 100 words
  - a. what wage-price guideposts are based upon,
  - b. why increasing wage rates in proportion to productivity increases does not mean that all of the increases go to labor and illustrate this by using a quantitative example;
2. describe in 25 words or less why our reluctance to accept an unemployment level in excess of four per cent may be in effect a guarantee of continued inflation;
3. explain in 25 words or less why monetary or fiscal policy may turn out to be destabilizing;
4. describe in 25 words or less in which manner large annual interest costs on a big public debt may impose a real burden;

5. describe in 25 words or less why current fiscal policy (which may increase or decrease the public debt) is more crucial for the economy than the actual size of the public debt.

### The Theory of Economic Growth

Economic growth means growth in the amount of goods and services produced in total, or per capita. The student will become acquainted with the factors affecting growth, the cost of growth, and growth policies. Specifically, the student will:

1. list the three main economic factors contributing to growth;
2. list at least two non-economic factors affecting growth;
3. give an example of an increase in the quality of capital without an attendant increase in quantity of capital;
4. describe in 25 words or less how a "deepening" of capital may overcome Ricardo's dire prediction of diminishing returns and falling real wages as the number of workers increase;
5. state whether a high saving/high investment or a high consumption society is likely to show a higher growth rate, and state the reason in one or two sentences;
6. state the main reason in two or three words, why since 1900, output in the U.S. has risen twice as fast as the input of labor and capital combined;
7. state the result of raising the quantity and quality of capital and improving the quality of the labor force;
8. describe the necessary conditions for growth on
  - a. the supply side,
  - b. the demand side;



9. state the opportunity cost of growth;
10. state in 50 words or less some undesirable side effects of growth
  - a. in human terms,
  - b. in environmental terms;
11. state in 25 words or less why cutting back growth is not necessarily the optimal way of eliminating the environmental side effects;
12. describe three ways the government can and does foster growth;
13. describe in 25 words or less the effect of aggregate demand on growth including relevant government policies;
14. state what he considers to be an optimal growth rate for the U.S. that is hopefully within our reach.

#### International Trade: Tariffs, Quotas and Free Trade

Free trade leads countries to specialize in the production of commodities in which they have an advantage and therefore makes it possible to produce and to consume more of all commodities than would be available if this kind of specialization had not taken place. Tariffs or other barriers to free international trade impede such mutually advantageous specialization and exchange and reduce living standards throughout the world. The student will become familiar with some of the fallacious arguments for protection as well as inter-governmental agreements to expand trade. Specifically, the student will:

1. list three common fallacious arguments for protection;
2. state in 25 words or less why the "We must protect our workers against low-wage foreign labor" argument (Pauper Labor

Argument) is fallacious;

3. list the consequences in terms of consumer welfare and industry efficiency if we were to follow the high protectionist policies prescribed by the fallacious protection arguments;
4. identify two non-tariff barriers to foreign trade;
5. state in 25 words or less the argument in favor of "Infant Industry Protection";
6. indicate whether the U.S. historically have been a low tariff or a high tariff country;
7. identify the authority under which periodic meetings are held to negotiate mutually advantageous cuts in tariffs;
8. name three of the major objectives of the European Common Market;
9. define the meaning of the word "dumping."

#### Exchange Rates and the Balance of Payments

The object of this unit is for the student to gain knowledge as to how international transactions are financed, and how exchange rates may be established. Specifically, the student will:

1. describe the chain of events that illustrates how a U.S. importer makes payment to a British supplier;
2. define the term "exchange rate";
3. illustrate in a simple supply and demand diagram what will happen to the price of English pounds if American importers need large amount of pounds to pay British manufacturers;
4. define the term "floating or flexible exchange rate";
5. state two reasons that may prompt a country to let its currency float;

6. describe the main drawback of a floating exchange standard;
7. state how under the present system of fixed exchange rates
  - a. we peg the value of the dollar
  - b. the value of other currencies is expressed;
8. describe
  - a. the measures the Bank of England would take if the value of the pound fell more than the allowable 2%,
  - b. the measures the German Bundesbank would take if the value of the Mark were pushed up beyond its allowable limits, in view of the fact that under the rules of the IMF it is the job of each central bank to intervene if the price of its currency deviates more than two per cent up or down from parity;
9. define the terms
  - a. devaluation of a currency,
  - b. depreciation of a currency;
10. give a definition of the balance of payments;
11. define the basic difference between the current and capital accounts;
12. be given a list of ten transactions and then must indicate for each transaction
  - a. whether it gives rise to a credit or debit entry,
  - b. whether it goes into the current or capital account;
13. indicate whether the U.S. deficits over the last decade led to a greater decrease in our gold stock or to a greater increase in our dollar liabilities;
14. list the three major factors that have given rise to our balance of payments deficit over the last few years;
15. describe how an easy money policy to stimulate a slack domestic economy might be in conflict with our balance of payments objectives;
16. describe in 50 words or less the new instrument introduced by the IMF which is designed to gradually increase inter-



national reserves;

17. state two reasons which will make it unlikely that our  
balance of trade will be improving much for the next few years.

