



FOUNDATIONS OF POLITICAL ECONOMY  
AND ECONOMIC IDEAS

Dr. Janus Poppe

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Reviewed by Col R. W. Bergamy, USAF on 23 March 1964

INDUSTRIAL COLLEGE OF THE ARMED FORCES  
WASHINGTON, D. C.

1963 - 1964

Foundations  
of  
Political Economy and Economic Ideas

6 September 1963

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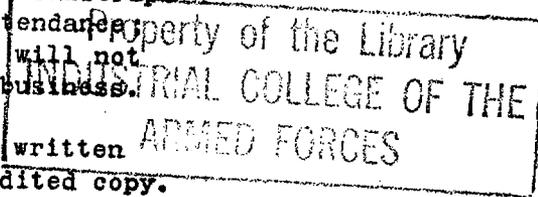
Reviewed by: Col R. W. Bergamyer, USAF Date: 23 March 1964.

Reporter: Albert C. Helder

Publication No. L64-18

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COLONEL BERGAMYER: Yesterday, Dr. Heller kicked off the economics phase of Unit I with Rosebowl sophistication. Today, we're going to start over with the fundamentals. ICAF's chief economist will begin the elaboration on some economic principles which should help us understand how Dr. Heller and the Council arrive at some of their judgment decisions.

Now, those of you who are not familiar with economics might feel that that which you are about to hear from Dr. Poppe might sound like Greek. But, I will assure you, gentlemen, that it is really Dutch. Janus?

DR. POPPE: Admiral Rose; Gentlemen:

We may draw an analogy from the joke I just told, pertaining to many words in economics. Economics has its own vocabulary and the same words may have a different meaning to different people, and in different context. For instance, in modern economics theory investment to the economist means expenditure for new plant and equipment. To most of you it means the purchase of common stock. It will change during the year, but right now you speak about the purchase of common stock when you invest. And, believe it or not, to my wife it means the purchase of a new hat. She came home a couple of days ago and said, "Look at the wonderful investment I made." And I really have a large number of diversified investments in my home, I can tell you.

The first observation about economics is that it has its own vocabulary, and that before we can understand the words we must carefully look at the definition of each word before we can intelligently discuss the subject. Economics have been

defined as "The common sense made difficult." And, to a degree it is true. For the next 14 days we'll prove it from this platform. And, as a matter of fact, as one of my colleagues pointed out this morning, I'm setting the stage for this utter confusion.

Economics, then, is the science that deals with human wants and their satisfaction. It is a study of those activities of man concerned with the production, distribution and consumption of goods and services. As a social science it is denied many of the means of experimentation and research that are open to the natural sciences. Human beings have wills of their own and resent being treated as guinea pigs for the purpose of social experimentation. The economist, then, can thus not make use of the test tube, but is forced to rely largely on the more indirect methods of observing mans' actions in society. Under such circumstances, when the economist wishes to ascertain the effect of a single cause he is forced to make a mental abstraction to allow for the influences of other causes in which he may not be interested at the moment, but this may be of great importance in producing the actual result that is under observation.

The phrase, "other things being equal," - *Satirius Pariabus* (phonetic spelling) - is therefore a standard idea, although it is recognized that in the actual world things never remain the same. As a warning, I would like to project that you will save yourselves many hours of bewilderment if you take special care to familiarize yourselves with the assumptions that underly the formulation of economic principles. Failure to recognize the significance of these assumptions may lead you to conclude that something is all right in theory, but all wrong in practice. Nothing that is wrong in practice is ever right in theory. If the conclusions of theory do not harmonize with apparent results in practice, either the theory itself is wrong, or we are attempting to apply the theory to practical conditions without recognizing

the difference between actual circumstances and the assumed conditions which were postulated in the statement of the theory.

For example, in economics we formulate the proposition that, other things being equal, people will buy more of the same product at a lower price than they will buy at a higher price. For instance, I don't think you've ever seen an advertisement which said, "Tires for Sale: \$15.00; previously \$12.00." We don't do that because the assumption is that as the price goes down more of the same product will be sold. As stated, then, this proposition is true; that at a lower price you will buy more.

But let us examine some of the assumptions implicit in the phrase, "other things being equal," that may or may not be fulfilled in practice. Let's assume that (1) people's incomes remain the same. (2) That their tastes remain the same. (3) That the prices of other goods remain the same. (4) That no new substitute for the goods is discovered. (5) That no price decline is anticipated. Take any one of these; for instance (3); that the price of other goods remains the same. Take butter at \$1 per pound; margarine, let's say 50¢ a pound. If the price of margarine goes down to 20¢ a pound there will undoubtedly be a large number of people who will switch from butter to margarine even though the butter price goes from \$1 to 90¢. Or, that no price decline is anticipated - No. 5.

