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ECONOMICS OF WAR

Lecture

By

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INTRODUCTORY REMARKS - COL. IRVING J. CARR.

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Gentlemen:

In the past two or three weeks you have been studying what the War Procurement Problem is from the difficulties that you have found by reading over the history of the last war. You have seen the lack of coordination we had, and you have seen the prices jump to five hundred percent of the real value of certain commodities. You have also discovered the necessity for planning to avoid those conditions in the next war.

We are very fortunate this morning in having Dr. Harold G. Moulton with us. He has long been a student in economics, was formerly a professor in the University of Chicago, and at present is a Director in the Institute of Economics in Washington. He has consented to talk to us informally this morning and will be very glad to answer questions during his talk or afterwards.

I take great pleasure in introducing Dr. Moulton.

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ECONOMICS OF WAR.

Gentlemen of the Army Industrial College.

I shall talk very informally indeed and I want you to feel free to interrupt and ask questions. I have had a great deal of experience in this speaking game and I think it works out better if we have more or less discussion as we go along. Sometimes the questions may need to be postponed until later in the discussion; if so, I will tell you.

Colonel Carr suggested that the first part of my discussion might be devoted to a consideration of what Economics is about, in general, without specific reference to the war problem. I shall endeavor to show you that.

The point of departure in all studies of economics is the basic resources - land and natural resources. That is what the people of the world have to deal with. Then you have a labor supply, or population, thought of in broad terms as human hands to work on natural resources. Third, we have capital goods. Do not think of money for the moment; think of capital goods as factories, tools, or concrete machinery, instruments of production, etc. Next we have organizers, a term commonly known as industrial managers - those who take resources and develop same. A business man in quest of profit takes land resources, labor resources and capital goods and makes an industrial enterprise out of them.

In every case, under modern business conditions, you have land, natural resources, labor resources, and the utilization of capital goods which are all united into a single establishment. The world is made up of a lot of these single organizations, but somehow they are finally knitted together into an economic system and the grand result is that we, the people of the world, find that there is being produced each year, each month and even each day, the right quantities of goods for our consumption of every kind and description. The result of the routine of industrial establishments in operation is that we have a certain number of houses built each year, of automobiles turned out, of shoes, clothing, food, food stuffs, etc. We can go into a store and get almost anything provided we have the money - no matter where the required commodity has been made or produced. Each of the many industrial establishments unite in giving to the people of the world that which they want.

The big question of economics is what are the processes by which the above works out. It does not work out with one hundred percent efficiency always. Certain socialistic writers have pointed out the vast amount of waste involved, the unemployed, over-production, etc. On the other hand the following illustration has often been used. Suppose one were up in an airplane and were enabled to get a full view of this whole world. Every morning you find millions of people coming out of their homes, proceeding to their respective places of work, and at the end of the day you would find those people returning to their homes - and the number of unemployed would seen very small in comparison. You would find some people working at cross purposes, but on the whole you would find a wide track of sameness in the system as a whole.

How does it operate? That is where the price system is involved. So far I have not used the term "supply and demand", but will introduce them later. By the price system we mean that the natural resources, land, labor, capital, supplies and manual labor combined, produce "X" commodity. All these concerns are producing for the market so they offer the goods in the market at a price. One of the main issues of economics has always been the factors which determine the price of any particular commodity. One of the most common explanations is that the amount you pay for your land, wages of labor, interest on capital goods, etc., constitutes the cost. An article costing one dollar is sold by the manager for one dollar and twenty cents, in order to make a profit. There is twenty cents profit on each commodity turned out. What is to prevent that man selling his products at any price between one dollar and twenty cents to four dollars, thereby making as big a profit as he wants? There are certain dominating factors in this situation. He is turning out a commodity which can be done without. The buyer would be willing to pay one dollar and twenty cents, if the product is as good as anything else he could get for the same amount, (that is where the demand comes in), but he would not pay the excess cost. Under competition the price for "X" is governed largely by how much people are willing to pay - and that depends upon how much they get by spending for other things. If a person could get something else just as good for less money, he would not buy the higher priced article, the manufacturer would not make any profit, and would go out of business. If the cost of producing that commodity is higher than that of competitive companies, it is driven out of the market. You have to be able to meet the competition of other companies - at a competitive price. Competition regulates the price of any particular commodity. The basic factor on determining the supplies is what it costs to produce the same, and the manu-

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facturer has to sell to cover that. On the demand side, there is the question of what else you could do with the same money.

