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ECONOMIES OF EUROPE PRIOR TO AND DURING WORLD WAR II

18 March 1953

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COLONEL WATERMAN: This morning we have the first of a series of two lectures designed to give you a general understanding of what the economies of western Europe are like. It is necessary, before you can understand what goes on today in the European economies, to get some background of the past economic history of Europe as a context into which you can place what you will find out about current events. We have asked our speaker this morning, Dr. Richard Ruggles, of Yale, to talk to us on the subject of the European economies prior to and during World War II. This will establish a setting, and we will have a further lecture on current trends tomorrow.

Dr. Ruggles is particularly well prepared by experience to talk about this subject. He has had a good deal of close contact with Europe in the Office of Strategic Services, in the Strategic Bombing Survey, and then with the Economic Cooperation Administration (ECA) after the war. This is his first appearance at the Industrial College and we are very happy to welcome him.

DR. RUGGLES: The title of this discussion is "Economies of Europe Prior to and During World War II." That is a rather broad subject and of necessity requires some sort of summary treatment, in order to give perspective to the major economic developments in Europe.

In view of the general interests of this audience, I have felt that it might be useful to discuss four things: first, the general economic recovery of the European countries from World War I; second, the French and German economic recovery from the great depression of the thirties; third, the prewar armament and World War II effort of Germany; and, finally, the initial post-World War II European economic recovery.

I take up these points because all of them have considerable implications for the innate flexibility of economic systems and for economic war potential. They show the potentialities of economic systems in periods of stress and their operation in changing world conditions.

World War I did considerable destructive damage when viewed by the standards of the past. When viewed by today's standards, however, that destruction was not very great at all. In France, for example, there were about 250,000 houses destroyed; this is in contrast to about 750,000 or 800,000 in World War II in France alone. Of course, even greater destruction took place in Germany in World War II and there was no such destruction in Germany in World War I.

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Immediately after World War I the main problem of Europe was provision of food. In tonnage, the relief in Europe at that time took the form almost entirely of shipments of wheat and other food products. Viewed in the perspective of the twenties, the magnitude of European relief then was considerable. Over a five-year period after the war it amounted to 1.5 billion dollars. In contrast, however, the European aid thus far after World War II would be nearer 30 or 40 billion dollars. There was some difference in the price levels of the two periods, but, even if the figures were price-adjusted, a great difference in the amount of aid given would remain.

Recovery from physical damage in World War I was rapid by any standards. Economic recovery, however, took a considerably different pattern. There was a postwar boom right after the war. This boom was fostered by the fact that there were great shortages of raw materials. The European economies during World War I had shifted to war-enforced trade patterns and the restoration of world trade required major adjustments. Civilian factories attempted to get back into production, and scrambled for raw materials. Monetary credit was easy to obtain, and as a result an inflated market for scarce goods was created.

This boom was followed very quickly by a slump, and for two reasons. First, when the factories did get back in production many of the shortages disappeared. Second, credit became much tighter and it was no longer as easy to obtain funds for imports. This slump was fairly short-lived, but in many areas recovery was not complete, because of the trade problem created by the splitting up of what previously had been integral countries. The Austro-Hungarian Empire had had no internal trade barriers prior to World War I. Now, with fairly intense nationalism, trade barriers sprang up all over Europe; and a situation arose which would be comparable to what would happen in the United States if there were trade barriers between the various states of the United States.

Aside from these difficulties in restoring postwar trade; the major maladjustment in Europe prior to 1925 was the German inflation. It might be very useful at this juncture to give some consideration to how this inflation got started, how it developed, and what actually stopped it.

This inflation took place because the German political situation was essentially unstable. The government was not capable of setting up a tax policy which would support the country financially, but instead found it easier to print money. Inflation had powerful supporters inside Germany. In the first place, the inflationary process got rid of the unemployment that had existed. The industrial and mercantile classes also benefited considerably by the higher level of activity and profits. The real stimulus to the inflation came, however, when the French demanded reparations and sent their troops into the Ruhr. The Germans in the Ruhr performed a sit-down strike and Germany decided to support these people by creating additional money. This was what capped the climax. Prices, which had gone up about 300 percent until then, really started to rise, until finally they went up on the order of 100 billion times.

The inflation had very interesting internal repercussions. Prices in different parts of the economy moved at quite different rates. It very often was cheaper to take a long train ride from one city to another than to take a streetcar ride within a city. This inflation had the effect of wiping out all debt in Germany and a very high level of capital formation was fostered. Everybody tried to get rid of money and in getting rid of the money tried to get extra assets. Therefore the construction and investment goods industries had a boom. Wages also had a boom. Prices of all goods rose and a wage-price spiral developed.

