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International Distribution of Economic Power
by
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Gentlemen of The Army Industrial College.

I was at New York last night pinch-hitting for my good friend
() at a meeting of the National Industrial Conference
Board. They had three speakers, and they were all economists. I was
saying to one of the men who sat at the table with me afterwards that
I didn't know why in the world anybody wanted to hear an economist after
all that had gone on in the last nine or ten years. He said he supposed
it was a good deal like the situation that his neighbor experienced a
couple of nights ago. He was coming home from his club and as he ap-
proached his house he saw a man on the lawn on his hands and knees who
seemed to be looking for something. His neighbor stopped and watched
the man a minute and said, "Did you lose something?"

"Yes, I lost my watch", the man replied.

"Can I help you look for it?"

"I wish you would. I don't seem to be making any headway myself." So they both got down and looked and pawed up the grass, but they didn't find the watch. The neighbor did make the discovery that the man had been drinking so he thought he had better take a hand at organizing the thing.

"Now we don't seem to be getting anywhere. Let's organize it, let's plan it. Suppose you tell me about, as near as you can where you dropped

this watch and we will start there, proceed, and expand our operations and sooner or later we are bound to find it "

The chap thought that was a good idea

"I dropped it across the street about a half a block down there "

"You what?"

"I dropped it across the street about half a block down "

"Man alive, why are you looking here for it?"

"This is the only place there is any light," he said

I have told that story every year for seven years now That is one of the advantages of coming here, you always have a new audience But it is a good story because it illustrates the difficulty of this matter Economics is an exceedingly difficult subject when you get into the more intricate phases and especially when you are talking about situations a long ways from home, in foreign countries that you don't know much about In its fundamentals it is simple If it weren't you couldn't ever approach the thing and do anything with the subject at all. It has to do with the simple problem of the scarcity of goods that we need to accomplish whatever ends we set up for ourselves, first and foremost, of course, the goods we need to maintain a standard of living for ourselves and our families, and, second, the goods the people need in a society that has gradations and degrees, and every successful society of any size has, if you are pleased to call it that, oligarchy Or it might rise to the extent that some people are ranked a good deal above others in importance, or certainly in the rank that they hold and the remuneration that they get. I needn't impress that upon you

younger men in the Army No society has ever gotten along without that. That probably is due to some deep-seated reason in human nature

It is the same when you are dealing with the very important problems in the modern world of national defense In all of those it is perfectly clear that you must have a large supply of the goods that you need to prosecute the ends that you are after, that you have set for yourselves or that have been set for you

I oftentimes say when I am talking to popular audiences that it is an old, old story There is nothing new about economics, although you hear more about it in recent years It is as old as the Lord's Prayer Remember how it goes: "Our Father, Who art in heaven, Hallowed be Thy name Thy kingdom come, Thy will be done on earth as it is in heaven " You haven't asked for a thing yet You certainly haven't talked about anything very spiritual Then comes the first supplication. It is an economic one, not spiritual "Give us this day our daily bread "

That is economics That is the heart and soul of it, that is the foundation of it. All humanity has been more concerned over the scarcity of food, the great part of the world has been more concerned over that problem than over any other problem You have got to eat to keep alive Food is inclined to be scarce A few fortunate countries like ours have removed the scarcity, but that is the fundamental problem of economics.

When you are comparing the international distribution of economic power, which is a very large subject, certainly for one hour, and a

subject that anyone might well write some books about, and people do, you have got to begin with that question. How well are these various countries supplied with the goods that they need to maintain their standards of living and to accomplish the other ends that people of the nations set up for themselves? That becomes a question of their production and flow of goods. Things that we call the national income represent all the goods and all the services that are created within the nation in a year. That's the national income, that's all it is. And when we compare the relative economic power of these various nations we have got to compare the value of their production of those things that they want without our going into the question of whether those are the things they ought to have, they set up their own ends and aims. How efficient are they? The answer to that question is the distribution of economic power. How does one go at that? As you men know, all modern knowledge, all scientific knowledge, the ascertainment of fact, is a question of technique for the most part. The one thing that we economists have got is that we have a few pieces of technique for going at these economic problems, and we have got one for going at this one.

I have been practicing up on The Army Industrial College for the last seven or eight years so I have got it fairly well learned and simplified. Suppose you take right now Germany, in which every one is interested, or France, or Japan, or Italy, or Russia. Those are the countries that are most to the fore now, in the public mind

You have got to ascertain their relative economic power as compared to the United States. How do you go about it? How can you get hold of it at all? You can get books and look at these, and finances, the national income, but they are all dollars, don't you know. Price levels are different in the different countries, and every nation summarizes the value of the total production by the prices at which you can sell the different units, and they don't give you a very realistic comparison. You always feel that the thing is tricky. It is, too. To know the difficulty and the danger of dealing with the money phase is illustrated by a story I read back in 1915 when Germany, you will remember, floated a great war loan. She had intended, of course, as every army does, to clean the enemy up in four months. That is the way theoretically, unless you can get out of it without fighting at all and get the best of the enemy. Germany didn't succeed in that. She started war in 1914, and by the summer she hadn't won. In the fall of 1915 she floated an immense war loan, and people were rather convinced, especially the bankers and such people, that Germany could never float some such sum as 5,000,000,000 marks. It was subscribed 50% more than the original or twice over, and all of that with marvelous success.

