

GENERAL ECONOMICS, CONCEPTS AND BACKGROUND

27 August 1954

CONTENTS

	<u>Page</u>
INTRODUCTION--Dr. A. J. Kress, Member of the Faculty, ICAF	1
SPEAKER--Dr. Clifford L. James, Professor of Economics, Ohio State University	1
GENERAL DISCUSSION	15

NOTICE: This is a copy of material presented to the resident students at the Industrial College of the Armed Forces. It is furnished for official use only in connection with studies now being performed by the user. It is not for general publication. It may not be released to other persons, quoted or extracted for publication or otherwise copied or distributed without specific permission from the author and the Commandant, ICAF, in each case.

Publication No. L55-9

INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington, D. C.

Dr. Clifford L. James, Professor of Economics, Ohio State University, was born in Preble County, Ohio, in 1903. He received a bachelor's and a master's degree from Ohio State, in 1925 and 1926, and a Ph. D. from Harvard in 1930. In 1937 he was a visiting professor at the University of Cincinnati and has recently served as an occasional lecturer at the University of Illinois and New York University. He has been called into Government service several times. In 1934-35 he was senior economist with the U. S. Tariff Commission and in 1939-40, economic consultant for the Temporary National Committee. During World War II he served as regional and later as state price officer with the Office of Price Administration. In 1953 he served as an economic consultant on the Bell Report concerning the Foreign Trade Policy. Dr. James is the author of "New Outline of the Principles of Economics," as well as numerous articles published in "American Economic Review," "Harvard Business Review," "Southern Economic Journal," and other professional journals.

GENERAL ECONOMICS, CONCEPTS AND BACKGROUND

27 August 1954

DR. KRESS: Admiral Hague, General Niblo, lady, and gentlemen: We begin our Economics Refresher course this morning. We will have a series of 9 morning lectures, 10 afternoon discussion periods, and some moving picture economic studies. We have an economic study by the Brookings Institution this afternoon at one thirty, and Dr. Kaplan, the man who made the study and who narrated the film, will be on hand to answer any questions that you might have about it.

Our discussion periods begin on Monday. We have several of our discussion leaders here and I would like to present them to you: Dr. Ulmer of American University; Dr. Poppe of Georgetown University; and Dr. Gruchy of Maryland University.

Our nine morning lecturers are selected because of their eminence in the field in which they will lecture to you. Our discussion leaders are men of eminence, too, in special fields, but they are from the local universities and were chosen for a different reason--they are especially good at teaching. I am sure you will enjoy your contacts with them.

You have the biography of our speaker this morning, Dr. Clifford James. He is also author of our textbook.

It is a pleasure, Dr. James, to welcome you to this platform.

DR. JAMES: Admiral Hague and gentlemen: Armed with this little book, I feel capable of giving at least a short lecture. On the basis of that statement, I would like to make another--a statement made sometime ago by one of the great economists of all time, Alfred Marshall. Marshall was attending one of these shop talks among economists and there had been quite a controversial discussion about some matters. I guess the old gentleman became a little bit ruffled, at least, at some of the younger people. He finally made the observation that any statement in economics that is short is probably misleading or incorrect. That is not a very good recommendation for my little textbook, but let me finish the story. Another economist attending the same session quickly came back at Marshall by saying, "Professor, your statement was also very short." So maybe it is possible to make

some short statements about a few things in economics that at least will not be too misleading and I hope not incorrect.

I have been asked to give you some of the general background material to open up these lectures, and the first topic for presentation is the general one of the "Nature of Economics."

Here I might remind you of some of your undergraduate days and some of your misconceptions at that time--I hope you didn't have too many--that this subject has been known for a long time as a rather dismal one. I think most of the curse of that characterization has been taken off economics in recent times as it has become recognized that it is very important, especially for military people; we must have an economy that functions fairly well in order to support the Armed Forces, particularly when they are in the field.

Now that tag of economics being a rather dismal subject, of course, came up originally in the early days of the science when a good many economists or people working in the field of economics taught that population growth would probably outrun our ability to produce; at least, would outrun the available natural resources that were known to man in the eighteenth and nineteenth centuries. Our history of production in the United States (also in other industrial nations) does not support this dismal outlook.