The system blew up; but, surprisingly enough, it was possible for the government to rescue the situation by issuing the Rentenmark. Under the new system so many billion of the previous marks could be exchanged for one Rentenmark. The Rentenmark was supported by laws preventing the government from printing additional money. Apparently the people believed that the new laws would be effective and therefore the economy would get back to normal.

In 1925 the alignment of European countries was considerably different from what it had been pre-World War I. Italy rose in industrial potential considerably, along with Holland and Norway. The countries that did not rise were the United Kingdom, Hungary, Germany, and to a lesser extent Belgium. All of these were either at or below their 1918 levels in 1925. But Europe by 1925 as a whole was about 20 percent above its prewar level, and the period 1925 to 1929 was the period of European prosperity, short-lived though it was.

Now, it might be asked, why did it take so long for recovery to take place from World War I when there was no great physical damage? I think there are three reasons why this recovery took some seven years.

First of all is agriculture. While the land was not particularly impaired, it had been taken out of use. There were problems in getting fertilizer. Agricultural production did not recover even by 1925; and agriculture was fairly important in the European economy. Second, the slump of 1921 retarded recovery. Had the economy been able to keep at a high level of activity, probably the recovery would have come much earlier. Finally, the necessary trade adjustments and the new trade barriers had a considerable dampening effect.

There is not much point in covering the period from 1925 to 1929. It was what everybody thinks economic prosperity should be. Things went along rather smoothly, inducing the ideas of limitless expansion of production and never-ending prosperity. But this dream was fairly rudely interrupted by the great worldwide depression of the thirties.

Not all western European countries suffered to the same extent from the depression. Belgium, Italy, and Germany were the hardest hit. Their decline in output was as great percentagewise as the decline in output in the United States. England, the Netherlands, Norway, and Sweden did not suffer as much. France was hit to some extent. Production in Germany declined some 40 percent in this period. In the interest of clarity and perspective, rather than attempt a discussion of all the countries, it will be best to take up just two--France and Germany.

The French depression was different from most, in that the decline continued until about 1936. There were two major reasons for this. One was the refusal of the French to devalue the franc in spite of the devaluation of other currencies elsewhere in the world. The other reason was the Blum experiment, which failed miserably in its attempt to restore prosperity.

In 1931 the English devalued the pound and this seriously affected the French balance of payments. With the prices of English goods being cheaper, these goods naturally competed more successfully with French goods; and as a result a considerable portion of the foreign market was taken away from France. With a decline in the quantity of French goods exported, there was naturally a decline in output and employment in France. This accented the spiral downward. The situation was further worsened by the United States devaluation in 1933. The Laval government was repudiated by the French because of the depression, and the Blum experiment started. According to the economic theory prevailing at the time, one which we here in the United States also seem implicitly to have followed, one of the ways to get out of the depression was to raise prices and raise wages; it was believed that the depression was caused by prices and wages sinking too low.

The thesis that there should be a rise in wages to correct the past cumulative decline was especially acceptable politically in France, since the French people were protesting low wage rates by widespread sit-down strikes. The Blum government granted a 12 percent rise in wage rates, and this wage rise, along with other legislation such as cutting the hours of work from 48 to 40 with the same pay, meant that wage costs rose some 60 percent. Furthermore, the farmer was not neglected; the prices of farm products were raised. This increase in food and raw material prices caused a further rise in the prices of French products, and this further worsened the import-export balance. With this further decline of exports, there was more unemployment and more cutbacks in production. In the face of this situation, in September 1936 the French finally devalued the franc. As a result of the devaluation, exports increased and, accordingly, production and employment rose somewhat.

There might have been a happy ending to this; but, unfortunately, although the French managed to get rid of overt unemployment by sending the apparent surplus labor back to the farms, the French economy did not get back to the 1929 level of output. France never did fully recover in the interwar period. It has been estimated by the Monnet plan staff in France that at the beginning of the war French industry had one-third excess capacity. Although statistically direct measurement is difficult, the standard of living of the French people probably had suffered a considerable decline.

The German situation is considerably different. When the Nazis came into power, recovery had just begun under the Bruening government. Hitler did not really have a New Deal, as has commonly been supposed in much of the writing on this subject. He continued the general policy of the Bruening government, with some slight differences in emphasis.

The Hitler government, like France in the early period, did not devalue. Devaluation was resisted because it was felt that devaluation was synonymous with inflation; the memory of the German inflation of the decade earlier was too fresh in German minds. Hitler did have a policy of government expenditure, but, again, both he and his financial advisers were afraid that if such a policy of government expenditure were pursued forcefully it would necessarily lead to inflation. Therefore two safeguards to prevent inflation were set up. First, a system of price and wage controls was instituted, so that the government expenditure would have the effect of increasing employment and output and not merely result in a wages and price rise. This policy was the opposite of the Blum experiment. Second, a policy of fairly high taxes was instituted. In fact in 1933 and 1934 there was practically no deficit in the government budget. Thus the initial approach to economic recovery was not that of deficit spending. These facts were not generally appreciated by economists writing before World War II. It had generally been thought that the Germans deficit-spent their way out of the depression and that theirs was the first economy to have economic recovery via deficit spending.