As a youngster you can remember that you could go to the bakery store on Saturday at 9:00 o'clock in the evening and get a dozen cookies for half the price because the baker didn't want to keep them over the weekend. Nowadays you can go to one of the larger super-markets and find that at 9:00 o'clock on Saturday evening the prices are still the same. In other words, they don't sell their strawberries for half-price, or their peaches, because the weekend is coming up. And there are a number of reasons for this. One is that they have better facilities for keeping the perishables. But another reason is that they do not want to destroy their mar-

ket. If people know that strawberries will sell for half-price at 9:00 o'clock on Saturday evening they will wait until the last moment and then come in. So, in order not to destroy the market prices nowadays are remaining the same. Although, at times, the store would rather give the goods away to charitable institutions rather than sell them at a lower price.

In attempting, then, to apply this proposition in practice, and to predict whether a decline in a given price will increase the sale of a product, we must know the assumptions upon which the principle rests and the extent to which it is fulfilled by the practical situation. The importance of assumption then, in economic reasoning, cannot be over-emphasized.

One of the most important assumptions underlying all economic reasoning is that of the rationality of human conduct. By rational conduct, from the viewpoint of economic reasoning, we imply that given a choice among several lines of conduct a rational individual will try to select that course of action which will seem to him to promise either the greatest amount of satisfaction or the least amount of dissatisfaction. For example, if offered a choice between articles of the same kind at different prices, the rational individual will choose the cheapest. Now, we accept that. But the same thing, for instance, doesn't work in Japan. If a Japanese businessman places an order it has a kind of sequence to whom he will give the order. In the first place, it may be a member of the family, his best friend or a friend he has had for many years; but it has nothing to do with whether the produce it 2¢ or 3¢ per unit cheaper or not.

In the Western sense, then, the Japanese businessman - until quite recently - was not rational. Because, when we say that the Japanese are now becoming more and more Western-oriented, Western-business-minded, it indicates that they are at the same time rational in the economic sense; meaning they take that price which is the

cheapest.

Now, I said that the rational individual will choose the cheapest. Or, if offered a number of distasteful jobs at the same time, at the same rate of pay, the rational individual will choose that one which promises to be the least distasteful. That seems logical, doesn't it?

The economist is not trying to explain the ultimate causes that motivate the rational individual. Why rational human beings desire to ornament themselves with diamonds is a matter for the psychologists to explain. But given the fact that people do desire them, and that diamonds are scarcer in relation to human wants than, let us say, shoes or socks, the economist can explain why the price of diamonds is higher than shoes or socks under ordinary circumstances.

Another strong force which tends to modify or influence the economic conduct of rational individuals, is social habit or custom. When an economically rational individual is confronted with a social custom that forbids a course of conduct that he does not like he has a number of possible alternatives to consider. He may conform to the custom; he may try to evade it; he may openly defy it; he may try to have the custom abolished or changed. The alternative he chooses will depend upon the intensity of his desire to do the forbidden act, and upon the relative degree of dissatisfaction promised by the different alternatives.

We are straying somewhat into the realm of sociology, and yet when we realize that prohibition provides an economic incentive for the bootlegger; that high taxes encourage the evasion; and that styles and changes of styles can result in prosperity or bankruptcy for the businessman, then we see the importance of social habits, customs and laws in influencing our economic actions.

In explaining the economic life of our society, then, we must devote our main attention to the rational economic calculations of the average man. As such, we

are not interested in the economic decisions of the oddball, nor<sup>do</sup> the economic laws based on the rational conduct of the average individual explain the economic conduct of any one person. To the extent that the individual differs from the average, we must allow for personal idiosyncracies. But, we have taken proper account of the rational actions of the average individual, and we should be able to explain the economic actions of a group of persons, and to predict under certain circumstances the way this group will react to different economic policies. And at certain times they will react differently than at other times. That is why, for instance, examination questions in economics for years tend to remain the same, but the answers from year to year differ.

Now, in explaining the economic life of our society, I mention democratic society. Our society is a democratic society, and we associate with such a society certain basic freedoms such as freedom of thought, speech, action, press and worship. These freedoms are essential to the fullest development of each individual, which is one of the highest aims of democracy. But democracy is not perfect until we accept the foundations of free enterprise, private property, profit motivation, competition and economic freedom. At this college we will stress these foundations for free enterprise as a vital part of our democracy. They are closely related to the democratic freedoms.