Two bankers, according to an editorial writer in the old New York Sun, were riding into town from the country. One of them said he didn't see how you could ever defeat a nation like that, endless financial economic power. The other replied that after fifteen months of war you could float a loan like that as easily as that as there was no end to that. The other fellow said he wasn't so sure of that. It

reminded him of the two chaps who were taking a trip to California. They heard that whiskey was selling for \$10.00 a quart in San Francisco, and you could buy it in New York for \$1.00 a quart. So they bought twelve quarts apiece and started off for California, it being perfectly clear that that operation would pay for the whole expense of the trip out. All went well until they got to Poughkeepsie, and one took out a bottle and started to uncork it. The friend said, "Here, what are you doing?"

"It is all right, I have developed a thirst, but I have an idea. At \$10.00 a quart this is fifty cents a drink, and here is your fifty cents."

That was fair. There was no complaint about that. The other fellow got to thinking about it, and Newburg, he took a drink and he paid the first man on the basis of fifty cents, and so they went across the continent taking alternate drinks, and each had paid the other \$120.00 for the whiskey he had had. But all the money they had left was fifty cents apiece, and the whiskey was gone. That is an old story, not in that version, but you have heard people tell it to you this way, about two bums who started for the races and they took beer with them to sell. They paid each other six pence apiece for the drinks, and when they got to the races they didn't have any beer and all each had was six pence apiece.

You can write a book, of course, and say less about the difficulties of money and wealth. You don't get very far with this problem of comparing the international distribution, you don't get far enough. What I do about it - I give it to you as a piece of technique - is to approach

it from the goods end, not that I don't know about money and credit
 Credit is a very slippery problem It is so very easy to lose yourself
 in the intricacies of financial technique I didn't invent that phrase
 You won't find it in any books yet - I haven't written a book since I
 learned that. One of the difficulties of dealing with problems in
 credit is that you lose yourself so easily in your thinking in the
 intricacies of financial technique That is why you get all kinds of
 books written by engineers on money I am amazed at it - books written
 by business men, etc Those are long books and they are pretty in-
 volved, but it will help you to understand the book and to evaluate it,
 too, if you remember that for the most part you have before you simply
 the experiences and the diary of a man who has lost himself in the
 intricacies of financial technique That is very easy to do Of course
 it is the same in military affairs, every layman can tell you how to win
 a war, especially the prime ministers at home - they are a highhat crowd
 If they went out they would lose themselves in the intricacies of
 military technique But I am quite onto that field and yet knowing the
 field of money and credit as well as I do and knowing the danger of
 losing oneself, I go at this and deal with fundamental economic problems

When you are comparing power - the international distribution of
 economic power - the first thing you do is ask about each one of the
 two countries you are comparing and see what part of the labor power
 of each country is absorbed in providing itself with food, because that,
 after all, is the fundamental economic want and it is certainly very,
 very important from the angle of national defense, where you have got to

defend yourself by the use of personnel and where that personnel has got to be fed and abundantly fed. You have heard "the army marches on its stomach", and that is the whole story in a few words. You start there with the nations, whether your problem is defense or what it is. Let's take two countries that are self-sufficient, that are somewhat alike, that feed themselves, some don't, Great Britain doesn't. She buys most of her food and gets it in the places in the world that are cheapest. But you take France, which is largely self-supplied, and the United States, let's compare those for a moment. We will take up Germany, Italy, and Russia afterwards.

In the United States we manage to feed ourselves by the labor of that 21% of the people which live on farms. Of the gainfully occupied people of this country only 21% are on farms, and that 21% produces enough food for ourselves, and enough food for export to pay for the food imports such as tea and coffee and sugar and similar tropical products. We raise cotton enough for all our uses, including industrial uses of cotton which are very great, especially since the motorization of the country, and cotton enough, in addition to that, for 150,000,000 people out of the United States which we export. That pays for the imports of wool, silk and most of the rubber that we buy. We do that with 21%, one-fifth of the people on the farm, one family in five is on the land. Twenty families feed a hundred families.

Take France. They require about 40% of their people on the land to do that same thing. They haven't quite 40% on the land now, but the French have to export a good bit. They export most of their silk and

some food but usually they have a good many tourists hanging around to eat up a lot of the food. In France it takes about 40 families out of a hundred to accomplish what 20 families do in the United States.