Recovery in Germany did come by 1935, a recovery that reached a level equal in productive capacity and the use of productive capacity to that of 1929. But even after this recovery came, large government expenditure continued. And, it was in 1935, 1936, and 1937 that the first fairly large deficits appeared. Surprisingly enough, the deficits of these years did not cause significant price inflation in spite of apparent full recovery. Instead, there was a steady rise in output in Germany during this period.

The recovery in Germany can to some extent be attributed to its internal measures to stimulate consumption. One of these measures was the granting of marriage loans by the government. Its object was to take women out of the labor market and thus relieve some unemployment and to stimulate consumption generally. By keeping women in the home, however, Germany later built up for its people a considerable problem of labor mobilization, one which they never fully solved during the war.

From 1935 to the beginning of the war, increases in government expenditure and other things had the effect of increasing the output 30 percent over the 1935 level. In 1938 government expenditure on goods and services was taking almost one-third of the output of the economy. In real terms the amount of government expenditure had tripled over what it was in 1928. The policy of government expenditure and the improved economic conditions did create some problems. The increased level of expenditures on goods and services meant that the demand for imported goods far exceeded the possibility of supply. Rather than devalue, Germany perferred to institute import controls, rationing the imports among those who wanted them.

Schacht, the German Finance Minister, had always insisted on sound financing. It was he that blocked many of Hitler's plans for armament expenditures. It is true that in 1935, 1936, and 1937 Germany did spend considerably more on rearmament than it had before. But it is important to note that the armament was not a case of guns or butter. It was a case of guns and butter. By 1938 consumption and investment and government nonmilitary expenditure all had increased substantially over their 1928 level.

About half of the German Government expenditures were for armament, but it is very easy to overstate the level of German military preparedness. Hitler had conceived of the war as an essentially short war in any case and he prepared accordingly. At the outbreak of the war, Germany had about 1,000 bombers, 1,000 fighters, 35 infantry divisions, and 4 motorized divisions. None of these were fully equipped nor fully manned.

One of the most illuminating pieces of historical evidence illustrating the essential unpreparedness of Germany was the now well-known 1939 plot against Hitler by high military and civilian officials. Those involved in this plot were not merely a group of disgruntled individuals who were dissatisfied with the internal policies of Hitler. General Beck, Chief of Staff; General von Witzleben, Commander of the Third Army; General Thomas, Production Chief of the High Command; the former Economics Minister Schacht; and the former Lord Mayor of Leipzig, Goerderler, were all in the plot. They had all been told by Hitler that Germany would invade Czechoslovakia if England were unwilling to compromise. It was the belief of this group that England would not be willing to compromise and that Germany was not sufficiently prepared to risk war against a coalition of European powers. Fearing a complete defeat and another Versailles, they therefore plotted to capture Hitler and take the government from the Nazis by a military coup. The conspirators had Theodore Kordt, the German charge d'affairs in London, tell Lord Halifax the details of the plot and ask the British not to give in to Hitler. As the plotters had agreed, General Beck resigned in September when Hitler informed him of final plans. Before the plot against Hitler could reach its final culmination, however, it became known that Chamberlain would meet with Hitler in Godesberg on 13 September 1939 in an effort to reach a compromise solution. It was evident, therefore, that Hitler was successful in his maneuver; the plot collapsed, and Von Haldor, who had also been in the plot, accepted Beck's vacated post.

The concern of the generals about the state of German preparedness was not without considerable basis. Germany's military build-up prior to 1940 was not extensive in any absolute sense, and by the year 1940 the United Kingdom alone was producing about as much as Germany. In aircraft the Germans were producing 9,500, as against 9,900 for the British. In tanks they were producing very little more--1,600 as against 1,400. In 1941 and 1942 the British alone had actual superiority in production of most military items over the Germans. In 1941, as a matter of fact, German production of ammunition and artillery was actually cut back in anticipation of an early victory against the Russians; they even built a stadium in Nuremburg to celebrate this victory, and some demobilization of the German Army began in that year.

But the disasters on the Russian front proved to be a terrific stimulus to production. A new, heavier tank was planned in January 1943. Yet, considering the 1943 figure, in that year Germany manufactured 12,000 tanks, as against 68,000 that the Allies produced.

Thus, although it appeared that Germany reached full production in 1935 and then went on to greater production by 1938 and 1939, a look at the military production figures shows that Germany had not really mobilized before the war. The armament index rose from 100 in 1942 (when it was already considerably above the 1939-1940 level) to about 400 in September 1944; there was thus a continual rise in military production throughout this period.