For example, without freedom of choice how free are we? Without freedom of enterprise, can we be sure of a free press? Without the right and freedom to own property, are our other freedoms secure? No one freedom alone, then, can make a free society. All our freedoms are inter-dependent, but the foundations of free enterprise are also foundations of democracy.

The question now may be raised, "How did modern economic thinking develop?" "Who are the economists contributing the most to our present-day economic philoso-

phy?" The first one I'll mention, is Adam Smith, a Scottish bachelor, Professor of Moral Philosophy at the University of Glasgow. And at the time that Adam Smith wrote, the Industrial Revolution had not yet transformed economic life. Adam Smith was really the spokesman for the small, enterprising merchants in England, And in his inquiry into the nature and causes of the wealth of nations he made out a classic case against the archaic system in existence at that time and gave us the first systematic treatment of the study of economics. In place of the planned economy of mercantilism Smith called for freedom in combining the factors of production - land, labor and capital. He pointed out that greater specialization would increase wealth; all of government, he said, should be passive. The government should practice a policy of freedom; of laissez faire, as the French call it.

Smith maintained that competition was a definite and essential element of a system of free enterprise, and we associate the free enterprise system with the classical school of economics of Adam Smith.

The next author influencing our present-day thinking is Thomas Robert Malthus, who put his finger on the real-world problems of population and depression. Malthus observed his environment keenly and noted that during the Napoleonic Wars industrial capitalism had made remarkable advances in Great Britain. Factories had become numerous; the population increased by leaps and bounds. And England had become a battleground of hostile classes. When we look at the population statistics of the 18th and 19th Centuries we see that the population doubled approximately every generation. Unemployment, depressions, hunger and malnutrition gradually transformed the Age of Enlightenment which had prevailed during the 18th Century, into the Age of Pessimism, and the recognition that man's future was bleak. Just as we have an era of rising expectations in many of the lesser-developed nations today, so we had a period of pessimism and the prospect of growing disillusionment in the England in

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the days of Malthus.

This process of growing disillusionment was exemplified by Malthus in an essay entitled, "Essay on Population." The Malthusian thesis held that population always tends to outrun the means of subsistence, only subject to certain checks such as disease, war and famine. The poverty of the poor was explained as a result of the passion of the sexes and their own lack of prudence and foresight. The masses of labor were operating under the doctrine of the iron law of wages, and the plight of the poor was of their own making. And it is from this picture that economics achieved the name of "The Dismal Science," while Malthus has been referred to as a "Prophet of Doom."

I do not have time to discuss all the authors mentioned here; the only thing I want to indicate is the relationship from Adam Smith through Malthus, to John Maynard Caine (phonetic) - to the neoclassic thinking which I will take up now. I will then bring out that Karl Marx and Lenin have their stamp on modern economics, as Alfred Marshall does. At one time he referred to the inexact science of economics and he taught it as a moral philosophy. Then it became political economy. Most institutions during the 19th Century had Departments of Political Economy. The only one left that still has a Department of Political Economy in America, is Johns Hopkins - and I'm quite sure they'll find out some day.

Nowadays it is economics and the specialized, either in the macro or the micro aspects - the macro is the big picture; the micro has developed the theory of the firm and industry. And then, under specialization we have the subdivisions such as statisticians or statistics, mathematics, business administration, pure economics; and then the further subdivisions in specialties in economics such as international economists, general economists, labor economists, etc.

Now, there are two possible approaches to the study of economics. We could

start by examining the economic motives and actions of individuals, or individual firms and industries, and so build up to a picture of the economic system as a whole. This method is referred to as "micro economics." The other method is called "macro-economics," and starts with an examination of the total national income; the total production; the total consumption and total savings and investment of the nation.

I have a slide here which starts with the gross national product. As I mentioned, it is the sub-total of all goods and services over a period of one year. In the process of production the machine destroys itself. You take account of that either by setting up a sinking fund or a capital consumption allowance which goes into a sector which we refer to as "gross savings." When we subtract the capital consumption allowance from the gross national product, what is left over is referred to as the "net national product." From the net national product we subtract the so-called "indirect business taxes," as a result of the double counting features, which becomes an income of the government. Then, after we subtract the indirect business taxes, what is left over is the national income. From the national income we subtract first the corporate profits which go into government revenues, the social insurance contributions which become added revenue; and we have the corporate savings which, again, go into the total savings of the nation.

Now, if we subtract those three we have, then, the personal income of the nation. The personal income is supplemented by so-called "transfer payments." These are payments for which no services have to be performed, such as social security payments, unemployment compensation, etc., which swells the personal income of the nation, but the personal income is lowered or gets smaller as a result of the payment of personal taxes, which, again, falls within the government receipts sector. Then, what is left over has to be paid in personal taxes; we have disposable personal income. And this disposable personal income we either can consume or not,

and they are referred to as "personal savings." And those personal savings also become part of the gross savings of the nation.

