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INTRODUCTION TO ECONOMIC POTENTIAL

15 March 1956

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INTRODUCTION TO ECONOMIC POTENTIAL

15 March 1956

COLONEL CONNER: General Hollis, Gentlemen: According to the calendar, for the past seven months you have been studying primarily the economy of the United States, and more specifically, you have concerned yourselves with the problem of mobilizing the United States economy for war. In the final Unit, beginning 1 May, you will have an opportunity to utilize all these learnings of the past months in applying them against the mobilization problem Jim Walsh has given you.

Before attacking the final problem, you need one more link in the chain of your studies.

As you know, United States foreign policy--political and economic, and to some lesser extent, perhaps, military policy--is based on the concept of collective security. That being a fact, then, your course here at the Industrial College would not be complete without an examination of the economies of those nations with whom we are aligned in the struggle against communism. You are interested in how or to what extent these various nations fit into the overall picture--what effect their economic positions have on our economic mobilization problems.

Maybe we, the United States, do not anticipate any material support from some of our allies, but many of them (and certainly when they are taken collectively) have much to offer. Few people realize that in World War II, reverse lend-lease amounted to some 8 billion dollars.

In any instance, because we are bound to all free world nations by political, economic, and military ties, the fact is that part of our economic capacity goes toward keeping those countries out of the Communist bloc--and if war comes, much of our economic potential would be allocated in aiding them to defend themselves, and in supporting their active efforts against the enemy.

So, any way you choose to cut the cake, a knowledge of the economies of our allies--and of our likely enemies--is an integral part of any study of the United States economic mobilization.

And that is the reason for Unit VIII, "Economic Potential," which we start this morning.

(Chart 1)

The objectives of this Unit which I would like to call to your attention can be rather easily stated in three short statements. This unit wants to afford you (a) an understanding of the various elements, or factors, which comprise the economic strength of a nation--any nation; (b) a knowledge of the basic economic features of nations throughout the world; and (c) a knowledge of the present and potential economic strengths of nations, individually and in coalitions, under various conditions of international conflict. I think these are stated in just about that manner in your curriculum book. I mention in passing that the class is organized into eight committees, and each committee will be working on the same problem directive, which requires a written committee report.

Each of you, as a representative of your committee, will specialize in studying the economies of some specific geographic area of the world. After a process of committee, shall we call it, cross pollinization, the committee will evaluate the economic potential of blocs of nations under conditions as outlined in the problem directive.

If you have any questions as to the details of organization and administration, I am sure we can cover them in the committee meeting this afternoon.

With that hasty background of what you might expect to get from this Unit and how you will be going about it, I will direct my remaining remarks this morning toward two goals:

1. I want to talk about the means and significance of some of the terms you will be using in this Unit; and then

2. I will discuss some of the ramifications of the assigned committee problem.

By d ssing these particular items, I believe I can best assist you in orienting your thinking toward the subject at hand.

First, the meanings and significance of terms: Take the word "economic." The word "economic" is used in this Unit in the broadest

possible sense. To illustrate: A nation's economic strength is often measured or equated in terms of gross national product. We readily associate such factors as the size and the skill of the labor force, the availability of raw materials, industrial capacity, and transportation facilities with the ability of a nation to produce goods and services. These factors are obviously economic factors.

But sometimes overlooked are the seemingly noneconomic and somewhat intangible factors such as: the will of the people, morale, leadership, national traditions, and various other psychological factors. These, and any others which affect the degree to which a nation's resources and productive capacity are utilized, are studied in this Unit--anything that affects the output of goods and services.

Now, let us look at this word "potential" for a minute. "Potential," according to Webster, means something that is "possible, as opposed to actual or realized." For example, we can say that the economic strength of a country, if you want to express it in terms of gross national product, is X billion dollars; but the economic potential of the country is naturally greater. The "potential" would be reached only if optimum use were made of resources and productive capacity--that optimum use which would in the end result in maximum production of goods and services.

Of course, I am sure you realize that the economic strength of a nation, as we have illustrated it, is continually changing as the population, industrial plant capacity, etc., change; hence, so does its potential.

The term "economic potential" alone doesn't mean too much. There are lots of "economic potentials." A nation has an economic potential to produce automobiles; it has an economic potential to produce bicycles, beans, hairpins and cough drops.