I suppose in recent times people think of it as a dismal science because some of its parts are not easy to understand. That has always puzzled me because many students who can do well in mathematics and engineering subjects, take up physics, and the problems of atomic energy don't seem to have much trouble with them, but the same type of student finds economics difficult.

The basic reason for the difficulty lies in the fact that the main aspects of economics are not highly precise. So it was not surprising that a few years ago a great German mathematician who decided he would study economics finally gave it up and went back to higher mathematics on the ground that it was much easier than economics.

I think the easiest thing to get in mind as a basic problem is the matter of scarcity conditions that seem to exist rather generally on this particular planet. Now that word "scarcity" is a tricky one because books have been written about an economy of abundance.

So we have to make a distinction here between the meaning of scarcity and the meaning of abundance.

Clearly, if we look back a generation or two and compare the status of living conditions--then and now--we can say we live in an economy of abundance. So in that sense, in an historical sense, when you are comparing the present period, at least in certain parts of the world, with a period 50, 60, or 100 years ago, one can glibly say we live in an economy of abundance.

But in economic analysis, although we continue to improve production, there is always going to be a problem of scarcity in a relative sense. We have inherited an idea of progress. We strive to have one generation better off than the previous one. Even though we moved into the atomic age of push-button production with everyone on a two-hour day, we would still have a condition of scarcity in a relative sense. People would still, under those conditions, want the rest of the day for leisure time in which to enjoy the goods and services. The little work that had to be done, presumably, would bring up the question of how to use those two hours of the working population in various kinds of projects.

So conditions of scarcity, then, are relative in the sense that you are comparing means of production with people's wants or desires. Undoubtedly there have been times and places--I don't know whether we have an anthropologist in the house or not; if not, I will speak freely--where people were almost wantless. Some of the early traders a century or two ago complained about people being wantless; hence they had a terrible time selling them anything or trading them anything.

Therefore, we don't say that this matter of scarcity is universal, that it must exist in all times and places, but we do say it is the general rule.

The thing to keep in mind as a basic point in regard to conditions of scarcity is that from these conditions arises the necessity for allocation of the means of production--United States natural resources, manpower, and so on. Certainly, the idea of allocation should not be a difficult one for anyone engaged in the armed services to understand. I am not a military expert, but I do believe, from my general reading, that quite often in military operations you are short of something; at least you don't have quite enough to cover all possible assignments. So

somebody has to make a decision along the line as to whether front A, B, or C shall receive the most of the available material and manpower that you have. That is a problem of allocation. You use different terms for it.

Just one or two other brief comments with regard to the nature of this allocation problem. It is worth noting that means of production must be suitable for more than one use. If we lived in an environment in which, because of limitations on skills and natural resources, every time a man went to work he could only produce, let us say, just one or two things, there wasn't the knowledge, skill, or available natural resources to do anything else, there isn't much of an allocation problem. That is, the things that you can do are so limited under those conditions that one would not, I am sure, employ an economist to try to figure out the operation of a complicated economic system. But the reason you have a problem of allocation is because labor and natural resources can be used in so many different lines of production.

Then we have this matter of wants that I spoke of a moment ago that are ever expanding, one generation hoping to live better than the previous one. Remember, that doesn't have to be a matter of present cultural wants, some of which may be rather crude. It may be better educational facilities, better health facilities, better general production facilities. All of those things go into what the economist is thinking of when he talks about human wants or human desires. We have these ever-expanding wants of a diverse nature and a scarce means for satisfying them. One important aspect of economic efficiency is to achieve an optimum adjustment of scarce means to human wants.

In an economy such as ours, we attempt to work out the problem of allocation or adjustment not quite in the way that you do in the armed services with the General Staff; we try to work it out gradually through a market mechanism, of having people in their capacity as producers go into various kinds of work on the basis of individual placement, that is of their own choice. Once they have some kind of place in the economic system, earning income, then they may as consumers indicate those things that they want most by purchases in markets.

That brings up another point. Our problems in economics would be much simpler if people's wants did not vary so much in importance. I dare say if we sent around a questionnaire this morning in this group with a list of consumer goods on it and asked you to check off your

A-1 priority and on down on a series of, let us say, maybe a dozen items, we would have probably not two papers coming in where the items would be given the same priorities. So that makes an extremely complicated problem.