Germany does better than France. Germany hasn't 40%, I think not more than 30% at the outside, a little less than that as a rule. I will say Germany has somewhere around 29% on the land, but they don't manage to feed Germany, they have to import more food and more textile fibers than France does. It takes the product of ^{about seven} / percent of the population for export to get the fundamental necessities of food and raw materials, so that you have to add 7 on to 29, which makes 36% for Germany. In Italy you have only about 50% on the land, but they have to export products of a full 10% of the population in addition, so they take 60%. And in Russia they have 80% on the land.

Now in the United States 21 people feed a hundred people, in France 40 people feed a hundred, in Germany 36 feed a hundred, and in Russia 80 feed a hundred, and in Italy 60. The end is all the same, assuming that they all eat the same amount of food and use the same amount of textile fibers. These figures are food production and textile fibers. That is so important because, don't you see, it leaves you some various amounts of labor over for other things - lumber doesn't take many people, and you have got to dig things out of the ground, but that doesn't take many people for transporting raw materials to factories, for fabricating it into finished products, for producing services, electricity, etc. For all of that you have 79 people out of every hundred, 60 in France, 64 in Germany, 40 in Italy and 20 in Russia. These are left over for

other things, that is, for doing some lumbering, some mining, oil production, taking all this raw material and transporting it to places where it is manufactured, where it is fabricated into products for use, transporting back from the manufacturing point to the point of consumption. For all of that you have got 79 people available, but we don't use them all. When we get all of the above done, and producing of all raw material and food, you have only 60% of your people employed. The others haven't any jobs at all. In Italy it takes that many just to do that first job, just to get the raw material out.

Now it is perfectly obvious that if we are any good in managing that other seventy-nine and if they have any machinery that is really efficient, we can produce a whole lot of goods in this country compared with any of those other countries. Now I have told you more about how to go about this question and you know more of the relative economic power of those various nations -- nobody can ever add as much to your knowledge, if he comes here and talks ten days or ten weeks, because we are dealing with the fundamentals of it. You can learn a lot in addition to that, and I have some more observations to make. But I think that is the method of approach that is utterly unbeatable, and one of the ways in which economics needs to be approached. The confusion we have on these economic questions is the fact that we lack some such fundamental approach of this. Some people say you can't teach economics in the grades or high schools, as they are not mature enough. There are some phases you can't teach them, take bank credit and its effect, and especially the monetary standard and its effect on

prices That is an intricate question The nature of depreciation and evaluation is a problem on which I have spent a good deal of time, and I make my living largely in experting in such fields You are in an exceedingly difficult and subtle field, but this kind of thing (indicating figures on blackboard) you don't have to have very much maturity to understand, children can understand it, the blacksmith, the common man, the bootblack, they can all understand this.

I gave a talk like this in twenty minutes at one of the National Industrial Conference Board meetings Dr Virgil Jordan is a very lugubrious man, and he always wears a white carnation in his buttonhole He lugubriously talked about the decay of social power and enterprise in the United States, France and England and shifted to Germany and Russia and Italy and Japan and South America I got up and I said, "Give me a red carnation " One of the real compliments that I do get is when people say "Well, I liked your lecture " Of course they say that anyhow, but the reason is that they can understand it. You can understand this one, you can understand it because it has to do with the simple fundamental facts in human life Of course the great mass of the production of every nation is consumed by the great mass of people in maintaining their standards of living The rest of it that isn't consumed you use to add to the wealth of the nation to produce durable goods, such as houses, roads, railroads, institutions, etc That in any nation will normally be about 16% to 20%

When I first got into the Government I made an estimate when they were trying to float the loans in 1918 It got to McAdoo, who was then Secretary of the Treasury, and so the final result was that I was brought

into the Treasury, and I planned the war taxes in 1918 myself I had a lot of trouble balancing the budget My problem was simple' They brought me in and said the President and the Secretary of the Treasury and someone in the Army, I forget who, had decided they were going to have another year's fighting Secretary McAdoo felt we would probably spend about twenty-five billion dollars that year and that one-third of it should be raised by taxes That was my problem, to raise eight billion dollars. We had to expect some squawking from the public I sat down from the 8th of April to the 1st of September I had a desk and a half a stenographer, that was all. We made it, the people were patriotic -- the proper balancing of the budget I balanced the budget It was said that people won't like it. To make a bunch of taxes that are popular is as impossible as it is to be in love and act wisely But it isn't a question of whether your taxes are popular or not The question is whether you raise the money. That is the question If you ever do have to balance the budget, if you get finally to the point where, let us say, we have a military dictatorship in this country - and we might have to have that --in the last analysis there is no way of keeping order except through the Army A lot of people don't know that in America I hope they will never have to discover it