Now, notice the disposable personal income becomes the large personal consumption sector which we refer to as "C" in neoclassics, while the gross savings through the banking process become investments for new plant and equipment, which we refer to as "I"; while the income concepts - there are five income concepts - this is an aggregate concept - can be referred to as "Y." Now, leaving out the government expenditures - in other words, we have here the government revenues. On this side we have the government expenditures. For the federal budget, when those two are equal we have a balance of the budget. If the expenditures are larger than the receipts we have a deficit in financing. If we leave those out for a minute we see that the gross national product is equal to this part, or, Y equals C plus I - investment. Why I? Because savings - gross savings - are equal to gross investment. That is, in the long-run.

Now, we need not define investment in such a way that they never in the - that they can deviate. That doesn't mean that during one year you can have more investments than savings and in another year more savings than investments. Investments are over the long-run.

May I have the next slide, please? Here we have a set of <sup>able</sup>equity data for 1929 through 1961. I skipped a few years. But here we have a gross national product figure. The gross national product plus, equals the consumption - and let's say the gross national product or national income concept figure equals consumption, investment, government expenditures; there are 49 million people, approximately, in the labor force. In 1939 there were 1½ million people unemployed - 3.2% of the

labor force. Notice that when we look at the labor force it increases from year to year, and continues to increase over the years. In this year, for instance, 2 million additional youngsters entered the labor force.

Notice that in 1959 we had a national income figure of \$104 billion; in 1932 we had \$68 billion. And notice what happened to the volume of unemployed; it changed from  $1\frac{1}{2}$  to 12 million people - lower incomes and more people unemployed. And please watch these pictures for a moment - 1935, 1936, 1937, where we have an income of \$70 billion, \$72 billion, \$82 billion, \$90.8 billion. But I will, in the next demonstration, take 70, 80 and 90, to simplify this a little bit.

May I have the next slide, please. Now, here we have 1935, and notice income -  $Y$  - is \$70 billion; consumption, \$60 billion; savings, \$10 billion. Then, in 1936 we have an income of \$80 billion; a consumption of \$67 billion; and a saving of \$30 billion. Now, the change in incomes between the years 1935 and 1936 was \$10 billion. The change in consumption is 67 minus 60, seven years ago. The change in savings is \$3 billion. Already you see that the change in income,  $\Delta Y$  -  $\Delta$  stands for change - the change in income is equal to the change in consumption plus the change in savings. And we have already said that savings equal investment, so, we may say that the change in savings will also be the change in investment.

Now, out of this come different concepts which are rather important. In the first place, the concept of the average propensity to consume, which is the ratio between consumption and income. For instance, in 1935 the average propensity to consume was  $60/70$ , which is .86. What does it mean? It's the same figure that Mr. Heller was referring to yesterday when he pointed out .94.

Could you give me the second part of the slide, please, for a moment, and I can show it to you right now. Here we are - .92 -  $C/Y$  - this is 1955-1956.  $Y$  is \$274 billion for 1955. For 1956 it was \$292.9 billion. We get the consumption

over the income - because this one goes up for 1955; this one is for 1956 - we get C/Y - it would be this figure divided by that figure, and this gave you .92. That is the 92 set to 94, set that Mr. Heller was talking about yesterday.

Cover it up, please. So, we thus get the average propensity to consume is .86 for 1935. For 1936 it is .84. Now, the change in consumption was from 60 to 67. And then, from 67 to 70 is a rate of <sup>six</sup>. Notice that although total consumption increased, the change in consumption decreased. In other words, we can say there is a decreasing rate. So, we find there is a ratio of the change in consumption as a result of the change in income, between \$70 and \$80 billion, which would be a change in consumption - six - over the change in income; that would be .6. We refer to that concept as the "marginal propensity" to consume. It is the extra propensity. It is the extra spending as a result of extra income.

This is important because when the income of the nation increases from 80 to 90 the \$80 billion is spent on the basis of the average propensity to consume. That means that there is a basis of 86¢ to the dollar. Thus, the \$10 billion is spent on the basis of .7, the marginal propensity to consume. And what importance does that have?

The next step that we have to go into is the so-called "multiplier concept" which, by definition, in Keynesian economics, is the ratio between a change in income as a result of a change in investment. So, this, by definition, is the multiplier - the change in income as a result of a change in investment. However, we have to predict the change in investment for the nation, and we have to know the multiplier before we can determine what the change in the national income will be. And why do we want to change the national income? Well, because we have seen that the income is related to the volume of employment.