If you could bring the whole population of the United States together and let them agree on, let us say, a list of a thousand items that they were interested in as consumers and have them give you the priorities and roughly the quantities, and the income they were willing to set aside in a budget fashion for purchasing them, there would be no serious problem of allocation.

In more recent times, economists have studied at least two other aspects of the economic system; other than this matter of how a given set of means of production is allocated. First, there is the matter of the degree of use of the total means of production that you have available. In other words does the economy move along year after year, employing all of its labor force, or do you sometimes have part of it employed and part unemployed? That is a problem which we refer to sometimes as the problem of fluctuation in the general level of income, output, and employment of the whole economy.

Clearly, another way to look at the economic system that has come under study in recent years and that is also important and has a longer-run point of view is: Does the economy grow or is it static and stationary, or does it decline? There have been a few examples in economic history of some groups going into a serious decline. Certainly as a result of two great wars we have quite a few examples in various parts of the world of nations that have fallen behind in this matter of economic growth and development.

In this third problem, we are again interested in the entire economy, both from the point of view of quantitative changes in resources available (population change is an important one) and of qualitative changes that take place in the economy. The qualitative changes sometimes can be merely a matter of training, that is, changes in the skill of your population in many types of work. These qualitative aspects are sometimes summed up in a very important way as "technological improvements." You have then three ways of looking at and of analyzing the economic system.

You can look at it over a short period of time in a kind of cross section where the cross section might be compared with a fish net.

The knots of a fish net represent many markets. These markets are tied together, many of them closely, and you look at the individual knots. You look at the market situations to see if the resources are going properly into the different lines of production. By "properly" I mean are they going in such a fashion that the adjustment in production and the supplies that come into the market in terms of cost are leveling off at just that point where consumers are willing to set aside that much income to buy them on a cost-price basis.

The other view is to look at the whole fish net for a short period of time. Is it contracting or expanding? Is it the same shape and size? Or, as a final long-period point of view, does the fish net take root and grow up as a tree, showing many quantitative and qualitative changes in the process? These are the basic problems of modern economic analysis. In passing, we may note some things that most economists are not interested in studying. Economic analysis, generally speaking, does not include a study of management and administrative problems. The economist, after all, tries to specialize. He can't take on the whole universe. So we assume or accept at a given time procedures that are generally known to exist in shop management, in industrial management, in household management (domestic science or home economics as we sometimes call it). That is, the economist is not interested in the technical procedures used in production.

He is interested in how, with a given technique of business administration and industrial management, and with the way in which consumers in general spend their money; production units and household units are tied together. How are resources managed in order to produce the things which fit in as perfectly as possible with the pattern of human wants.

Another subject which the economist generally avoids is what we call human wants and human desires, or the even more tricky topic, human needs. Sometimes we sum up all that by saying, economics includes problems of means--how they are fitted to wants--and excludes problems of ends, that is, individuals' desires or objectives in life.

Clearly, when you enter the field of human wants and desires and probe into what people want and then raise the question: Why do they want it? You quickly move into a study involving psychology and sociology, a little touch of anthropology, and so on. Beyond that you encounter questions of ethics and aesthetics--should they want certain things?--and you open up Pandora's box, the field of philosophy.

So the economist as a specialist tends to keep away from such problems. Some economists, I think quite properly, do pay more attention than others to the general social framework which conditions the wants that people have. I have no quarrel with that procedure. But generally speaking, most economists do not try to develop a general science of society.

Now to sum up--you, as students of economics, should never go to any books in the field hoping to find there a complete answer to any major social problem. Economics is a specialized study, for the most part, that cuts in as an analysis of only one phase of human activity and human progress. Economic analysis is only a partial aid in the formulation of public policy. For example, economic analysis may be used to demonstrate that restriction of imports in order to protect certain domestic industries results in ineffective allocation of resources and a loss to the economy. However, for some industries protection may be provided, in spite of the economic loss, because of their contribution to military security.