The bombing raids destroyed a great deal of German production potential, but they also had the effect of stimulating the German effort. Very often this factor is neglected when the effect of bombing on an enemy is analyzed. But in the case of the German bombing of England it is well recognized that the British experienced a considerable increase in determination to produce. The German air raids on London and other parts of England greatly stimulated British activity. Our bombing of Germany had a similar effect.

The aircraft industry is a fairly good example of this stimulation. Once the Germans realized that the aircraft industry was a target system, it was taken over and rationalized by Speer and its efficiency was increased. Shortly after it was taken over, production increased over 33 percent, and the increases in production continued until 1944, even though the aircraft industry was a target system and was hit time and time again by the Allies.

The German use of the resources of occupied countries in its mobilization was mainly limited to labor supply. About 20 percent of the labor force in Germany was made up of foreign workers--7 million out of a total of 35 million. Aside from the use of this labor supply, Germany did not get much in the way of military production out of these countries. It may have gotten some food supply and a few other things; but, generally speaking, these countries did not provide an arsenal. The collapse of the German economy came toward the end of 1944 and the beginning of 1945, as Germany began to lose parts of its own territory.

The postwar period was quite different from that following World War I. In World War II physical destruction was much more extensive. The repair of this destruction has not been accomplished even today; and it is not possible to make any estimate of when recovery in this sense will be achieved. The pattern of recovery from the point of view of the volume of current production, however, is not so gloomy as this. In fact production has bounced back much faster than it did in the post-World War I period. By 1947 most countries had recovered to the level of their prewar production. This recovery, however, did not have the same significance in all cases. France, for example, returned to a prewar level that was still somewhat below the 1929 level. In other countries, such as England, Sweden, and even Denmark, production recovery came even earlier than 1947. Germany did not recover so fast as most other European countries; in 1950 Germany was still 5 percent below its 1938 level.

The European trade problem after World War II was quite similar to the trade problem after the First World War. Both food and raw materials were needed. This time, however, it was recognized that relief in food alone was not sufficient to get an economy back on an even keel; and raw-materials were also supplied.

There are other contrasts with World War I. The existence of the OEEC and the internal policies of the individual countries overcame to a certain extent the trade barriers that had come into existence after World War I.

The internal economic policies worked two ways, however. Some countries were unwilling to allow the world economy to have an impact on their own domestic economies and attempted to insulate themselves against either the inflationary or deflationary pressure that their balance of payments problems would cause. This, while it perhaps prevented inflation or maintained employment within the country, also prevented trade adjustment. Some countries, such as France, Belgium, Italy, and Germany, had both unemployment and inflation. At certain times in the postwar period there had been softness in all of these economies and at other times there has been a fear of runaway inflation. This situation was partly caused by excess liquidity. This whole problem of postwar trade and financial adjustment is beyond the scope of this lecture, however. Other lectures after this one will be dedicated to a thorough examination of these problems.

It will be useful, however, to look at the record as of 1950 and see just what has happened. In percapita terms, the European countries enjoyed increases in output ranging from some 25 percent for Norway to 10 or 11 percent for France, the Netherlands, and Denmark. Thus by 1950 there had been a real, substantial increase in total output. All of this did not go into consumption, however, because there were two other major categories of competing demands on the output: government and investment expenditures. In the postwar period investment expenditures went up to a level much higher than they had been in any previous period, because of the stimulative efforts of the governments in this direction. Most of these countries realized that in order to obtain greater production in the future they would have to invest more in the present, and government programs were designed to stimulate this. The general level of investment expenditure was somewhere between 12 and 15 percent of the total output, as contrasted in some countries with as low as 4 or 5 percent before World War II. In all of the countries, however, a per capita increase in total consumption did occur.

In concluding this lecture, I should like to make a few observations on the implications of this economic history in the interwar period. It is obvious that the concept of full employment in an economic system is not too meaningful. The experience in Germany, and the experience in the United States, during World War II illustrate the unrealized production potential of economies which are apparently near full employment. Instead of shifting from consumers' goods to armaments, both consumption and military production increased by leaps and bounds during the war. In Japan, also, much the same sort of thing happened. Effective demand, or demands on the economy in general, succeeded in bringing forth considerably more in output than even the most optimistic ever dreamed possible.

This has importance for two reasons. If in a period of war we plan to attack the economy of an enemy, such flexibility and hidden production potential must be considered. Bottlenecks may not really be bottlenecks. It is very easy for a country to adapt itself one way or another to a specific crisis. It is not necessarily true that resources required from some critical use need be drawn from somewhere else. Resources may be drawn from the normal fat that exists in an economy and this fat may never be suspected until the need arises.