What kind of economic potential are we concerned with in this Unit? We are concerned with a nation's economic potential for war.

A nation's economic potential for war, according to branch research study R189, is said to be "that portion of the potential economic strength of a nation which could be employed to equip and supply its Armed Forces for service against an enemy."

In trying to estimate a nation's economic potential for war, there are quite a few things that have to be evaluated--some not too simple:

In the first place, the part of the total national effort which could be allocated for war will depend, in part, on how much of the total effort must go to meet civilian requirements. And that determination is rather difficult to make. It depends on what the civilian is willing and what he is able to give up. If he is used to a high standard of living, it might be difficult to deny him some things; on the other hand, he may be willing to give up some things, but be unable to. (The example is often cited here of the automobile-refrigerator economic economy of the United States. If the United States civilian had to give up these items, although willing, he could not make his maximum contribution to overall national production and hence to the war effort.) So, actually there is an optimum civilian requirement--a balance--which would in the end maximize the support which could be given to the Armed Forces.

Also, a nation's economic potential for war will depend on the overall composition of the economy--the percent of output derived from agriculture and services in comparison to manufactured goods would be important. If you take two nations with the same gross national product, the one with a manufacturing economy could be expected to furnish more military items than the one with an agricultural economy.

Then, too, a nation's economic potential for war depends on its self-sufficiency in raw materials; on the convertibility of the economy to the production of war goods; and on how much slack there is in the economy at the start of the war--just to mention a few of them.

By considering all of these things, one can get a fairly good estimate of a nation's--a single nation's--economic potential for war.

Some nations have very little economic potential for war. The Belgian Congo is certainly an example of this. But one cannot write off that potential which does exist in a nation--as small as it may seem in itself. It cannot be disregarded because in this era where nations act collectively, one nation's weaknesses might be offset by the strengths of others, and vice versa. Economic potential for war of individual nations must be considered in the light of their importance to the overall strength of the group or bloc of nations with which they are aligned.

By definition I pointed out that economic potential implies an economic capability to be attained or reached after a war starts--after a period of mobilization, a period of perhaps 18, 24, or maybe more, months.

We all appreciate the importance which economic potential for war played in this country in World War II; but because of the vulnerability of our economy to enemy damage, it is not at all illogical for one to ask himself, "How much dependence can we place on economic potential in the next war?" "Will we be able to mobilize our economic strength after the next war starts?"

Some think the next war will be a nuclear war and will be over in a very few days, weeks, or a few months at the most. In a short war, such as this, certainly unmobilized economic strength would not come into play, except in the consummation of the victory.

Others say that no matter how much nuclear damage is suffered by the combatants, they will continue to fight, with clubs or spears if necessary. In such a case, economic potential would be an important determinant of victory or defeat.

Then we have those who feel that because of the awesome aspects of nuclear war, the world has reached a nuclear stalemate. They feel that any shooting wars of the future will probably be conflicts whose outcomes are likely to be determined by productive capacity, manpower, and the other traditional elements in the equation of armed combat.

Obviously, no one knows the answer--the part that our unmobilized economic strength will play in the next war.

But it is equally obvious that our national policies and actions are designed to assure that our industrial capacity can continue throughout a war to produce the gigantic amounts of equipment and supplies required by the Armed Forces (to provide a mobilization base, the breaking of bottlenecks, stockpiling, buffer areas around the world, etc.).

In any instance, because our economic potential could be the difference between victory or defeat in the next war, regardless of degrees of probability--as long as there is a reasonable possibility--then studies of economic potential for war are still available.

In fact, such studies may be of greater significance today than ever before. With the enemies' capability to strike at the heart of our industrial economy, the need for economic intelligence, and its correct application; the need to know the extent of the enemies' capabilities, his intentions, and his probable courses of action is of utmost importance.

It is also to our advantage to know his weaknesses and strengths, as a basis for our military strategy and our political and economic policies.

In World War II, there was considerable evidence that major decisions were made without a clear understanding of the factors which determine the power potential of a nation. Germany underestimated the potential of the U.S.S.R.; Japan underestimated our potential; and we greatly underestimated that of our enemies. In a speech in 1942, President Roosevelt stated that Italy, Germany, and Japan had reached their maximum productive capabilities for the building of ships, planes, guns, and tanks. Yet in the years 1942 to 1944, Germany increased its production of planes and ships over three times, its production of guns over four times, and tanks over six times. We underestimated our own production capabilities just as greatly.