My next topic is that of "Major Problems." It was necessary in a preliminary way to draw these into the discussion of the nature of economics. Now they may be explained more specifically. Scarce means of production are allocated or adjusted in markets to the wants of consumers, but markets vary in effectiveness in this operation. Some are competitive; some are monopolistic.

The economist is interested in the degree of competition that prevails in markets. He believes that in many instances where competitive markets exist, that is, where there are many sellers and many buyers and the products are fairly homogeneous and there are many opportunities for people to get into the industry, that you have a whole-some amount of automatic protection for the consumer and that the buyers in a way are protected.

Competitive markets tend to protect consumers against arbitrary restriction of output and of prices in excess of minimum average costs. In such cases the "law of supply and demand" operates impersonally and is not subject to manipulation by any buyer or seller. However, many industries because of the economics of large-scale production and technological improvements have so few firms that output and price can be manipulated. Perhaps in some of these instances the consumer is given better treatment than under competition characterized by many

sellers and buyers. Prices may be in excess of average costs, but costs may be substantially lower, the product greatly improved, and the price favorable as compared with highly competitive conditions involving many small production units.

Therefore, in terms of public policy toward monopolistic markets, it is important to determine the degree of competition in the American economy in order to avoid arbitrary creation of scarcity of goods and uneconomic allocation of resources--too little in some industries, too much in others. It is also important to determine the performance of monopolistic firms engaged in innovational improvements in production. Government ownership of an industry, or Government regulation of prices in an industry, or Government insistence on breaking an industry into many pieces may not in many instances promote the most efficient allocation of the means of production.

Since costs of production are prices paid for inputs of a firm in order to obtain output, the prices of certain fundamental means of production (labor, land, capital, and managerial ability) in the form of wages, rents, interest, and profits are studied as well as commodity prices. The output of goods available for consumers may be monopolistically restricted and its price raised at various points in the chain of markets. Firms in their selling transactions may compete with other firms in a national market, but as buyers of inputs they may exercise monopoly control in local markets. On the other hand the suppliers of inputs for a firm may exercise monopoly power. Bilateral monopoly, on a "tug of war," exists when monopoly control appears on both sides of the same market.

Allocation of the means of production also involves a study of international trade. Some regions or nations of the world have an abundance of certain means of production relative to other areas. Specialization in each area in the most advantageous lines of production provides the basis for an exchange of goods which improves the allocation of resources and the total output of goods available for consumption. A group of specialists exchanging goods and services can produce and consume more than the same number of "jack-of-all-trades" in a similar situation trying to be self-sufficient.

Stability of output, income, and employment at high levels, the second problem, involves a study of short-run changes in the economy as a whole. Changes in total consumer-expenditures are important, but particular emphasis is placed on the investigation of changes in

total saving and investing. Expenditures for consumption and for investment goods determine total income. Monetary and fiscal policies of Government are significant because of the influence of credit, interest rates, taxes, and Government expenditures on consumer-expenditures, private saving, and investing. Since in practically all modern industrial nations one aim of public policy is to maintain a high level of output, income, and employment in order to provide economic security for the average citizen, not only monetary and fiscal policies are used to achieve this objective, but also unemployment insurance and farm price-supports. Prices are essential elements in this problem, but the emphasis is placed on a study of changes in the general level of prices instead of individual prices.

The third major problem of economic analysis consists of the complex conditions retarding and promoting economic growth and development over a period of years. In a study of this problem, economics must depend on the findings of other social sciences. For example, explanations of increases and decreases in the quantity and quality of a population from which the labor force is derived involve an analysis of the cultural heritage of a people. In a similar fashion the accumulation of technical knowledge and the innovational drive for applying this knowledge in an improvement of production are processes which may be explained only in part by economic analysis. In economics the statistical increase in per capita productivity may be recorded over a period of years and the consequences examined, but the conditions favorable for economic development are the subject for study in all social science. The experience of the United States and other agencies in attempting to give technical assistance to undeveloped areas supports the observation that more than economic analysis is needed.

The third topic for presentation concerns "Methods in Economics." Because of the nature of the problems for analysis as indicated previously, economics must rely more heavily upon qualitative, deductive methods than upon quantitative, inductive methods. The latter method is used successfully in the natural sciences where phenomena to be analyzed can be isolated usually within a laboratory and subjected to a controlled experiment. Under these conditions many of the variables can be controlled and their changes can be quantitatively measured.