I want to carry you quickly beyond that to the next step. The industrial manager pays labor wages, probably rent for the land and natural resources used, and usually pays interest on the capital he uses for most business concerns of today are not entirely free from borrowing. Thus you find, under modern business conditions, that all of these factors of production must be hired in the market and must be paid money, and that, in turn, when the commodity is sold it is sold for money. The money mechanism comes in here as the tool in connection with this whole thing.

Next, the industrial manager comes into our scheme. Before he can start running his establishment he must have funds; not necessarily actual cash money but a checking account at least. There are two kinds of funds, fixed capital and working capital. That is to say he gets out a bond issue or sells stock for necessary funds with which to build and get ready to operate. This is his fixed capital. In doing that the investment banking market and bond purchasers are involved. They buy the bonds and get going a flow of money to the industrial manager. When we buy the securities we set a part of our money flowing through the market to the industrial manager and in that way furnish means to develop natural resources and aid capital goods. Some of the investor's money goes into the investment market, or by putting it in the bank, buys bonds, etc; some of the funds goes to retail establishments of one kind or another for consumption.

What determines the amount that an individual will send either way, and what about the aggregate total? This has special significance when we come to the war time problem.

Now, besides the fixed capital the industrial manager has to have working capital, funds with which to pay his workers, buy raw materials, if his plant is ready he has to have funds with which to operate. That is working capital distinguished from fixed capital. This he gets from commercial banks, which ties up the problem with the Federal Reserve System.

The stock market is a place where you get rid of bonds if you have them. This brings us up to a complicated financial mechanism. All these various banks are linked together and each and every one, as individual institutions, taken together transfer funds from one and any of the financial individuals to the industrial manager who uses those funds. He wishes to use these funds to pay labor, land, wages, interest and dividends. These industrial managers, after they have the money, do not keep it

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but manufacture goods, turn same out for sale and in the business of manufacturing pay this money back. It comes back to us in a circle, and we in turn make our decision as to whether we will spend it or save it. Suppose we all decided to save the money. There would be no demand, therefore no consumption and the mechanism would break down. That is the way the wheels go round - briefly but roughly outlined. In other words, that is the kind of financial mechanism we have, that is what economics is about.

It is an analysis of, first, the way in which all factors work together in giving an economic system, determining the amount which goes to the land owner, the proportion to the laborer, that which goes to the capitalist in the form of interest, and determines the dividends to be paid in the form of profits. There are four agencies of production - the land owner, the laborer, the capitalist and the bond holder. They each furnish ingredients in this system which determine the distribution among these various groups.

One of the problems of economics is to determine the forces controlling this question of profits. The other great question is what makes the wheels go round. Now we come quickly to the war problem.

Where does money come from in the first place? Where does this supply of funds come from? Under this system we have the gold and silver coins coming from the materials of the mine; the quantity depending upon how productive the mines are. The producers deposit it in the banks; once in the banks it is made the basis of a supply of currency. It would take long to discuss the mechanism of this system.

Now as to the difficulty of the quantity of funds. This is where you get into the problem of rising and falling prices. There are times when the quantity of funds are very abundant, and when this money gradually gets into the channels and causes a rise in prices, then money prices go down again - such as often happens in ordinary times. There are occasional breakdowns and it takes time to get to working smoothly again. This whole mechanism has evolved, without any direction from above by some overwise dictator or manager, or without anyone taking any leading role in its development, a gradual calling upon each of the factors without any response to each of the individual needs. That is the mechanism existing at the time of the Great War, the machinery which we have to deal with.