So, I have  $\Delta Y$  is equal to  $\Delta C$  plus  $\Delta I$ , or, a change in income

is equal to the change in consumption plus the change in investment. From that, I realize that by putting the delta C on this side, delta I is equal to delta Y minus delta C. From that, I realize that K is equal to delta Y - and remember, this is the definition - over delta I. For this delta I I substituted delta Y minus delta C. I divide the whole by delta Y and as a result I get K, the multiplier, is equal to delta Y divided by delta Y, which is 1 over delta Y divided by delta Y is 1 minus delta C over delta Y. And delta C over delta Y, remember, is the marginal propensity to consume.

May I have the next slide, please? This part is the marginal propensity to consume, and K is 1 minus 1 over the marginal propensity to consume. Why get from this formula to that formula? Because, in our economy, by statistical measures I can find the marginal propensity to consume. Here they are; these are the actual statistics for 1955 and 1956. And for the change in consumption and the change in income I arrive at the marginal propensity to consume, of .7. And having found the marginal propensity to consume, of .7, I arrive at the multiplier K, which is equal to 1 over 1 minus .7, which is equal to 1 over .3, and that is equal to 3.3. Remember Mr. Heller was referring to two multipliers yesterday. In one he mentioned the No. 2; in the second one he referred to anywhere between 3 and 4. This is 3.3; this is the one he was referring to between 3 and 4.

Now may I have the next slide, please? Going back, then, to these data, I find, thus, that in 1935 there was a change in investment, from 6.3 to 8.4. There was a change in total government expenditures from 10.3 to 11.8. Then notice that we were at an important unemployment level of 10.6 which was a result of the increase of investment, plus government expenditures, and this gradually went down to 7.7.

May I have the next slide, please? Well, here are those figures again for

1935, 1936 and 1937; investments and government expenditures. The change in investments was 2.1. The change in government expenditures was 1.8. Total change in investment plus government expenditures, 3.9. There is, thus, an additional amount of money spent, of \$3.9 billion over the whole year, divided by 4. So, we are spending it in quarters. That means that \$975 million was spent per quarter. The first quarter, how many people as a result of this additional expenditure are employed? Well, assume that the average weekly wage is \$50. Yesterday for the first time it was reported that the average weekly wage for skilled laborers was exactly or a little bit over \$100 for the first time in our history.

But, assume that it is \$50 and that we are operating in approximately '36 and '37. The wage for three months would be 12 weeks times \$50, which is \$600. You divide the \$600 into \$975 million, and you get 1,625,000 additional people employed as a result of the increase in investment and government expenditures.

Now, the second income propagation period - that is, the second part of the income propagation period in the United States - is three months, and it refers to the time that is needed to have the income wage filter down to the next level. We again have the \$975 million. Now, for the economy as a whole we expended the average propensity to consume. But, for the additional \$975 million, in the second income propagation period we spent 2/3 of that, because, remember, we said that no supplier dreamed that it was as a result of having a marginal propensity to consume, of 2/3 or .7. So, 2/3 of that was spent by people and by the whole economy on the basis of the marginal propensity to consume. And we find that the \$975 million will give us an additional employment of 1,625,000 which is the same as this figure, although not necessarily the same persons, plus 1,083,000 as a result of this secondary spending.

In the third income propagation period - the third quarter of the year - we

have an additional 975 plus 650 from Period 2, and 433 from Period 1, which gives us 2.7 plus 720, or a total of 3.4. The fourth quarter, 975 plus 650 from the third and 473 from the second, plus 288 from the third, gives us 3.9 million people additionally employed. Now we are at the end of the year and assume that we fall back to the previously level of expenditure; that is, consumption plus investment plus government. In other words, the additional - the delta thing up here - we fall back to the previous level, and then in the fifth period there is no 975 to take care of them. But there is still the 650 from the fourth period and the 433 from the third period. And we find that the volume of additional employment is beginning to decrease. And, of course, it eventually will peter out and we will thus stop the additional expenditures.

Well, suppose that we continue at the level of increased investment of government expenditures? In that case, the final result of this increased rate will be determined by the multiplier effect, meaning that when we have a multiplier of 3, the final impact - the multiplier is 3; the changes in investment plus government expenditures included here will thus, let's say, as it is there, 3.9, the result will be 3 times 3.9. This will give you 11.7 billion over the long-run, and the additional employment will be 4.87 plus. Theoretically, of course, it never works out; it's just like a caterpillar climbing a pole and it covers half the distance every day. Theoretically, it will never reach the top. But, for practical purposes, it reaches the top.

Now, it's the same thing here. We say that the final impact has worked out to approximately 13 income propagation periods. That is approximate and it is usually accepted as the time that is needed.