In economic analysis the economy as a whole, or parts of it, constitute the laboratory. Over a period of time, many economic variables change in an unknown manner, and hence the measurement of certain particular variables becomes very difficult if not impossible. Rough

estimates take the place of statistical laws. Studies cannot be repeated frequently enough under similar conditions to establish a high degree of probability concerning results sufficient to justify predictions of future changes. Consequently, much of the inductive or empirical investigation in economics takes the form of historical studies.

The historical method involves qualitative descriptions of economic situations and qualitative interpretations of trends in an economy for a period of time. Sometimes certain lessons may be derived from these historical studies and implications may be inferred concerning probable future trends in economic development. The findings, however, are never the basis for highly reliable predictions.

When historical studies are made of economic processes, statistics may be used in order to achieve a semiquantitative basis for the analysis. It is the only means for handling large masses of numerical data. One important technique in statistical analysis is to use numerical data which are related to time of occurrence. These data can then be arranged in a series covering varying periods of time. These might show changes in income, output, employment, expenditures, investment, prices, wages, and so on. The trend of changes in the data for a given period can then be measured by averages and other methods and can be presented graphically for ease in understanding. Frequently, in order to test an important relation or association between two or more time series of economic data, a correlation technique may be used.

There are many pitfalls in the use of correlation analysis. Random variation in certain variables may make the results of the test insignificant. Moreover, although significant correlation between time series is found, the reason for the associated changes must be largely a task of qualitative interpretations. Particularly difficult is the task of estimating which variable or variables should be treated as independent ones (causes) and which should be treated as dependent variables (effects). The investigator must be particularly careful in assuming that changes in a variable which occur in time before a change in another variable are the cause of the latter change.

Sometimes a stochastic method is used in statistical analysis in order to cope with random variables which are difficult to analyze with the correlation technique. In this instance the investigator attempts to establish limits within which certain changes in variables fall. This method may give in certain cases significant results. However, if the limits established for certain changes are exceedingly far apart,

there is little to be gained from the investigation other than the knowledge that quantitative analysis is futile.

The deductive method in economics is used as in other sciences to provide hypotheses concerning possible relations of variables in a given situation. It is a logical process which in economics takes the form of a hypothetical experiment. Assumptions are made concerning the basic elements in a given economic situation--sometimes referred to as an economic model. Once these assumptions are made which indicate the nature of variables in the model to be studied, then changes can be introduced in the form of assumed quantitative movements of the independent variable and logical deductions can be made concerning quantitative movements in the dependent variable. This method demonstrates logical possible economic relations in an economy. The hypotheses, principle, or laws derived from the analysis are useful theoretical possibilities which may be used for guiding statistical investigations. In other words the hypotheses may be tested in order to verify their probable explanation of certain changes in an operating economy. This method is the source of most of the economic theory as contrasted with the more limited explanations of probable operations of the economy as given in applied economics.

When the deductive method is used in formulating theoretical or possible relations among variables in an economic system, mathematical techniques may be applied. Since the procedure is basically one of logic, the mathematical technique is highly effective. A complex set of variables with many changes can be set forth very specifically and great precision can be achieved in examining their relations. However, mathematics cannot be used effectively in a verification of the relation among variables in an operating economy.

The mathematical technique sometimes seems to encourage economists to develop complicated hypotheses that have little chance of being tested in an empirical and statistical fashion. In the physical sciences mathematics has been a useful tool in the development of hypotheses which could be verified at least in part under controlled laboratory conditions. Since this cannot be done in economic analysis, there is the possibility of mathematical economic theory becoming very silly because there is no check point in terms of operational verification. Many great economists, although well trained in mathematics, have made only a modest use of this technique.

The next topic for consideration is that of "Types Or Schools of Economics." The existence of different schools or approaches among

economists can be explained largely by the difficulty encountered in analyzing economic problems and in the varying scope of investigation used. We have observed that results in economic analyses are frequently uncertain in an empirical or operational sense. Consequently, there is room for differences in the interpretations of different economists. The statement is often made that if all economists were laid end to end they would never reach a conclusion. We have different types or schools of economics in part because of conflicting beliefs concerning the freedom of individual action in economic affairs.