In time of war what we want at the front, of course, is supplies of every kind and description. Early in the last war

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that was not clearly seen by a good many people. "Money will win the War" was a slogan popularly used. You cannot shoot money at the enemy; it is only a means to the end, but a very important one. It is quite true that without funds you could not get industrial mobilization. A great many wars have been conducted without the use of money but by a direct waging of war, but for a great many years wars involved, to a very considerable extent, the use of money and supplies. Medieval history takes care of the efforts of kings to borrow money to wage wars, to hire soldiers, buy supplies abroad in the territories they were occupying, etc. Napoleon conducted all of his great campaigns without putting France much more in debt than she was in the beginning; he lived upon the country he was occupying at the time, and this was quite remarkable from the financial standpoint.

Next we have to consider the producers and the banking institutions. Ordinarily funds go through banking institutions and retail stores. On the route which they take the retailer orders from the wholesaler, the wholesaler from the manufacturer, and the manufacturer, in turn, secures operating funds from the banking institutions.

In time of war the United States Treasury becomes a very important part of this mechanism. In ordinary times that portion of our activity conducted by the Government involves funds sent through the Treasury. We pay a certain portion of our money to the Treasury in the form of taxes, the Treasury uses that for the work of the Government. In war time we enlarge the flow of money through the Treasury and the production, labor and supplies, or whatever is required, is obtained from there. Here is your real problem of finance. How are you going to obtain this additional flow of money through the Treasury, by taxes or by loans either from individuals or from banks?

There has been no end of discussion as to whether the war should be financed by taxes or loans, or by both, and if so in what proportion. Economists are not all agreed about this. In the first place, if the supply of funds has to be enlarged, a reduction will have to be made in another place in the circle of operation - thereby making two reductions. What we did in the last war was not done soon enough - increasing the taxes.

You may recall some of the efforts of the Capital Issues Committee to control the sale of securities. If we are going

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to build munitions establishments and supply agencies, etc., for military purposes we ought not to build as many industrial establishments of the kind that would not help win the war. If the flow of funds from the banking institutions were undiminished, the ordinary peace time establishments would compete against the Treasury for supplies and labor. That is what happened at the start of the late war. Your financial mechanism is the means by which labor, supplies and materials are gotten to the places required.

We lessoned the demands for labor, for building houses and for nonessential commodities. Money flows into the retail stores and, in turn, the retailer orders from the wholesaler and so on, and if the demand is good the manufacturer will endeavor to hire labor and obtain raw materials and supplies of various kinds and produce the commodities required of him. His individual interests as a profit maker seems to be to get all the supplies, etc., he can and turn out as large a production as possible. Did not the manufacturer see that it was unpatriotic to do so? He did not, to start with. He thought that unless he ran his plant with full capacity, he would not be able to pay for loans, taxes, etc., and therefore it was necessary to run at maximum capacity. It enabled him to buy bonds alright, but when the Treasury got that same money it was found that supplies, labor, etc., could not be obtained therewith. Thus we eventually fixed prices, essential industries, etc. All European countries went through the same experiences; many was of secondary importance.

The basic items required were supplies and labor, and we were relying upon a price mechanism, upon profits, to get our industry shifted and it was not working well. That brings up a question of whether we should not have conscription instead of relying upon profits. For our soldiers we made the appeal to them of the patriotic citizen, also to get people to go into factories, but in addition to that we paid high wages to the latter. That was the real bait; a man working at an ordinary pursuit got six dollars a day, and the man in the field the soldier's wage. If this is a war that requires just as powerful organization back of the lines as in the lines, if all the people are fighting this war, why not recognize the fact and have conscription not only in the army proper but conscript all labor for the essential work of the war industries? Then also the question arises - "Why not have conscription of factories and supplies?". We covered that by working out a priority machinery which had the same effect. The army had first claim on certain kinds of materials and if there was anything left in that line, the civilian population could have it.