On the other hand there seems to be no definite assurance that under normal circumstances economies will use their resources to the fullest. Over the period from 1918 to 1950 there were numerous instances of economies at less than full utilization of their capacity; this situation seems in fact to be almost the usual rather than the exceptional circumstance.

COLONEL WATERMAN: Dr. Ruggles is ready for your questions.

QUESTION: I would like to refer to your statement about the 1947 figures, that western Europe had achieved, not complete but almost complete, recovery. Most Americans, I believe, feel that we have been aiding Europe in a recovery program, whereas it seems that they have misinterpreted it and it should be called an expansion program. Would you comment on that, please?

DR. RUGGLES: It depends on what you take as the standard of recovery. I perhaps unfortunately took as my standard of recovery the prewar level. As I indicated, however, for France this was not recovery in the sense of full employment or full capacity utilization. France in both 1938 and 1947 was still below the 1929 level. It is also true that given normal technological advance one would expect a country's output to be considerably above the 1929 level by 1947, and if there is an actual failure to achieve such normal progress, it can be said that a country has not "recovered." When we say "recovery" in European aid terms, we mean arrival at a normal functioning of the economy; and the normal functioning of an economy should, in almost all instances, be considerably above the prewar level. Besides the expected increase in output and productivity over time, it is also desirable to avoid the tensions that come with unemployment and inflationary pressures and other maladjustments. The European Recovery Program is thus more an adjustment concept than it is merely an attempt to obtain a given level of real output.

QUESTION: We have heard about cycles and their effect on a lot of things. I wonder if this is the case with bombing. I wonder whether the psychologists and the economists have gotten together and worked out any means of determining how far you can go in bombing before you stir people up to where they produce more than if they hadn't been bombed.

DR. RUGGLES: That is a very good question. I certainly don't have any answer to it. I am interested in it, and I am sure that lots of you here would be more capable of answering it than I am.

I was just raising the point that there have been some instances in which there certainly was an increase. Also since economies are hard to damage by a small amount of bombing, in the initial phases a small amount of bombing might actually increase instead of decrease output.

QUESTION: I realize, sir, that you said you were not going to answer that question, but I would like to ask maybe a very simple thing with regard to it. That is, we hear this statement that after the bombing, production increased. Isn't there also the implication that, had there been no bombing, production would not have been even greater, by people more or less getting together to do something?

DR. RUGGLES: Not necessarily. There is the factor of bureaucracy in mobilization. In a bureaucracy it is sometimes very difficult to get things done. But when there is an emergency and red tape can be cut, programs can be established that wouldn't have a chance of getting established otherwise. I think this was probably true of the German aircraft industry. If it had not been realized in Germany that there was an emergency in this area, the rationalization that took place would certainly not have come as early as it did. Nor would there have been the establishment of additional assembly plants, on the theory that a large proportion of them were going to be bombed out. The aircraft industry actually advanced its schedule a great deal because it was considered that there would be some wastage; and in doing that the aircraft industry was able to edge them up more than it could have done otherwise.

QUESTION: There must be the other end to this thing. If we hadn't touched them at all, maybe they would have stopped doing anything.

DR. RUGGLES: That is a very interesting one, because actually I think the Germans did react quite a bit that way. I think the situation in 1940 and 1941, when they actually started to cut back output, is a striking example of that. It was the Russians who provided the first great stimulus, and that acted just like the bombing did. When they lost in one engagement 45 divisions of tanks, they realized they would have to do something about it. The T-34's were knocking them around. The Germans therefore created a heavier tank. Everything is done according to stimulus in these situations. So you have to consider the stimulus and what would have happened if you hadn't had that stimulus. But this isn't a suggestion that the Russians should have given up at that time so that the Germans wouldn't have produced any more and so could have been defeated more easily by the Allies.

QUESTION: Dr. Ruggles, would you comment on the functioning of this so-called blocked mark in Germany?

DR. RUGGLES: The whole German foreign exchange problem in the thirties was quite complex. The use of the blocked mark was essentially a form of discrimination. The whole idea of the blocked mark was that on certain groups of transactions individuals receiving German marks in payment for goods and services could not convert these marks to other currencies. Thus if a certain country sold grain to Germany, it might receive in payment blocked German marks which were essentially inconvertible and could be spent only on German goods. Within Germany the blocked mark thus provided markets for some goods, and in some cases it provided a source of imports, as long as those people selling goods to Germany didn't want to take their money out of Germany. This meant essentially that Germany did not have to pay for certain imports either in gold or other currency. As long as those selling goods to Germany were forced to hold blocked marks or else buy goods from Germany, the exchange position of Germany was improved.

In addition to the blocked mark, the Germans also used different exchange rates for different groups. Tourists had one rate; commercial groups in their own countries got another rate. Thus the Germans tried to tap each market for what it was worth.