May I have Slide No. 6 once more, please? You see that this is the figure that Mr. Heller was concerned with yesterday, 14% of the labor force unemployed, and

you see that the gradual decrease is from 10 to 9 to 7, and then something happens over here, but we won't go into that. because there are many pitfalls here. But, for practical purposes we'll continue with our present line of thinking.

Now, our economics studies, then, at the college will concern themselves with macro economics mostly, and for this reason I devoted most of the time to some of the concepts which are fundamental to understanding the neoclassical synthesis. It was John Maynard Caine who gave capitalism a bold and a vigorous theoretical foundation on which many of our present economic policies rest. And the opinion is widespread that Caine has explained what has determined the volume of employment at any given time, and that governments have it in their power to maintain stable and high levels of national income and employment within the framework of our traditional economic environment. And I think that's the important thing; our traditional economic environment.

I'm not finished, but I think we should have a ten-minute break now.

Let me explain one more aspect before I open this session to questions. That is, that the institutional assumptions dominate this neoclassical thinking. The important thing is that consumer expenditures are limited to national income, and it's unlikely to expand unless income expands.

The second observation is that investment opportunities are limited in a mature economy such as our own. Private investment, therefore, may continue year in and year out at the level that falls below a level that is necessary to maintain full employment. And the essential thesis, then, of the system, is that aggregate effective demand - that is, the total amount of money spent on all types of goods and services, determines the level of economic activity.

The observation that I would like to make, and that can easily be substantiated by looking at what has been happening within the last 30 years, is a gradual

movement away from laissez faire toward a managed or controlled economy. Neoclassicism in itself is a devastating blow to laissez faire. Neoclassicism holds that modern economic phenomena are not a part of culture as a whole. Economics cannot be isolated and extracted from its environment. The price system on which a free enterprise system strives is sometimes unable to bring about economic equilibrium of a kind that is desired. That is, at a level of high employment and relatively stable price levels. And it is argued that government intervention is necessary to achieve this kind of equilibrium.

Thus, we advocate such fiscal measures as tax decreases, deficit financing, and public works construction. And in our present frame of thinking, prosperity and economic stability can be obtained by vigorous free enterprise in which business and labor play a responsible role. And I underline the word responsible. Only in case the economy does not perform in such a way as to give us a satisfactory level of employment and the desired stability, is the government brought into the picture. And under our system it is the federal government which is responsible for the maintenance of an adequate level of prosperity.

Now I would like to open the question period.

QUESTION: A previous speaker mentioned four national economic goals. Two of them were rapid economic growth and stability of prices. I wonder whether you consider that those objectives are in conflict?

DR. POPPE: Not necessarily. There is a considerable volume of literature on the subject of economic growth and instability. It's true that up until now, when we have had dynamic periods in our economic society, usually it produced a severe inflationary tendency at the same time. But it is maintained nowadays that that is not necessary. However, we may have to make some changes in our institutional

setup. In other words, there may be some legislation required to prevent it. In other words if we cannot hold inflation with monetary and fiscal policies, then we may have to go into some controls.

But I do think that the trouble is more severe without the economic growth, really, although I see that economic growth is necessary. Sometimes, you wonder, economic growth for what? And in what direction? In what sector? It will depend very much on that, I believe, as to whether or not we'll have inflationary tendencies. Does that answer your question?

QUESTION: I have heard quite frequently that the gross national product is deceiving in that it includes services and tends to throw a person off in actually telling the vitality of the economy. Would you please comment on that?

DR. POPPE: No, I do not think it is deceiving, because it also indicates the standard of living. The gross national product as measured in the Soviet Union does not include services, and limits itself just to the actual production that is taking place. We maintain that services should be in there so as to indicate the level of prosperity at which we are. And the services component of the gross national product indicates the maturity and the advance of the economy. Consequently, it has greater value than it has disadvantages, in measuring it. Of course, it has been said that if we all start ironing each other's pants we get lost in a big gross national product; that's true. But there must be a balance; that's an obvious thing, isn't it?

QUESTION: I am troubled by the assumption that investment is equal to savings which we make here for the purposes of considering an employment situation. Now, it appears to me that this is an assumption which you cannot make if you're considering monetary policy. Could you reconcile this for me, please?

DR. POPPE: I wondering how I can best attack your question. It's similar to

a question that I had at a ladies' meeting that I was addressing two years ago. One of the ladies said, "Supposing you found yourself in the White House this evening? What would you do?" And my answer was, "Well, I would apologize to Mr. Kennedy and get to hell out of there." But I do see your concern. You've brought something out that has been considered a weakness. That is, can you really assume that investments are equal to savings?