Some economists are primarily interested in the operation of markets and the way in which the price mechanism allocates the means of production. They confine most of their attention to the study of private enterprise in a capitalistic system. They may also be interested in the problem of changing levels of income, output, and employment. In a limited way they may study some aspects of economic growth or development. In general, although they do not include in their analysis many aspects of the social system which they recognized as having some influence in the operation of markets, they believe that a market system of private enterprise promotes economic efficiency and supports a free society. Their methods may in some instance be mainly deductive and they may explore possible market adjustments. In other instances they may specialize in inductive and statistical studies of various markets and industries and explore the structure of markets as well as the performance of individual firms in the market.

We also have institutional and welfare economists. They are institutional economists in the sense that their scope of investigation includes a broad study of markets and the history of their development. They explore evolutionary changes in the entire social system in order to indicate their influence on markets and economic trends and in some instances to make a few guesses concerning future developments.

We sometimes link institutional and welfare economics together. The basic reason for the linkage is that both types frequently involve investigation of both means and ends in the problem of allocation of resources. As stated previously most economists are interested in some form of welfare economics. However, those economists who investigate primarily the operation of markets in allocating resources, consider an improvement in economic welfare to consist largely of improvements in the operation of markets. The institutional and welfare economists frequently consider improvements in welfare to consist

of broad social changes involving in their judgment a more judicious selection of ends or social objectives to be achieved. There is no way to establish objectively what the social objectives of a nation should be or the individual ends or goals which individuals should pursue. Many economists exclude these problems from the field of economic analysis.

Planning and socialistic types of economics deviate substantially from the first two groups. The most substantial difference involves a disagreement concerning the effectiveness of a market mechanism in a private enterprise system adjusting effectively scarce means of production to human wants. This constitutes the big issue at the present time. Economists interested in planning propose various devices for central regulations of the entire economic system. So far most of these proposals remain as blueprints. There does not seem to be an effective arrangement for central planning of an economy which would preserve a high degree of individual freedom of action in the satisfaction of human wants. Presumably, in a socialistic system with central planning, production could provide for many wants of consumers; but in order to obtain efficiency in operation, a few people would have to be given dictatorial authority. Sometimes it is urged that a socialistic system may be developed which would avoid this dictatorial aspect. However, many experts agree that in the absence of dictatorial central planning, you lose perhaps the most effective feature of socialistic production. It is similar to having a large apartment building without the convenience of central-heating facilities. No special features characterize planning and socialistic economics in terms of the methods used.

I will close with a brief reference to a few traditional terms in economics. Since the text covers some of the more basic ones, there is no point in my going over all of them. I wish to add a few that have appeared recently and that are used by some economists. They will appear in some of the readings assigned for other lectures.

In the text I refer to "utility," a rather odd word, used to describe the satisfaction that people presumably get from consumer goods. It is a general concept which includes many complex reactions of consumers. Obviously, we can't strap a machine on the seat of our emotions and measure the amount of satisfaction obtained from consumers' goods. That is one weakness of utility analysis. It implies quantitative measurement. But one can use a utility concept and explain in a general fashion how consumers try to allocate various portions of their income in order to get a maximum amount of utility or satisfaction from the things they buy. Consumers may never achieve a maximum position, but the analysis indicates the general nature of demand.

In some books you will find what is called preference analysis or the indifference curve analysis. Here you postulate that people can judge how much satisfaction they get from one item as related to another item by expressing their preference, for example, for so many units of cigarettes as being equal to so many tots of rum. Reducing the number of cigarettes and adding to the tots of rum may produce several arrangements in which the individual is indifferent as to whether he has a great many cigarettes and a smaller amount of rum or the opposite. That is the basic idea of preference analysis. I cite it as a substitute for utility analysis; another way of explaining the general nature of demand.

Preference analysis, other than in the field of pure theory, has added very little to the solution of economic problems. Many economists have used this type of analysis, but it doesn't add any more than the old-fashioned utility analysis in giving information of the operation of the economic system. In applied economic analysis, complex indifference schedules are as weak as the utility concept.