The whole dilemma of Germany at this time was its terrific internal demand for imports. Germany had not devalued. Therefore the prices of German export goods were higher relative to goods from the countries that devalued. Foreign goods were cheap in terms of marks for the Germans, and their main problem was obtaining enough foreign exchange to buy as many imports as they wanted. They solved this import problem by rationing foreign exchange internally and using tricks of the trade to multiply their foreign exchange.

QUESTION: Do you mean that the objective was to get these imports by moving into markets, for instance, in Central and South America?

DR. RUGGLES: I think there were two major influences in this instance. Moving into the South American markets was the natural businessman's tendency to expand capacity, to increase employment, get more profit, and so on. Of course, German businessmen during this whole period were trying to foster the growth of business. So they naturally would try to stimulate this sort of trade.

The real German trade problems were (1) getting sufficient foreign currencies for imports and (2) stimulating the internal economy. To the extent that selling German goods to any foreign country accomplished both of these ends, the interest of the German economy and the German businessmen were coincident. It was essentially these two major influences, I believe, that affected the situation, rather than any general political considerations. I don't think trade with Central and South America had any particular political significance.

QUESTION: Would you care to relate the effect of the trade barriers during the post-World War I period to the development in the thirties of the rise of nationalism and its subsequent result in World War II?

DR. RUGGLES: Most European trade even today is internal trade within Europe. I believe that something in the range of 25 to 35 percent of the European countries' gross national products is in imports or exports. Of this, some 25 percent is traded among countries within Europe. Now, the rise of trade barriers, I think, was as much a result of nationalism as nationalism was the result of it. The two factors reinforced each other considerably; but in any case the end result was that each country wanted to control its own trade.

As you remember, this situation was made worse in the post-World War I period by the conflict among the countries over rolling stock. They didn't dare send trains across the border, because they were afraid the receiving country wouldn't send back the rolling stock. As a result, all trains had to unload and reload at border points. This naturally made trade deteriorate even further.

But I am not at all sure that trade barriers continued to foster nationalism in the thirties. In the thirties the depression took marked precedence over the trade barriers. All countries at that time were trying to increase their exports and decrease their imports in order to stimulate their internal economies. In that period the objective was to refuse everybody else's goods and try to get yours sold. Now, when every country does that, obviously it will cause difficulty. Of course international trade suffered a great deal. The role of the depression was so very important in influencing trade policy in the thirties that I do not not feel that nationalism as such was a dominant influence.

QUESTION: Do you believe that because of the fact that you had this clamor insofar as imports were concerned and the fact that everybody was trying to sell his own goods and not buy the other fellow's served to cause internal conflicts that made them more responsive to things such as the rise of Hitlerism or the rise of Mussolini and so on? Which in turn created these conditions that led to World War II?

DR. RUGGLES: Yes. I think they did. They focused everybody's attention on the internal rather than the external, because trade was shrinking. The paramount issue was not trade but employment, the level of employment within the countries. Naturally the attempt to sell and not buy had a further effect on international trade, because you can't have a lot of people trying to sell things and nobody buying.

QUESTION: It appears that we might draw the conclusion that full employment is possible under present economic systems under the stimulus of either inflation or war. Is there a third stimulus floating around that can bring about full employment without the aid of either one of those two causes?

DR. RUGGLES: I think the term "inflation" is somewhat abused. I am having a struggle myself to find a proper definition of "inflation" and I haven't come off very well.

I think your question can best be answered if we go back to 1932. In agriculture it is well known that if a farmer has any sense, he will not contract his production even when the demand or price for his output falls. In other words if a man is producing wheat on a farm and the price of wheat goes to rock bottom, the farmer won't say: "Well, it is so low that I will plant only half as much wheat as I did before." I think that over a fairly short-run period agricultural production tends to be relatively unchanging with respect to prices or with respect to the business cycle or economic fluctuations or what have you. As a result, therefore, any change in the level of demand for agricultural products will cause a change in the price of agricultural products. If you go back to the period of the thirties, you will notice that prices of agricultural products started to rise in 1932, and they continued that rise as long as income rose. As a matter of fact, the more income people have in a country, the greater will be the demand for agricultural products. In this sense one can say that we had inflation starting in 1932 in the agricultural sector. Furthermore, this inflation spread to other sectors through its effect on other prices. If a man is making textiles, he will require cotton. If more cotton is demanded for textiles and the supply of raw cotton remains the same, the price of cotton will be bid up. As a result the price of textiles will have to rise because of the individual textile producer's increased costs for his raw material. Similarly, in other agricultural and related pursuits you will get a price rise right from the bottom of the depression. Now, where this price rise ends is a matter of conjecture. Incidentally, of course, when wages rise, the producer is also going to raise his price in order to make up for the increased wage cost involved, and we had wage rises in the early thirties.