It seems to me that our diplomats and military strategists are at a terrific disadvantage in sizing up issues, in making decisions and in calculating risks--as they must do every day--if they do not have a knowledge of the economic strength behind our enemies' and our own military forces.

Well, let us relate these thoughts on the subject of economic potential for war to the problem directive--the other item I am to discuss this morning.

As I have tried to point out, considerable thought has been given to the possibilities of the future, especially in connection with what "kind of war" we are likely to get into and "when" it will occur; and as I have tried to illustrate, nobody knows for sure. So in order to be realistic, the committee problem asks you to consider several possibilities.

There are a tremendous number of combinations and permutations under the heading of "what kind of war" and "when" will the war start, but in order to place some limitations on the problem, we have to make certain major assumptions. We have tried to keep the problem manageable and at the same time keep it realistic.

(Chart 2)

For the first part of the problem, we have asked you to evaluate the economic potential for war of the two world blocs. We have

assumed that there will be a general war--possibly on many fronts--starting immediately--1 July 1956. Under this assumption, we have made two further assumptions: First, that the war will involve little or no use of nuclear weapons. Under this first type of war, we are assuming that a nation would be able to build up its economic power after the onset of war. In this sense, where you have little or no use of nuclear weapons, you are interested in looking at the economies you will be studying from the standpoint of their expansibility, their convertibility, their development, their research capability, and so on. These are more or less items you are familiar with in economic mobilization.

Now, the other type of general war we are likely to get into is a war where there is major, critical, devastating enemy damage at the onset of the war, or very early in the war, from nuclear weapons. Now there are a lot of permutations on that--how much damage is done; how much damage is not done. Nevertheless, the most important test of an economy under this assumption of nuclear war would be its resiliency and its recuperative ability--its ability to carry on, to heal the wounds, to support what was left of its Armed Forces in the struggle against what was left of the enemy's armed forces--the ability of the nation to exploit the greater damage it might have done to the other side.

So under these conditions, you are interested in looking at: (a) the dimensions of an economy at the outset of the war (what you have at the start, the way it's dispersed, has some relation to what you have left after the bombs fall--barring complete annihilation); (b) the flexibility of the economy as indicated by interindustry relationships; (c) the stockpiles of raw materials and end items; and (d) any other factors which would enable an economy to get back on its feet to produce the equipment and supplies necessary for its Armed Forces to gain victory.

Al Ryan mentioned earlier in the week, it might be, in the situation of nuclear war, that all the country could produce would be inferior weapons. It might be that those inferior weapons would be the deciding factor in the war. As I mentioned earlier those weapons might be clubs and spears. And it might well be in this nuclear war that the intangible economic factors--the will of the worker to continue to work, as an example--would be the key in determining the extent to which a nation can recuperate.

Now, if the free world becomes involved in a general war starting this coming July, or within the next year or two, as a matter of fact,

there is little that could be done to change a nation's economic capacity to fight that war. Economies would not have time to change or be modified substantially in that short a period. Economies just don't change overnight. What you are going to have as an economic base a year or two from now is pretty much what you have now. And that's the situation in the first part of the problem--your evaluation must be based on the economies as they now exist.

But if this general war occurs "later on"--5, 10, 15, or more years from now--there would be time for economies to undergo major changes, either as a result of natural forces or by design. And the second part of the committee problem recognizes the possibility that the general war might start after a long cold-war period.

(Chart 3)

In that extended cold-war period, the free world should--and it would--be vitally interested in improving its position to fight a war coming later on. So you are asked to make recommendations as to what the free world should be doing to enhance its economic position to fight a general war occurring "later on"--a general war of either of the two types--nonnuclear or nuclear.