Another comment I would like to make concerns the phrase "factors of production" or "means of production." Later, in economic analysis we talk about factors of production. That is a kind of technical term in economics which economists use to indicate that certain classes of means of production must be employed in order to produce things.

Some economists mention labor, land (natural resources), capital (money capital and capital goods), and the ability of the organizer (entrepreneur) to build up a production unit. One can quibble a great deal about how many classes or factors of production are sufficiently indispensable to be specified.

The socialists say there are only two factors of production, land and labor, and since land or natural resources can be called a gift of nature, then all that is produced is produced by one factor, labor. No distinction is made between labor and the entrepreneur's contribution. Nevertheless, in the USSR any laborer has to produce an amount of productive value in excess of that which is received in ordinary workers' wages. In the USSR that excess goes to the government as overhead, for capital development, for party organization, and so on. So we need not stop to discuss the dogma of surplus value.

Sometimes you find in textbooks that land, as merely one technical form of capital equipment, is treated as one factor of production.

From the point of view of investment problems in a system of private enterprise, there is adequate justification for this procedure. A more important variation is to treat Government as a factor of production. You must have law and order as a backdrop to your economic system before it can function. In modern times Government services appear in such a significant fashion in the strictly economic phase of our lives that there is justification perhaps for including it as a factor of production.

On the matter of income, there is a traditional term that is used, namely, functional distribution of income. Don't get tripped up by this way of looking at income. You will read much concerning the personal or the family distribution of income. That is largely a statistical problem where one is trying to make some kind of examination of either per capita income or the family income in terms of different levels and the number of units that enjoy different income levels. That is a fairly important problem in economics.

Don't confuse that with what we call functional distribution of income. There we are interested in breaking down total income into three, or usually four classes of income: wage income broadly speaking (including salaries), rents and royalties, interest income, and profit income. Clearly, so-called personal income might be drawn from all four of these sources. When we talk about functional distribution of income, we are saying there are broadly three or four basic functions that must be performed in getting goods produced. So we want to know, roughly, the total amount of these different payments that go to obtain those services, and we refer to that as functional distribution of income. Look at it another way, it is the pricing of basic factors of production because the average price of any class of units multiplied by the number used will equal the total share of income for that factor of production.

Then there is the problem of total income, what we call national income analysis or macroeconomic analysis which means looking at the entire economic system instead of its parts. In this instance attention is concentrated on total income and its division into consumption expenditures, investment expenditures, and Government expenditures as the primary determinants of the level of output and employment.

COLONEL BARTLETT: Dr. James is now ready to answer your questions, and I feel that you will get some good answers.

QUESTION: What did you mean by the term "textbook competition"?

DR. JAMES: That is a confusing phrase. In the textbook we spell out the specifications for competitive markets. In other words we specify that a market is a purely competitive one when there are many buyers and many sellers facing one another; so many that no one buyer or seller can influence price appreciably by his own action. Then we go further and set down another specification--that the units being brought to the market are all identical. In other words it is a graded commodity, or homogeneous. So in that sense, no one can influence the market by saying, "I have a little better grade or quality, or something." No, this is a given grade of wheat or cotton.

In addition there must be free entry into the market--freedom of any firm to enter that particular industry. These are specifications for what we term a competitive market.

QUESTION: A recent periodical expressed the opinion that the present Administration has halted or reversed the trend of this country toward the welfare state. I would appreciate your opinion as to the extent of our trend toward a welfare state and whether the legislation of the 83d Congress has halted or reversed such a trend?

DR. JAMES: That is a big order. This may be the time when I should confuse rather than explain, but I will try to explain. You must remember that in much periodical writing, especially some of the journals which are not technically economic journals, valued judgments and estimates are made, and phrases that are far from accurate, are thrown around to intrigue readers. I don't wish to go on record here today that we have completely reversed that trend--promotion of the public welfare is included in the constitution.

I think all of us should recognize that the present Administration, the present Congress, has largely for economy reasons tried to cut back on a great many types of Government expenditures. In that sense we have reversed at least some of the trend, so to speak, toward what is sometimes called "the welfare state."