I guess you would really call it inflation when prices get high enough so that any further price rise is not welcome. But I don't think you can have any upward movement at all in income, output, or employment without a simultaneous rise in some prices. In the initial phases of recovery from depression when there is underutilized capacity, there will be large increases of production with relatively small increases in price, other than in the agricultural sector. But in the agricultural sector there will be considerable price rises even in the initial stages of recovery from a depression. The problem of defining inflation thus becomes a problem of defining where recovery ends and inflation begins. Generally I think you can say that when an increase in total expenditures in a country does not really call forth a significantly greater amount of output, it can be called inflation. Under this definition, we don't get inflation until we have full employment. Therefore we don't need inflation to get full employment. It is really a matter of definition.

COLONEL WATERMAN: During the prewar period Europe, with twice as many people as we had and highly industrialized people, still couldn't put out the production per capita that we did. How much of that was due to such things as interference with competition and demands for excessive welfare and that sort of thing?

DR. RUGGLES: This is an awfully difficult question and I don't think I am going to give you the answer. I can give you thoughts on it for what they are worth.

I think the United States owes its development to three things. One is that we have had a fairly short history, so that we do not mind wasting resources in capital formation. For instance, we will take machines that are relatively new and junk them if something better comes along. I believe that this is due partly to our youth as a nation. Furthermore, a large market area that allows competitive practices within large market groups, as against Europe, with its trade barriers, so that the benefits of mass production cannot really be obtained, is a second contributing factor. A third factor is that we have pretty good resources. These three factors are probably sufficient to account for the differences in the standard of living between the two.

On the other hand, on the welfare angle, if you take those countries that have done most poorly in terms of production, many of these have practically no welfare development--for instance, Italy, Turkey, and Greece. As a matter of fact, in terms of education, health, and so on, the United States appears to have gone considerably further in welfare terms than these countries. I know I have been very much amazed in going to some of these countries that we consider welfare states to find them quite horrified at the United States for having certain welfare measures that we take for granted. For instance, in the Netherlands the people were quite shocked that the United States had a social security system that was run by the state. They felt that this was extremely socialistic. They couldn't get away with that in their country. They have compulsory insurance in the Netherlands, but it is done through private insurance companies. They asked, "Why is the state entering that business?" Similarly, in Denmark the people were quite shocked that we had an RFC at any time. They said it was the state interfering with the bankers. The people in Sweden were surprised that we had a corporate profits tax which had to be paid. In their country they had a corporate profits tax, but, because they allowed accelerated amortization, no businessman really had to pay the tax if he invested enough. So it all depends on your point of view. Different institutions strike people differently. Certainly, I think that we have far more welfare measures, if you want to call them that, than many of the European countries that have a lower standard of living. So I don't think you can correlate welfare measures and the level of output.

QUESTION: Dr. Ruggles, we have learned from our history books that colonies were very important. Yet you have pointed out that Germany recovered from World War I at least as quickly as most of the other European states, while at the same time its overseas empires were taken from it. The Germans lost manpower probably at an equal rate with the other states. This makes me wonder what the real factors of stability are in nations. And you can leap from that to the question: Suppose there is another war and suppose we are able to win that war, how do you treat your erstwhile opponent so as to reduce the possibility of World War IV arising?

DR. RUGGLES: I think you have gotten out of my bailiwick. I just don't think I can answer that.

QUESTION: Then to a certain extent Germany was not harmed in the economic sense by having its colonies taken away?

DR. RUGGLES: No. I don't think it was. It may well be that, with the exception of the British problems, which I believe have been covered elsewhere, colonies have been overemphasized. I think they are more a matter of prestige for many countries than they are valuable in the economic sense.

The main requirement for a high level of economic activity is that there really has to be a demand for the output. The level of activity in a country may be high even though the country has gone through some pretty bad things in the past. As a matter of fact, even in Germany I think that the First World War built up industry through the demand for armaments and other things, and probably left the productive capacity of the economy in better shape after the war than it was at the beginning of the war. Therefore what Germany needed was an effective damand, something to stimulate the level of activity.

England after World War I didn't progress so fast as the other countries; but this was not due to the fact that there were basic physical conditions that prevented it. It was mainly that England did not achieve a level of activity consistent with its capacity.

Take our own country--we came out of World War II with plant and equipment really better than when we entered the war. And we were able immediately to attain a standard of living considerably in excess of the prewar level, in spite of the fact that we had produced tremendous masses of munitions, which were essentially thrown away. This is the paradox. It is something like weight lifting. If you lift enough, you get strong; of course, you can break your back, too.

QUESTION: We have been studying economic warfare. You mentioned a couple of economic warfare instruments that Hitler used, like trick marks for exports and imports. You mentioned import control. Would you care to expand on that phase of economic warfare and give us your opinion of how you think that affected the economies of Europe at that time?