Remember Lugio in Argentina? It happened in 1930 He had that thing sewed up tight, he was a dictator I believe you men must be specialists in South American finance They couldn't pay out any money unless the President signed a voucher So the President moved out of the city, took all the vouchers there, piled them up, and signed none

of them That fixed them, by jove. That was the last of the countries down there to have a revolution They started in the spring with the Dominican Republic and this man Lugio, who is the president now, was the general of the Dominican army and, strangely enough, after he had restored order and all, demanded that they take the president That is the way it is done They had a revolution, and I think it was the students of the military academy who went, ragtag and bobtail, after the president Well, what can the army do when the president is attacked? So the army attacked the mob and got hold of the president, and to protect him they did what? Do you remember it? You want to remember it You may have to get up your technique sometime, -- Norfolk is near, you know They put him on a battleship where no mob could get at him and they convoyed the battleship with other battleships He went out to sea -- and he never did get back! It's as simple as that, you know It's all in the technique

To come back to my subject now, obviously the people in this country can do a lot of digging out, a lot of manufacturing We have done all of this, providing the people with goods, really making the goods and moving them to the place where they are going to be used, and having people to sell them in industry, trade. People complain that the population in merchandising has grown so much more rapidly than the population devoted to manufacturing That is not surprising There is a simple reason for it A person in manufacturing, common labor, works with 4 horsepower in this country In other countries he works three or two or one for a laborer When you can do that all you need is to use a machine to accomplish it That is where invention comes in, if you have got plenty

of energy. Then if you can find a machine for converting and transmitting energy you can go a long ways in manufacturing, but in the matter of merchandising it is different. Go down shopping with your wife or daughters, and see what happens. You go down to buy a suit of clothes that the tailor has made -- it's an important decision, it takes time and you don't want to be hurried, you know. As you get more goods to merchandise and as you multiply the number of goods we have in this country that is manufactured, naturally you have to have more people to sell. In the other services we haven't made any improvement, perhaps a little, but not much. In population the cities have grown so much that any improvement you have made has been pretty much absorbed by the increasing distances you have to go. Over and above that, you have got a great mass of people who are not engaged in the manufacture of goods at all and who do practically nothing with respect to goods, people who manufacture services, of course, like electricity and telephone. There are teachers and preachers, singers and doctors, economists and such fellows who are engaged at these other things. They are the people whom we put on old age pensions at sixty to get rid of them, and these old professors' hearts are broken, they love teaching. One of the reasons for not getting into teaching is that you are retired at the age when you are very active. Teaching is just a kin to acting, not a kin to research. It doesn't mean that some teachers aren't real researchers, they are. But you have also the youth of the country. We have got to have plenty of time to get the boys and girls educated.

All of which means, however, that when you are thrown into war you have got an enormous amount of personnel that you can take out of these so-called useless activities in the sense that they are contributing nothing to the immediate problem in hand and utilize them in other lines I suppose you people know just how big an army we could maintain in the field for years at a time Ten million would be a small number for this country if you went about it seriously Certainly in national defense you would have no trouble in maintaining and feeding steadily right along, as long as you could keep the enemy pretty well away, ten million people, they could certainly be mustered because we have them You have to have very few people in the manufacturing of passenger automobiles We got a lesson in this The number of automobiles in use and being driven at the lowest point of the depression was only 10% less than in 1929, and they drove them just about as far and as fast as they did at the very boom. Of course the automobile manufacturing concerns had drops from five and a half million to one and a half million, but you didn't need to manufacture new automobiles

Don't ever try to put on war taxes or balance the budget unless you have got the courage to do two things first, put on a sales tax right down the line, don't exempt anything except food and all that There is no time nor place for that in an emergency, and, second, if you are in a bad situation, as Germany was in 1924 and so on, you have got to put a tax on wages and salaries. Those will raise the money. You can't get your income without paying your taxes on wages and you can't spend it without paying a tax

I have told you more about the making of taxes -- I have told you all the trade secrets. But that is all there is to it. You can see it is a matter of common sense. You can levy taxes in many ways, but you can't collect them. You have got to put it so that they get collected, and, as I say, when a man gets his income you have got to collect it as a condition to his getting paid and as a condition to his spending it. That is what you do.

I want to say one more thing about the difference in economic power between these nations. This isn't all of it. In the United States you have got 79 people as against 20 in Russia. It is perfectly obvious that the American farmer has got the others just beaten off the face of the earth for efficiency measured by output. Tell me why he is more efficient? You can ask me that question afterwards in the discussion. It is clear that it takes twenty-one families out of one hundred to feed American families, and in France it takes forty to feed a hundred families. The American farmer produces twice as much as the French farmer because it takes twice as much to feed a hundred families, and we are three times as efficient as the Italian farmer, due partly of course to the greater amount of soil he has to work and the fact that, having more soil, he can keep horses and supplement his own labor with the energy of the horses. My grandfather owned twelve acres on the Rhine in Germany. Over here he bought himself eighty acres, and they were worth less than the twelve acres, but over there he could keep a horse provided he worked for the neighbors part of the time. Over here he could, on eighty acres, raise enough food for himself, for all his horses, and have food left over to sell. That is why our farmers are more efficient.