In this cold-war period there are a lot of challenges which would have to be met by the free world nations which you cannot overlook, and your recommendations for improving the free world economic potential for a general war must be compatible with the cold-war tasks faced by those nations. These are the cold-war tasks as I see them. They are not new to you, I am sure, but I am bringing them together to focus your attention on them because they are pertinent to this part of the problem. The free world bloc of nations must:

1. Maintain the capability to fight successfully the economic, political, and ideological battles to keep individual nations strong, and to prevent them from coming under Soviet domination. (Examples of Soviet pressures are surplus cotton from Egypt and Soviet diamonds to be used in economic warfare--you are all familiar with the struggles going on in the world today in that field.)

2. Continue to progress technologically. They must maintain capability to do extensive research and development to stay ahead of the enemy. This is a field where a single technological breakthrough could give one side or the other a tremendous advantage.

3. Satisfy the aspirations and expectations of its peoples to maintain their types of governments, their national characters--everything the nation stands for. These cannot be sacrificed.

4. Be able to fight successfully peripheral-type wars (Korea and Indochina) to prevent the enemy from gaining his objectives by increments.

5. Maintain a high plateau of readiness to fight a general war--there is always that threat.

And although you will be making plans for a war, those plans should be conducive to peace and deterring war. Therefore, your recommendations should permit the free world to:

6. Deter the enemy from initiating a general war. It must have forces in being--striking forces, defensive forces, including warning nets, etc.

None of these cold-war capabilities can be sacrificed on the road to improving the free world's economic potential to fight a general war some years hence. If your recommendations aren't compatible with these cold-war tasks, you would be recommending a course of action which could result in the defeat of the free world through cold-war pressures only.

Gentlemen, that is all there is to the problem. If we have left out anything, it was strictly an oversight.

I have tried this morning:

1. To get you started thinking in terms of economic potential for war and the significance of such studies in the light of recent developments in warfare and in view of present international tensions; and

2. I have tried to give you an insight into the committee problem. I hope that my discussion has served to plant some ideas and maybe some questions that will be of benefit to you in the next five weeks.

In closing, I point out that these studies in economic potential have no finite answers. You cannot expect to close with the problem to your complete satisfaction. You must be prepared to settle for something less than an absolute answer.

In the final analysis, the evaluations you will make can only be estimates, or judgments, but your judgments must be based on the analysis of the factual material.

The fact that a study of economic potential is an inexact science should in no way detract from the value of such studies. Much of science consists of efforts to narrow the range of guessing.

As Professor Jones, from Yale, says in an article, "The Power Inventory and National Strategy," "So long as there is politics among sovereign states, there will be estimation of power. Even though the best estimates are only rough, they are better than reliance on intuition and emotion."

Thank you very much.

COLONEL CONNER: Gentlemen, we have quite a lot to get out to you this afternoon in the committee meeting so I would like to encourage your questions to stay away from the details of how you are going to be working, the organization and administration, and confine them to the general area of economic potential.

QUESTION: Would you discuss a little bit why you have changed from thermonuclear to nuclear weapons?

COLONEL CONNER: Yes. We put thermonuclear in there. We recognized the fact that there may not be thermonuclear weapons at all. There might be just nuclear weapons. Somebody brought it to my attention and we changed it.

QUESTION: Then you have completely ruled out thermonuclear weapons?

COLONEL CONNER: No, not at all, but we are not certain that these weapons will be hydrogen bombs.

QUESTION: Your assumption was based on little or no nuclear weapon. What is a little use of nuclear weapons?

COLONEL CONNER: He wants a clarification on the part of the problem which assumes we will have a war with little or no use of nuclear weapons. We recognize the fact that maybe some weapon, such as a tactical weapon, will be dropped. We have tried to divide

the thing into two general categories of war, where there would be extensive damage from nuclear weapons to industries and another trying to say, in effect, that damage from nuclear weapons would be negligible in the first part of the problem, except out in the field armies, that damage to the industrial economy would be slight.

COMMENT: I object to the word "drop." I think you should include "fire."

COLONEL CONNER: If you let me by that easy, I'm satisfied.

QUESTION: Who will provide us with the damage estimate?

COLONEL CONNER: You don't have any. I think you will have to do a lot of hassling in committee as to how in the devil you are going to go about estimating this damage. I might say that the committees can make any further assumptions they want to. I am certain some of you will. I don't know whether the committees are going to find they have time and want to go into detail to try to determine how much industry is going to be knocked out or to look at it from the standpoint of the vulnerabilities of the economies. You are not going to get a damage estimate. That's something the committee is going to argue and hassle about, how they are going to go about estimating damage and what effect it will have on the economy.