I point out that by definition in the Cainesian System it is accepted by neoclassicists, in general, that investment equals savings in the long-run. And, it is assumed, thus, that through monetary policy we can influence that investment and the savings. But from year to year it is undoubtedly, under most circumstances, not true. However, this is one of those assumptions we make. I realize the weakness of it, and you pointed it out correctly.

QUESTION: Would you say there is no compatibility, then, between our monetary theory and the Cainesian System?

DR. POPPE: Oh no. That, I wouldn't say, because our monetary theory is very much along neoclassical lines as it is applied, and as we will learn later in the course. There is compatibility, yes. But, in other words, we may implement certain monetary policies, but that doesn't necessarily mean that they will work, because there is another factor at work. And that is, the investment psychology of the banker as well as the public, and of business. And that you cannot control. So, certain monetary policies may be frustrated as a result of the sectors in the economy not cooperating.

QUESTION: Doctor, in the excellent treatment that we have heard today and yesterday afternoon on the general topic of economics, we've heard a great deal about growth of the gross national product and various other favorable factors. It appears to me, however, that we're sort of kicking under the rug something that

we've touched on only lightly. We've heard about deficit financing. Do you have any hope or any feeling that we might level off this \$300 plus billion figure, or perhaps reduce it in the foreseeable future?

DR. POPPE: Of the national debt?

QUESTION: Yes sir.

DR. POPPE: No, I don't think we will ever have the intent to pay this off, really, at least not within our lifetime. There is considerable worry about whether or not a large national debt is desirable. You have to look at the national debt; how it got to the point where it is now - over \$300 billion. Go back prior to World War I. During the war, as a result of tremendous expenditures, we started borrowing money. The borrowing was on the basis of, well, if we do not borrow the money, but rather, tax the money away, we impair incentive. In other words, a man is working eight hours and making \$2 an hour, and therefore he makes \$16 a day. As a result of the war he is now working 14 hours a day and getting another four hours of overtime pay. If you were to tax that away they thought that people would say, "What's the sense of doing this?" So, what are you doing? You're really impairing wartime production.

I believe that it was a mistake in not taxing heavier during the war; in other words, attempting to pay for the war on a pay-as-you-go basis. My philosophy is that if you can have 10 million men in the Army, the majority of whom get \$50 per month, I don't see why the civilian component can't carry the other part of the burden.

Well, here again, in my personal opinion I think we misinterpreted the feeling of the American public. I think they would have supported it. Then, the theory is that in time of prosperity we should increase taxes and in times of depression we should engage in deficit financing. But this is an awful platform to run on. No

politician stands before his constituents and says, "I'll run for a tax increase." So, by tradition, politicians do not want to, if it can be prevented, run on a platform of increased taxes. So, when we should have taxed away we did not. In the meantime - and we have run consecutive deficits year in and year out - we've begun looking for justification for the deficit.

For instance, we say, "Well, now, let's look at the budget a little bit differently. When we spend more than we have coming in we should look at where we are putting the spending and say, like a private corporation, 'The part that goes into dams and roads we'll call an investment rather than an expenditure.'" And, there is something to it. But, the lesson to be learned is that the balancing of the budget, at the time we could have done it, was not done. And now, at the time that we make the budget policy subject to a full employment policy, I feel of course that it is the wisest thing to do, but it does not solve the problem of your national debt.

Then, you can give the answer, "Well, is the national debt so bad?" Some people say it is; some people say it is not. You can get out of this by saying, "Well, we owe it to ourselves." There's a considerable school who feel this way. And, "The expenditures made are made during our time and we benefit from these expenditures." And I believe that when a national debt is held mostly internally, as it is, in America, it doesn't do anything to the prosperity of the nation because there is no leakage out of the income, you see.

The British, for instance, are saddled with an external national debt on which they will have to pay not only interest, but also have to pay back to foreigners. We don't have that. If you get your bone back is it because the gentleman over there paid it as a result of a refinancing operation? It stays within the group. However, I do not think that we will ever attempt to get rid of the national debt as such. It has some advantages, because as a result of a national debt we are

able to exercise effective monetary policy. Because now we can engage in open market operations. That's one thing.

The other thing is that the national debt sometimes takes care of itself. For instance, it is \$300 billion. But in terms of purchasing power - in 1940, purchasing power was less than \$150 billion. Remember when you bought your war bonds for \$18.75 and after ten years how happy you were with \$25? But you didn't realize that you only got \$12.50 worth of purchasing power, did you? Well, that's the national debt; it solves itself over the long-run.

Already, your children talk about 15¢ icecream cones. This is a new generation. They will live with it at an increased price.