In Russia it takes eighty farmers to feed a hundred people, while with us it takes twenty-one. She never can raise the standard of living materially until this is down to at least forty families. It has got to be as efficient as Germany and France in agriculture, in food production. Did you ever stop to think what it means, what kind of a job that is? It is quite a job to teach them, to begin with. The people have to be taught to do work by scientific methods, with machinery, etc. You can do a good deal of that with the methods of communication, with radio. But it is a slow business, I should say it would take forty to fifty years, if you had no revolutions and no wars externally. In about forty or fifty years she might get to the point where she could feed herself with 40% of the population. Suppose she has 175,000,000 people. She now has 80% of that on the land, which is 140,000,000 people. If she had only 40% of the people on the land that would be 70,000,000. What can be done about it? You have got to have seventy towns of a million each, or twenty towns of a million each and forty of something else, no so on down. You have got to build buildings for all of those people, you have got to put stores, factories, etc., in, you have got an enormous problem of investment, don't you see?

Back in 1931 people always used to ask after the lecture, "What do you think of Russia and what if Russia succeeds with the five year plan?" My answer was that that of course would greatly stimulate industry in America. They all thought that if Russia got this increased territory according to the five year plan then she would just give her goods away and embarrass us. The great mass of the production of every nation

is bloated up in the maintenance of her standard of living and in the increase of her standard of living, and if Russia has good luck for forty or fifty years and gets this down, then they can live as well as Germany and France now do and half as well as we do. Of course we won't still be where we are now, but it throws the whole thing into some sort of prospective.

So I say the American farmer is four times as efficient as the Russian. Something like that also applies to these people insofar as they are engaged, not in merchandising or in lecturing or in acting or what not, preaching and teaching, but insofar as they work in factories, work with machinery and power, there is just about the same difference in efficiency. If you have been reading this Russian _____ efficiency stuff you will find that it takes about four times as many Russians in the factory to do a certain piece of work as it does in America. You find it takes about four times as many people in building, four times as many man hours to erect a house as in the United States. It runs in perfectly uncanny fashion, and everybody who has ever produced in Germany and France knows that it takes from two to two and a half to make the same thing. During the war and before you had this talk of German efficiency. I have lived in Germany a good bit in my day, I speak it and read it. You don't have to ask an American about their efficiency. Read Pitcairn, or read Julius Hear t's book, he wasn't an industrialist, he was a minister in the Socialist cabinet and was himself a socialist.

I delivered this lecture ten years ago (by the way, this is an anniversary) in the old Foreign Policy Association Arthur Salter as on the program and I was on it, and an economist from the Soviet was there. I tried this out, and since the economist from the Soviet was on the program they had the Russian News Bureau taking down the stuff and they cabled this speech of mine back. It was a very short speech, as I wanted Arthur Salter to have more time I gave half my time to him. I didn't read Russian, but my friends reported that there were numerous controversies over this accusation of mine that it took four times as many Russians as it did Americans. That is perfectly obvious on agriculture. They got into a row between the young communists and the rest of them. The young communists said I was right only it was a disgrace to Russia that a capitalist had to call this to Russia's attention.

There you are, and there's my story. Now some of you will say at once, "Yes, but you are running up America and running down Russia and Italy." I am not, I am saying this purely factual, purely scientifically. Even taking up that question and considering it, that isn't the explanation, that we have greater natural resources. Sure we do, but we had just as great natural resources in 1880. It took 50% of the American people, that is, fifty were on farms. They exported little more farm products than we do now, but we consumed less, certainly less textiles were used in the country, and we had the same natural resources. But we have made progress between here and there. We have

done things to industry, we have developed methods in agriculture. The percentage of our people on farms in 1900 was 36 and if we had today the same number of people on the farm relative to the total population we would have on the farms a little over 50,000,000. But we don't, we have about 11,000,000. We have made great progress in agriculture alone.

The Agricultural Department of the United States is a research organization that challenges comparison in the whole world. We do more agricultural research than the whole world, and we give those foreign countries the result of our research for their mere asking. That's why we have as many friends as we do. But the facilities the Department has for getting information out among the people to the county agents and all of that are marvelous.

Of course, to see such a nation as ours, after they tried to "Give us this day our daily bread", praying for an abundance of food, and finally the Lord answers the prayer and this country has an abundance of food and the prayer is answered, then Congress goes to work and appropriates \$500,000,000 to see what it can do to stop it. That's not economics. Then we have an awfully ambitious Secretary of Agriculture, but without saying a word of criticism -- I am all for him as a corn breeder. He can make four ears of corn grow where one grew before. Farmers may vote for him or not, I don't know, but anyhow this is a great country to be in. You know, you have to appropriate money out of people's pockets in order to get money to bribe producers so they will produce less so the consumer will

permanently be required to pay more. We have enormous capacity in this country for doing just what we want to do. It is nobody's business if we want to do it that way. It's all right. That's the only way that you can justify a lot of things you have done in life. But, as I say, here you have much the same difference in efficiency in the field of production.

There is a whole field out beyond production, in the rendering of services where you can't, of course, apply power and therefore there isn't any great efficiency. I suppose the German or English or French believe their system just as efficient. They are, too, but there we are.