DR. RUGGLES: It is very difficult for those who are essentially interested in the development of the United States to get too concerned with world trade, because United States external trade amounts only to about 5 percent of our total output. But we must remember that in the European countries, where external trade has amounted to as much as 40 percent of total output, external trade is a matter of life and death.

I would say that the usual import-export problem is important mainly with respect to the level of activity. As a result, it has been true in the past that certain countries have found themselves paralyzed because their export markets dropped away. With that came unemployment and cutbacks in production. At other times it has been true, especially in these postwar periods following World War I and World War II, that the impossibility of getting raw materials through imports has prevented large parts of the economy from producing and utilizing the capacity that existed. But this is a less usual circumstance and it has generally not been what most countries consider their main problem.

There are two schools of thought about imports and exports. One thought--and I think this is prevalent in parts of ECA--is that the whole object of the game is that every country should have an export surplus. This is rather discouraging, because by this criterion there will always have to be 50 percent of the countries that are bad and 50 percent of the countries that are good. For instance, a country like Sweden, which has had a 40 percent rise in its per capita income, is apparently considered bad, because it has an import surplus, while Germany, at a much lower level of total output, has an export surplus and is considered good.

For economic warfare purposes, it is very difficult to tell whether by employing such measures as blockade you damage the other country more than you damage yourself. For the United States it wouldn't matter, except for particular strategic materials, if a great portion of our trade stopped. It wouldn't harm us particularly. I think with Russia this is also true--that internal policies are far more important for its military production than the things that it imports. If you really want economic warfare to be effective, you could do it with the Netherlands; a blockade of the Netherlands would really wreck it. You have to take into account just what country you are fighting when you consider the problem of economic warfare. Certainly if somebody should attempt to fight us by cutting off some of our trade, we could struggle through without too much difficulty. I see the import-export problem mainly as one relating to the level of activity. If a country is sophisticated enough to know how to keep the level of activity up without using this, it generally can get along. (This of course excepts the Netherlands, Denmark, and some of these other countries that could never be self-sufficient and do depend heavily on trade.) If, as a matter of fact, Europe got to be one solid customs area, without any trade barriers, trade with the rest of the world, I think, would become less important to Europe. Trade is important to Europe mainly because it is split up into these little pieces, with trade barriers between them. If they were consolidated, imports and exports for Europe as a whole would amount to only 10 percent of its total output. Where large blocs exist, it becomes more and more difficult to injure them by economic warfare. We are a large bloc, Europe is a large bloc, and I guess Russia is a large bloc.

QUESTION: You made the statement that as of 1950 Europe had not recovered more than 95 percent of its prewar index.

DR. RUGGLES: I think those were per capita figures, weren't they? I will have to look at them.

QUESTION: That was the question I wanted to ask. Does that include all of prewar Germany, or does that only include what is now the Western Zone of Germany?

DR. RUGGLES: Only the Western Zone, because we don't have the figures for the other part. It has been somewhat difficult to go back to prewar data and break them down according to the postwar political zones. That is what has been done, to get the base data.

In volume terms, in 1952, according to the OEEC, total output for the Western Zone of Germany was about 20 percent larger than in 1936, but in per capita terms output was 5 percent below the 1936 level. Population in the Western Zone increased from 38.4 million to 47.5 million.

QUESTION: You suggested that elimination of the import barriers to the United States would have little effect. Would you be a little more specific and give us an estimate of how much the elimination of those trade barriers would affect our trade and also affect European trade?

DR. RUGGLES: I think the effect on Europe would be far greater than the effect on us. I am really no expert on trade barriers, United States or Europe. I just don't have an answer. Certainly in our case, I think you could not expect very much of a change in our total real output due to it. In some European countries you might expect considerably more effect. In a country highly dependent on trade, you might get a rise of real output of 5, 10, or even 15 percent. This is just by way of rough magnitude.

You see, mostly, people think of questions of trade as having a multiplying factor. When exports increase, employment increases. More employment gives people more money; they go out and spend it; that further increases production and so on.

But in some of these countries--take for an example the Netherlands--people have full employment now. So that the only difference that a reduction in trade barriers would make would be a difference in the prices of the goods traded with the barriers and without the barriers. There is a fairly limited number of goods that would be affected. The things that people spend their money for are primarily (1) food, which would not change much, because the import-export barriers are not large there; (2) rent on housing, which would not be affected at all; and (3) things like city transportation, movies, and clothing, which it might affect some but not a lot. But most of the items that have duties are not items that are a large percentage of a person's budget. So it wouldn't affect the average person terrifically.

COLONEL WATERMAN: Our time is about up. You have done a very solid job on our economic foundation. Thank you very much.

(29 June 1953--350)S/rrb