Just a word about the tax and the loan problem. The truth of the matter was that we did not raise enough money to give the Treasury all the money they wanted. We therefore had to resort to loans and when we did so some were sold to individuals and some to banks, and individuals were even asked to borrow the money from the banks with which to buy bonds. All economists are agreed, first, that it is necessary in time of war, because of the volume of funds required, to resort to loans, but they are all also agreed, second, that these loans ought to come from individuals almost all together rather than from banks, and the reason for that you can seen When these loans come from individuals they cannot spend as much at the retail stores and the stores cannot therefore compete against the Government for the supply of raw materials through their manufacturers. To the extent that we, as individuals, went to the bank and borrowed the funds and then continued to spend at the retail stores, we were through those stores causing the ordering of goods and thereby keeping up competition for the Government.

The rise of prices in the war instituted what is commonly known as the vicious circle of affairs.

OPEN DISCUSSION.

QUESTION

Doctor, will you carry your picture a little further on that scheme of priority for military supplies to the extent that it puts the commercial activities of industry out of business as regards the flow of money, and how the Government will then carry on?

ANSWER

There you get into the sort of problem that it seemed to me you people will have to give major attention to. It is obvious that if you checked the flow through the channels entirely, you would wreck all commercial enterprises and among which are some which are really needed in connection with the military organization. The big problem you have to face is what types of industrial and commercial enterprises can be dispensed with in time of war without having adverse effects upon your military program itself. It centers down to the question "What types of organizations can have their supplies reduced materially if not altogether dispensed with?".

I do not have any knowledge of the types of industry desirable for your use, but we must not forget that they all fit into others in the general scheme. I tried taking a list once - there are some that are not necessary for war purposes and could be absolutely closed down, there are a great many others which are necessary up to a certain degree but where they are not necessary at their ordinary peace time capacity. To find out that involves a detailed study of supplies of various kinds, its descriptions and relations to the Army. That is a very large task, in itself a technical matter.

QUESTION

What are the principal characteristics of our National character and organization which makes preparation for war difficult or easy in the United States?

ANSWER

That is not very easy to answer quickly. I should say that the great advantages which we have at present, apart from the fact that we have resources, agriculture and industry, is a very strong banking system. We have large reserves that can stand nearly any shock. We were extremely fortunate in having a Federal Reserve System before we entered the World War. If that had not been the case, we would have had much more serious price difficulties than we had. I cannot emphasize that too strongly - the strength of our commercial banking machinery plus the fact that we have a large reserve of lending power. That is the most important, single feature in the whle economic mechanism. Next comes the abundant supplies of natural resources and large population.

QUESTION

Will the development of strong labor unions be likely to assist or hamper industry in war?

ANSWER

It would be likely to hamper industry. Looking at it purely from the effectiveness it is likely to be a handicap. There was no use in the last war of talking about conscription of labor; the policy was strongly against it and said they would not stand for conscription of labor and factories, and I think that it would be likely that a strong labor organization would work on such basic things as that with cross purposes to the Government in the time of war. The democratic character of our institution makes it harder than in a country organized like Germany before the war to conscript either labor or factories. I say that with some hesitancy, however, because under the stress of war we go a long way in the direction of obeying orders given, but I think there is a great difference between countries like Germany, present Russia and the United States and Great Britian. It is very difficult to measure that sort of thing.

QUESTION

To what extent is it advisable to rely on voluntary enlistment of industry and labor in war?

ANSWER

That was a matter to which I gave a great deal of attention during the war. I do not think there is any question from the standpoint of efficiency. A conscription of labor and industry for war purposes is the efficient way providing you can accomplish that sort of thing without having all sorts of social agitation. If the morale of the people would be all wrong, also that of the business man would be low, if their war supplies would be low, that would more than offset the advantages. However, no one can answer that offhand. I am inclined to believe that a future great war might see the institution of industrial and labor conscription.

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I believe there has been left no real bitterness over the Selective Drafting of people during the recent war. It has always seemed to me that the man who goes into a safe job ought to be conscripted more than the man who goes into a dangerous one.

In the matter of supplies, I believe that the lessons learned by American business men were such as to lead them to see that a measure of industrial conscription would not be at all bad. I hope to see developments along that line. Of course that power has to be used with wisdom.