Now, as I say, we have made enormous progress over the last fifty or sixty years in this whole matter. Then we stood somewhere between France and Italy, and a hundred years ago we stood where Italy stands. And we have come from there to here in economic progress. Now we stand and have evidence of continuing to stand far in the forefront of all of these other nations.

Last night I was sitting at the table with a munitions manufacturer after the speeches at this Industrial meeting. He asked me a question. He said, "Now then, suppose Germany has her 64 people and 60 are manufacturing munitions, and we have ours manufacturing livestock and cosmetics, then what about the relative economic power?" That was a clever question. He was grouchy because the Government was riding the munitions people, and he had reason to be troubled. But that can easily be turned around very quickly. You let the people approach anything

like national danger and we have got the ability to change over, and to meet the situation. There is no doubt about it. Whenever you get to thinking of this question and hear people talking who are worked into hysteria over this danger because of the rising economic power of these other nations, don't let it worry you. So far, there are none of them that are within gunshot of us or have any chance of getting within gunshot on the economic side for a long time to come.

"International Distribution of Economic Power"

Discussion.

Doctor David Friday

September 23, 1938

Q - Dr Friday, I believe you predicted a number of years ago in 1936 that we would have a depression in 1937, I think I think it might be very interesting to all of us to know some of the factors on which you made that prediction.

A - I think I probably said 1938 I know I didn't have it quite right I can tell you that I made that pretty simply without going into it much deeper than that, after every one of these major depressions such as that last one (we hadn't had one for thirty-two years before that - since the 90's when I had, my worst one) we have a minor depression. We had minor ones in 1914, 1921, and 1924 but after every one of these you can be perfectly sure that when revival comes - unless we have had very serious political dissension - that you get to a point where the revival will run right straight to the amazing point where industrial production duplicates the peak which you reached in the previous war That means that in 1929 you had a peak at 125 (that is the Federal Reserve Board index of industrial production, not agriculture, but mining and manufacturing) - that means not 125 to the average products for 1923 to 1929, but bushels and gallons, etc And it would run up higher from about 97 in 1920 to 125 in 1929. That was the peak Then this ran clear off until it stood at just half that - 59 in 1932 in the summer through July, and again in 1933 in March In the meantime it fell back about a dozen points

from that We had a quick rise in 1933 just like this up to a hundred and then we fell here (pointing to chart) and got down, and we are going back up. That normally should have been there or a little above In 1920 we drooped and went back to a higher point I was predicting that this would go on for some time in 1937 and 1938 But we never made that last rise Now the reason I thought it was going up there was simply that that is the natural thing for it to do. Why is it natural? You come again to the very fundamental proposition that there is no reason why it shouldn't have gone up there due to the falling population You have all the machinery and all the land and having all there was, it is the natural thing for it to run up there It takes time to get yourself readjusted and you come to the question of why there is any such decline as this The question is confusing, it confused me just as much in the 90's In the spring of '94 I left prep school to run my mother's farm I came home and I was just as confused as the rest of these people are today. I couldn't see any way out at all I read Henry Jordan's book - I could see that the rich people had made their money out of owning land or oil wells, but the manufacturers were getting rich over all the field of economic wisdom I finally became a socialist in 1914 That is the way of it, but you presently got to be 28 years old and you do have to be convinced We don't know very much yet about what causes these major depression business cycle manifestations Those are the sort of things we had in 1921, 1922 and 1924 Then we have a depression and the strange creations themselves automatically go on These major

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depressions are produced by these economic changes we go through, changes in our monetary system. Probably between 1894 and 1897 we had five billion dollars of bank credit outstanding. In 1914 we had 181,500,000,000. In the last war not a word was said about inflation. During the war it doubled and went to 38, dropped to 33, and ran up to 55 in 1929, dropped off to 38 in 1933. You can't stand that much shrinkage in your bank credit. We are back up to about 54 again now. This way people have made up their minds that a lot of things that were worth money were buildings and lots and businesses. This is the situation where new factors enter and create new values, and then when you get into your revival, you run up to this amazing thing - the situation here (chart). Those are the new forces. Take, for example, rayon. I happen to know something about that. Rayon in this country was used to the extent of 1,200,000 pounds in 1920. By 1925, it was 50,000,000 pounds. When do you think rayon was first patented? In 1885 - 35 years before 1920. In 1925 we went to 50,000,000 pounds. In 1920 125,000,000 pounds of rayon products were used right on through the depression, until in 1936 it was 300,000,000 pounds. That is the kind of thing that runs up industry. There was Japan - they didn't like it - they were trying to keep the price of silk at \$0 a pound and it was \$1.06. That is a new foreign situation, the constructive factors always over-balance the destructive ones. What is land worth on K and L streets? People bought years ago as an investment, when they asked me whether they should sell it, I said "Can you sell it - for cash, not milk tickets, I mean?" Adding, "If you can, sell it because the automobile transportation is just jumping clear over that