COLONEL WIRAK: In the Requirements part of the course, the people in Study Area C dwelt on that particular problem quite a bit and discussed the best thinking of ODM. Hence, they might use what information they gleaned from that as a starting point for their debates and discussions.

COLONEL CONNER: Thank you very much, Gus.

QUESTION: I will ask you one about biological and chemical warfare.

COLONEL CONNER: It is true, we haven't. I am not going to imply that the damage that would occur as a result of chemical and biological warfare would be identical to that which would occur under the assumption of a nuclear war--in other words that the damage would be the same--but I think, within the magnitude of the estimates that you will be making for all conditions and purposes, we can assume that the damage would be about the same or in the same general category. I

don't think you are going to get down to estimating casualties in this Unit. I don't think you are going to get down to the percentage of damage to various industries. But you are perfectly at liberty to argue the vulnerabilities of these economies to chemical and biological warfare and take that into your study.

QUESTION: There's one other area where we could get into a lot of hassling which might be unnecessary. That is, you mentioned little or no use of nuclear weapons to assess the economic potential, as I understand it, prior to and during a general war. Are we to avoid any assumption as to the interplay and movement of ground forces? For instance, to give an easy example, we might assume that Western Germany will have no economic potential because it will be overrun in a week. Are we to overlook that type of thing and assume the ground forces will stay where they are and the Air Force will drop the bombs?

COLONEL CONNER: No, I don't think you can make that kind of assumption. Now it is proper to discuss Western Germany's potential, but I think you are making a tactical assumption that is not necessarily true.

QUESTION: If we are to make a strategic assumption, we must assume that Western Germany will be overrun. Are we to avoid that type of discussion?

COLONEL CONNER: I think you could assume yourself out of the problem--which might not be a bad idea. Seriously, though, answering your question, we want you to look at the economies to see what potential they have. Then, after you make an evaluation of these economies and how they might fit into ours, the committee might point out some of these vulnerabilities as you have. We know that Western Europe is the industrial balance of power between the free world and the Soviet bloc. Point out the vulnerabilities on the thing and what might happen; if we did lose it, the position the free world would be in. Point out if that Western European economy were neutralized, what it would mean; if it went over to the Soviet bloc, if they would take it over and use it, what that would mean. But don't assume it at the beginning.

QUESTION: Do we use the United States or its current rate of technological development in warfare as a norm for the measurement or do we have to examine each one of these countries or areas in terms of the type of economic development it has reached. I am not making myself clear, but how do you equate these economies?

COLONEL CONNER: How do you equate these economic potentials of countries? I don't know. That's what you are going to have to find out. There is no norm of this thing. I always think of the United States economy as a benchmark from which to base others. I think that's true in most cases. You have problems here. You are eventually leading up to comparing world-bloc economies, but you have got to start somewhere by evaluating areas and actually individual nations for what they are worth. You could spend a whole year on something like this but you don't have a year. You have five weeks. You have to start picking up major items on these economies to the summation of the thing you want and which you are striving for.

QUESTION: I want to go back to the answer you made of assuming ourselves out of the problem. By the same token, it is intended that we be as realistic as possible on this thing. If you consider that France is liable to defect and therefore her assets are to be discounted, that should certainly come in. The realism of a situation as of now should be very carefully weighed.

COLONEL CONNER: Very true. For instance, we have divided the world into eight geographical areas. We have some countries like India; I don't know which way they are going to go; or Norway or Sweden. They are in the Western European area. You want to study these economies, but when you get into committee action, you can question the contribution that these countries would make to the free world bloc from the standpoint of the things that you mention--how much they would come over on our side--but I don't think you can assume yourself out of the problem on the question that right away Western Europe would be overrun. You can point out our vulnerability as to what might happen.

QUESTION: None of the questions have been in the nature of things concerning the problem. The name of the course is "Economic Potential." Isn't it true that we are studying economic potential in the light of certain circumstances so that the emphasis is rather on economic potential rather than the circumstances involved in this problem?

COLONEL CONNER: Yes.

QUESTION: To know about the nations and their economies?

COLONEL CONNER: Yes, that is true. We are trying to study the economies of these countries.