I would go further and add this, which fits in with what I had to say a moment ago with regard to the investigation of markets, that I think the present Administration has recognized that in the matter of Government policy toward business one should be very careful in the application of our antitrust laws. By some individuals this may be considered as a retreat from the "welfare state."

Economists have always been divided on this issue, some of them saying that we should be extremely careful concerning policy toward

business. Professor J. M. Clark, of Columbia University, several experts at Harvard University, and other outstanding economists have always taken that position of caution. Others have been much more insistent on the rigid enforcement of the letter of the law.

I would say that the present Administration is certainly trying to develop a somewhat more cautious, and, in my judgment, a somewhat more workable policy toward big business. It is attempting to consider performance. Some could interpret that as drawing back from the "welfare state."

Another point is that the present Administration does not wish to get the Government committed any deeper in the field of Government ownership of various kinds of operations. There, again, is a touchy issue in public policy. People, I think, can have honest differences of opinion as to how far Government should go in what we call broadly the public utility field, regulation of industries. Also, what we would like to add to the public utility field and to the field where you have both Government ownership and operation. I certainly believe, as of now, that the present Administration has pulled back in that area from that of the previous administration, and that could be regarded by some economists as a retreat from the "welfare state."

QUESTION: Doctor, this retreat that you just mentioned, or at least evidences of a retreat from a welfare state theoretically, are these trends good?

DR. JAMES: I can answer that in two ways. Maybe that will confuse you. As a strictly economic problem, we do prefer to make the decision on this matter of certain governmental operations on the basis of the more effective way of handling certain operations. Now, clearly, there are some types of operation in which Government is absolutely essential, for the simple reason that private enterprise cannot develop the long-run interest and cannot operate in what we might call the public interest at all times. That has been particularly important in fields that we sometimes refer to as conservation problems in natural resources and human resources.

It sometimes appears quite sharply in the field of education. Once education was primarily a private enterprise. In terms of good citizenship, we now want people to have at least the equivalent of a high school education regardless of the size of the parents' purse. So in many areas, we strive to make the decision on these welfare

problems in terms of the most effective way of using scarce means of production to achieve certain ends. Sometimes as citizens we choose objectives which are to be achieved outside the market system. These broader issues and decisions relate to sociological and other considerations, such as developing a higher degree of morale in the whole social group and in developing at least certain minimum standards for ordinary living conditions which will ease social tensions.

When you enter, as indicated previously, the broad field of social welfare and the development of welfare state, it is extremely difficult to say whether or not another extension of, let us say, various aspects of social security is desirable or undesirable. My own personal judgment on the matter isn't particularly important. It seems to me that the solution of these broad social welfare problems and the development of a welfare state depend primarily on the reaction of the population. That is, after all, who is the final arbiter of how some of these things should be handled. For example, should we have free education through colleges and universities for those who can make the grades? That is a broad social welfare problem. It might be an extension of activities in a welfare state. There is no way of throwing this problem and others like it on a scale and weighing it out in order to determine what is desirable and what is undesirable.

It seems to me that such problems--problems of social security, unemployment insurance, various kinds of aids for needy people and the aged--should be determined through a democratic governmental procedure which indicates what people seem to want and how badly they want it.

If enough voting citizens in a free society want some of these extensions, they will be adopted. Some may consider them to be socialistic and undesirable. If in the absence of these extensions, critical social tensions develop and destroy morale in a majority of a free people, the welfare measures are not undesirable.

In conclusion, that is one aspect of a free society that, it seems to me, is worth fighting for; namely, the preservation of freedom for making such difficult decisions. I do not wish to dictate to you and tell you precisely how the total economy and total governmental organization ought to be set up in the United States. And I think it would be equally undesirable for you or any small group to tell the rest of the country how it should be done. One of the vast benefits of a free society is that various objectives are developed to a point where a working

consensus emerges as to what should be done and that process provides an opportunity for a group of people to become an effective nation.

COLONEL BARTLETT: Doctor, I think that particular bit of philosophy is a good final point; any other questions can be taken up in our discussions.

There are several compliments I could pay you. I will take one. For my money one of our greatest barriers to learning is fear. We fear something because it is unknown to us. The compliment is that you have done a great deal to remove fear from our audience.

(20 Oct 1954--250)S/ibc