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thing That is the kind of thing that happened Look at the situation on Euclid Avenue in Cleveland They had the automobile industry pulling the values out that way The great aggregation of people left and the place between was a place to drop through They were mortgaged to death In the National Bureau of Economic Research - of which I happen to be president this year - you have that Well, the thing that I thought you were going to ask me was why we had this recession afterwards When you get up here (chart) about equal to the peak then you have a short, sharp recession Depression causes a recession. The democrats are right, absolutely, I have always said whenever I have had to talk about that subject About the first thing the economists ask is why this recession came in 1938 rather than in 1939 The reason it didn't go up through there (chart) is something found in certain things that happen pretty clearly The fact that labor began to make demands and that the cost of labor went up raised the cost way up above any advance in prices, such as occurred earlier Furthermore, take the automobile industry. In 1936 and 1937 wages went up twenty per cent and the efficiency went down, and you have got among other things people cavorting around and you don't get the efficiency that is necessary First and foremost the great rise in building costs in materials much more than in labor stopped incipient building revivals We went up a little but we're not a third of the way yet to any real building by now By July it was clear that that had fizzled and that was one of the things that brought the recession on There was the criticism in high places of the rising price level to a point where

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it was 88 in 1926. It was a throw-back to the 1920 level. We gave warnings against them. They were too high. That was another factor. Out of undistributed profits came the rise. Take Henry Ford. I was in the Ford shop with the result that I found out that this was exactly what Ford did - made a profit of \$167 a car on the average. Mr. Cameron - William J. Cameron - in a Sunday evening radio address in 1936 on the thirty-third anniversary of the Ford Company which was organized in 1903 said they had made \$20 a car. But they went on making \$23 a car when they were getting their start. For the years from 1903 to 1919 they averaged \$25 a car. The building grew up out of its profits, they never borrowed a dollar, that is what new industries do. They become so attractive to the public that they can make profits. They build up, you see, the industry out of these profits. The undistributed profits were the reason for things of that kind. Now I think this revival is a real one. That was my subject last night. I think this revival will go down to 76 in May and June, and that decline from 108 to 76 is the most rapid in history. There was bound to be a decline and we were so close to the last depression for thirty-two years that we were perfectly hysterical. You have heard, perhaps, that in March I said this is the regular pattern of a short, sharp recession. People felt that was not so, that it was stupid not to see that this was a depression and would go on for a couple of years, but it is certainly going where many of its citizens are going to go when they die. In July it wasn't 76, it was 83, and for August it will be about 86 or 87, and before the end of the year you will see that products at 95 will

probably be a hundred in December I expect to see this thing go up through and above 125, that is the regular pattern That is the answer to your first question I think that the things that brought this about, brought it about a year earlier The people who thought they couldn't be brought about were labor leaders If they had any sense they would have been preparing for the day when it was sure to come again And I hope I am right in what I am predicting for the future

Q - The very interesting figures there on the board raise the question in my mind - where does Great Britain stand in this picture?

A - It is like this Great Britain has only about 8 or 9 per cent of the people on the land and the great mass of her food she gets by exporting her manufactured products and bringing in imports They learned that a hundred or more years ago when she was the leader she learned how to apply the steam in the coal to the problem of manufacturing, particularly in textiles, and for the earlier part of the last century she kept the machines - the manufacture of them - a secret Robert Fulton after he first got the idea had to wait before he could get Great Britain to export a steam engine They found then that it was a good deal easier to send out goods which are manufactured by the use of energy and bring in your food and raw materials With control of the sea in those days, she could do it I don't know what may be the outcome Great Britain probably won't use more than 25 to 30 per cent of her labor power in feeding herself She can purchase wherever it is the cheapest It's down here not quite as good as Italy, not as

bad as Russia - somewhere around there (chart)

Q - On your percentage, if the 21 per cent were our modern methods before they increase that and increase the 79, what is going to happen? What is the out on the 79?

A - We are going to do just what we did in the last 20 years Let me illustrate. - Were you asking that question because we were voicing all the things on which we were about to be surprised? I don't look to be 62 years old, but I will be next week, so I have lived longer than most of you have, and I can remember some of these things you don't remember I remember my grandfather on my mother's side telling us what was wrong with this country in '96 He was a great talker He said the trouble was that on his farm he used to have to have four men cutting a ten-acre field of wheat and then you had to have four men to bind these up into sheaves So you had eight men a day or a day and a half for a ten-acre field of wheat. Nowadays you put on three horses and in a day you cut that wheat and it is all tied That is, one team of horses does in a day what eight or ten men did before. That is the trouble, that is why all these people are unemployed This is nothing new In 1900, for example, we have the gainfully occupied divided this way (chart) on farms, in 1930 10,400,000 The population of the country was 76,000,000 In 1930 it was 122,000,000. That is 46,000,000 - the difference between those - that is as many as in the united kingdoms of Britain and Ireland That was 35 per cent gainfully occupied I suppose a million of those are making farm machinery and binder twine and maybe tractors and gasoline for use in the tractors and some other things. They are making things that require less work on the farm