QUESTION: Doctor, I suppose that the most important problem to the military man is the balance of payments. We've heard all kinds of proposals to correct this, from the deficit value of gold to the injection of a new kind of opinion. I'm just wondering what is your proposal for solving the problem of the balance of payments?

DR. POPPE: We have three real experts on that. I can give you my opinion on it. I always say that you never get richer by giving things away. And we have been giving things away - \$100 billion since the Second World War - and our chickens are coming home to roost. The balance of payments problem reflects itself mostly, of course, in the gold shipments from the United States - or, from the account of one nation to another - that is, from the United States to other nations - as a result of what we refer to as an unfavorable balance of accounts. And that is because we are not exporting enough. On current accounts we do very well.

We export goods and services in which we are really competitive. But we have other commitments, and the other commitments are foreign aid, forces overseas, etc. It is here that we will have to make the determination of what is more important; the outflow of gold, or maintaining the aid and the forces overseas, etc. Now, we

may try to solve that by increasing our exports and current accounts. That way we can leave the other things as they are. If we do not, then we will have to look for some other measures. These measures could be, of course, bringing back the forces and their dependents; that could be one way; eliminating part of our foreign aid could be another. But why do you want to solve it absolutely? Well, mostly because we still have a requirement of a 25% reserve in gold to back up our federal reserve notes, on the statutes. This, in my opinion, could easily be changed from 25% to 20%, or from 20% to 15%. Does the 25% have value? It's somewhat archaic. We do not need the gold reserve requirement, but it also serves some purposes. One of the purposes it serves is that at least it is brought to our attention that something is wrong with our balance of accounts internationally.

The remedies that I would offer are, really, unhappy remedies in many ways.

QUESTION: You mentioned that we are gradually moving toward a controlled-type of economy. Of course, the Soviet Union as we know it, is a definitely-controlled economy. We read all the time about the rate of growth and the comparison, and what happens in the Soviet Union.

I understand you just came back from a tour over there. Would you give us your personal views on the Soviet economy and the trends?

DR. POPPE: Yes. We sometimes tend to forget the good points of the American economy and focus the Soviet Union far too much and bring it far too much into the limelight. The Soviet Union is a command economy. Everything is centralized and organized. And, as statistics point out, if, let's say we had had the same growth as we've had in the last 15 years of Czarist times - had we had that same growth, the Soviets would have been about 25% ahead of where they are now.

I pointed out to some of the Russian scholars that communism in and of itself hasn't proven anything to me, as far as success in economic growth is concerned.

I was nearly thrown out of Kiev Institute for making the statement. However, there was one man who dared agree with me. The other thing is that in our country we have 40% of the world's progress for 6% of the world's population. In other words, we are the most productive nation in the world. We have a 40-hour week, which is real. It's not a dream sort of thing, such as that the Soviets are going to establish a 35-hour week three years from now. That's what they say. Whether it will happen, I don't know.

But our 40-hour week is real, and, as I pointed out awhile ago, we have \$100 a week for the skilled laboring man; they get 25 rubles a week. We have greater opportunities. Our laboring man is beginning to disappear from the labor scene, strange as it seems. In other words, in 1910 there were about 36% of our people who were common laborers. In 1940 26%. Now, only 22%. They all become, in other words, a more scientific, better-informed individuals who let machines work for them.

The freedom of our society is a characteristic which is desirable. I think we have an unlimited capacity for change. We are in a constant or permanent revolution. When I mentioned control I was referring to workmen's compensation laws that have been adopted; the Federal Reserve System; unemployment compensation is now in practice in all states, and our unemployment check is bigger than the Russian worker gets; federal old-age pensions; the standardization of the 40-hour work-week; the minimum wage of \$1.25; these are the good points that we sometimes overlook. This does not mean that there are not a few things that we can learn from the U.S.S.R.

One thing that I was impressed with was the handling of their children. For instance, in our society we have four to five million youngsters running around in the slums every summer. Now, there is no reason why we can't have the facilities

- they don't have to be state-run - but at the moment we don't have them. We leave them in the slums for three months and they don't learn anything. And we expect them to become good citizens. And mind you, democracy is the most difficult system or form of government that is in existence. Consequently, there is room to teach those children, let's say, some kind of vocation; some Americanism; some sort of healthy effort in the forest, etc. rather than letting them rot in the slums. That is something we might learn from the Soviets, but not in such fields as material goods or improving the lot of the laboring man. With them, it's a long way off.

Of course, the most important thing here is their loss or lack of individual liberty. Everyone there is a little slave, and you notice it.

Gentlemen, I'm afraid I'll have to quit now. It is seven minutes after ten. I thank you for your attention.