## CHAPTER IV

### SUMMARY

This thesis represents an attempt to deal with the problems of content and method pertaining to the teaching of the economic principles course. It tries to clarify the goals and method of instruction and seeks to establish a rationale for the development of a substantive content that would serve to bring economic reasoning closer to the world the student can recognize. The underlying assumption is that the principles course should be more relevant to the specific needs of the beginning student both as an individual and as a citizen. Economics is an important part of human activity and the student is interested in learning about the character of the empirical world for the assistance it can provide him in making intelligent decisions.

The proposed method of instruction, i.e. the use of performance objectives, is directed toward effectively achieving the stated goals. It would seem to be an acceptable premise that a purposive method of teaching is more apt to produce fruitful results than a haphazard approach to the task. Telling the student what is expected of him is likely to lend purpose and direction to his efforts.

Both the selection of content and the statements of performance objectives in this paper present primarily an effort to give better direction to the teaching of the principles course. There can be

little doubt that the use of performance objectives will enhance the pedagogical value of the course. In constructing them care should be taken to tailor them to the type of tests used. We should also try to overcome our propensity to equate a higher degree of difficulty with good teaching. There is no basis in fact for this assumption.

The selection of the substantive content presents a greater problem. It would be difficult, if not impossible, to achieve a consensus as to what should be included and what should be left out. "Relevance" to the real world can serve as a guideline, unfortunately the term is subjective. A distinct advantage of the behavioral objective approach lies in the fact that it gives the instructor a free hand in the choice of the substantive content he wants to cover in his lectures. He can not only delete from the text but add what he considers to be of importance without placing an additional burden of uncertainty on the student as to what he is to learn.

A pattern for the macro course has been set but a great deal remains to be done. Results achieved with experimental groups using the behavioral approach should be compared with those of groups not using this method. Comparisons should be based not only on understanding, but whenever possible also on retention after a lapse of time. Both the choice of content and its translation into performance objectives should be subject to continuing analysis. The most efficient course will evolve from trial, evaluation, revision, and further re-evaluation.

What has been done in this paper for macroeconomics will have to be extended to microeconomics. There the problem of content and relevance may present even greater difficulties than in the macro course.



## NOTES

<sup>1</sup>Irwin L. Herrnstadt, in Discussion at the Seventy-seventh Annual Meeting of the American Economic Association, American Economic Review, LV (May 1965), 572.

<sup>2</sup>Allan B. Mandelstamm, "The Principles Course Revisited," The Journal of Economic Education, III (Fall 1971), 43.

<sup>3</sup>George J. Stigler, "Elementary Economic Education," American Economic Review, (Papers and Proceedings of the Seventy-fifth Annual Meeting), LIII (May 1963), 658.

<sup>4</sup>George L. Bach, "Student Learning in Basic Economics: An Evaluated Experimental Course," in New Developments in the Teaching of Economics, edited by Keith G. Lumsden (Englewood Cliffs, N.J.: Prentice Hall, Inc. 1967), p. 76.

<sup>5</sup>see Bernard F. Haley, "The Content of the Introductory Course," American Economic Review, (Papers and Proceedings of the Seventy-fourth Annual Meeting), LII (May 1962), 478.

<sup>6</sup>Irwin L. Herrnstadt, op. cit.

<sup>7</sup>Kenneth E. Boulding, "Economics as a Moral Science," American Economic Review, LIX (March 1969), 1.

<sup>8</sup>Paul A. Samuelson, Economics, (New York: McGraw-Hill Book Company, 1970), p. 609.

<sup>9</sup>Ibid., p. 610.

<sup>10</sup>David Krathwohl, Benjamis Bloom, and Bertram Masia, Taxonomy of Educational Objectives, Handbook II: Affective Domain, (New York: David McKay Company, Inc., 1964), p. 6.

<sup>11</sup>Ibid., p. 7.

<sup>12</sup>Ibid., p. 7.

<sup>13</sup>Albert F. Eiss, "Behavioral Objectives in the Affective Domain," Educational Resources Information Center, IV, 1969, p. 6. Eric.ED 028 101. Microfiche.

<sup>14</sup>Ibid.

<sup>15</sup>David Krathwohl, Benjamis Bloom, and Bertram Masia, op. cit., p. 45.

<sup>16</sup> Philip G. Smith, "On the Logic of Behavioral Objectives," Phi Delta Kappan, LIII (March 1972).

<sup>17</sup> H. M. Harmes, Behavioral Analysis of Learning Objectives, (West Palm Beach, Fla.: Harmes and Associates, 1969), p. 8.

<sup>18</sup> Ibid., p. 13-15.

<sup>19</sup> W. James Popham and Eva L. Baker, Establishing Instructional Goals, (Englewood Cliffs, N.J.: Prentice Hall, Inc. 1970), p.52-53.

<sup>20</sup> Robert F. Mager, Preparing Instructional Objectives, (Belmont, Cal.: Fearon Publishers, 1962), p. 38.

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