At that time there was no automobile industry The six million people today engaged in working on the raw material used in building new cars, tires, and so on form a new industry In making parts the finished automobile is thought of in the merchandising, advertising, and selling of them In producing oil and gasoline for use in them, building roads and maintaining them, building garages and filling stations, six million people are used These people are now doing that and furnishing us with all of these automobile services - that is the dividends of progress It consists, however, in parts First the work couldn't have been done if we hadn't released people from the old industries

The improvement in clothes isn't so bad because people wear more clothes All they need is someone to change the style What we do is to fill the closet with suits, then when depression comes we wear out the old clothes But no so with women, they have to keep up with the styles There is an industry where you could have a great deal of expense Everybody wants houses, improved houses The new improved kitchens make the old ones obsolete You have got the labor unions primarily and the building material But now you have got not only to improve the technique of these six million people but you have got to have somebody there to try his mind to develop new products, more attractive products, that is what these fellows in the automobile industry try, all the way from Charles Duryea and Ransom Olds and Henry Ford and Jordan and Packard Then there are these young fellows who help the automobile manufacturers My first car was a Haines Light Six - why "light" I do not know. Those men simply made a new product and the result is that today we have more people working no harder We have not only

all the people, we have got the whole industry and all the roads and all the rest Bankers and others were perfectly sure this was plumb going to ruin the country Nor did anybody foresee that the automobile would be like this That is the answer, that is the problem of complementing economic progress in two parts, improving the logical industry and developing these new products A decline of industry will be illustrated by a decline in the birth rate You want security and comfort, you probably won't have emphasized so much economic progress but as long as you do and as long as you want better standards of living for all of the people, you are bound to have this problem of complementing it You can't have progress without change. When you have change you upset things There is a book on the subject, it was written two or three years ago I suppose if anybody ever read the book they would try to make me its critic The book was written by Allen G B Fisher, called "Clash Between Progress and Security" It is a good book because it never comes back when you loan it to people That is one of the points that needs to be taught to the American people today Now you don't get any unemployment, isn't it a complete truth? So far in our experience we have always overcome the unemployment element You can't be sure these new products are always going to succeed We may be more interested in shorter hours but while we have done all this, we have shorter hours also The automobile industry is the perfect example It is such an obvious thing that everybody knows it They have reduced the price, improved the quality Take the Ford situation, his car sold in 1906 for \$950, the next year \$850, then \$780 and \$600 by 1913, at which after that date we find it selling for \$550 From \$950

to \$550 in seven years is a lesson in what to do with stimulating demands. It was a howling success. His profit was 350 per cent of the sales price in 1909 and he made \$3,000,000, in 1919 his profit was 29 per cent of the sales price. He finally got that down to \$250. The economic progress has been made. The used cars come in too, if you want just transportation, which is what a lot of us want, we could just buy one of these, if we didn't care for style. A good bit can be saved by buying a used car. All this foot-work is necessary to keep up with the progress and keep going. That is what I said before, that is the answer to your question. There is some luck about it as to whether you're going to be able to develop the new products and if the public wants the new products.

Q - Isn't there a tendency for unemployment to vary directly with your figures in the right hand column?

A - No, there isn't. I remember very well the period in the 90's. In those days our problem was this. I was born and raised across from Chicago. If worse comes to worst and you can't get enough money and you're down and out, just apply at the Friday place and there will be something to eat and a place to sleep in the barn. That is where I was born and raised. In 1906 and 1907 there were usually about five to twenty men on the night boat from Benton Harbor. They wanted to work. We had just thousands and thousands of these hoboes who had camps and stayed there. It was a problem for five or six years after that. But pretty completely all of that unemployment has been taken care of. During the war you solved all of your labor problems pretty much. In the 1920's there was a perfectly miraculous activity period for the

populace, not, of course, all - there are always some memployables
 You could cut out five per cent of the work and do it with one per cent
 out it isn't a good thing - they have too much time to think and hatch
 up political deviltry and such A lot of people are not very productive
 The facts that certain organizations emit I consider to be just so much
 rumbles out of a vacuum I have got a story that I always use Andy
 Gumo was standing at the window and looking out Evidently a new
 family had moved in "There goes that woman next door She certainly
 knows how to wear her clothes It isn't only that she's so good looking
 and everything " Min stood this for a little while and then told Andy
 what was what and that if she spent half what the other woman did and
 if she had two maids and a butler she could look like that too and by
 that time she choked up and said "And anyhow, beauty is only skin deep "
 Andy turned back to the window and said, "That's deep enough for me
 I'm no cannibal "

Colonel Miles: I want to express the gratitude of the
 faculty for your fine talk You don't often get a chance to get down
 to bed rock the way Dr Friday does I am sure we will all eat a better
 lunch and sleep better tonight by having heard him Thank you, Dr.
 Friday.