CENTER OF ECONOMIC RESEARCH

LECTURE SERIES

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SOME THOUGHTS ON THE RECENT SLOW GROWTH OF THE AMERICAN ECONOMY

By
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Professor of Economics University of California



ATHENS, GREECE

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THE CENTER OF ECONOMIC RESEARCH

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Finally, one should emphasize that this is one more example of Greek-American co-operation, a pooling of human talent, funds and efforts, designed to promote the training of economists and help in meeting Greece's needs in the field of economic development.

The final aim is eminently practical: to help in creating a better life for the Greek people.

GEORGE COUTSOUMARIS, Director

SOME THOUGHTS ON THE RECENT SLOW GROWTH OF THE AMERICAN ECONOMY

In discussing the recent slow growth and high level of unemployment in the United States I shall, first, attempt briefly to review the salient facts; second, suggest some reasons for the recent course of American economic development; third, attempt to draw a few general inferences regarding the dynamic behavior of advanced economies; and, finally and most rashly, peer cautiously into the future.

I

The most salient phenomenon in the contemporary American economy is the unbroken high rate of unemployment since the middle of the 1950's. The rate of unemployment as we define it — and the way we define it is not radically different from the way most European countries define unemployment — has not been as low as 4% since 1953. It has not been as low as 5% since 1957. In contrast, the rate of unemployment in most of the advanced industrial countries of Western Europe has recently been at levels of 2% or 1% or even

less. For the calendar year 1962 the average unemployment rate in the United States was 5.6% — almost 50% more than the goal of 4% taken, not as an ultimate goal, but as a first goal to be achieved before going on to something better. That rate of 5.6% was also the seasonally adjusted rate of unemployment in the United States last month, the month of September, 1963. It has not improved significantly in the last year and a half, although GNP has risen, industrial production has increased, and it is generally said in the United States that business is much better than it was a year ago.

While space does not permit an extensive examination of the unemployment problem in America, we must at least pause briefly to mention the fact that this problem is multi-dimensional and therein markedly different from that which exists in most western European countries. Among the advanced industrial countries, America has the most heterogeneous labor force in the world. The most tragic of these elements of heterogeneity rests on differences in color of skin. Also, for reasons which are not yet fully understood, age makes more of a difference in America than it does in Europe. Skill also carries greater weight. Also, because of the vast extent of the country, geographical region makes more of a difference.

Let us consider for a moment just two of these

differential unemployment rates. At the time when the overall unemployment rate for the entire labor force was 5.6%, the rate for non-whites, which means essentially negroes, was almost precisely double that, 11%. One out of every nine negroes looking for work in the United States last year could not find work. The rate among those who in the United States are called teen-agers, boys and girls aged 14 to 19, was 13.3%. This leads to a dramatic and tragic relationship — what we call the «two times two formula». The rate for vouth is roughly twice the overall rate in the United States, and the rate for negroes is also twice the overall rate. This means that, when there is something like a 6% overall unemployment rate in the United States, the unemployment rate for negro youth is 24 - 25%. At this point we are strongly tempted to leave purely objective analysis and, instead, to speak about the human values involved.

The high unemployment rate is primarily a reflection of the slow growth of aggregate demand, which has not kept pace with the increase in productive capacity of the country. The facts regarding the growth of GNP are, at least in a statistical sense, rather startling. Around the middle of the 1950's, something happened to the growth rate of the American economy. Now one can argue about whether to put the dividing point in the

year 1953, 1955, or 1957. Let us first take 1953 as the dividing point in the postwar period. The average annual growth rate of GNP from 1947 to 1953 was 4.6%; from 1953 to 1962, it was only 2.8%. But perhaps we bias the results by taking 1953. Therefore let us take 1957, the other end of the range within which the change occurred. From 1947 to 1957, the average annual rate of growth was 3.8%; for the five years since 1957, the rate of growth was 2.9%. So that if we look from the present back over the last half decade or more, the rate of growth of American output whether we take 1953 or 1957 as the beginningwas only about 2.9%, compared to something like 4% to 4.5% for the first six to ten years after the war.

Let us consider for a moment the historical background. There are some convenient figures available from the recent valuable study by Edward Denison on the sources of growth of the American economy from the year 1909. The period from 1909 to 1929 covers the half-dozen moderately prosperous years before the first war, the tremendous expansion during the first war, and the boom of the 1920's, but it stops at 1929 and reflects none of the Great Depression. What was the growth rate during that period of twenty years in which America plainly was the envy of the entire world and no one talked about unemployment serious-

ly? The growth rate was 2.8%, almost exactly what it has been in the last seven or eight years. What was good enough for Americans and beyond what the rest of the world could achieve in growth rates before 1929 is today tragically inadequate. Something has happened. What is it?

П

There has been a significant acceleration in the upward trend of productivity since the 1930's in the entire western world, and pre-1929 growth rates are no longer adequate. We still are largely ignorant as to what has caused this dramatic change. Let us first consider briefly a very familiar set of relationships which I shall call the basic aggregate supply identity».

Ever since The General Theory in 1936, economists have been fond of talking about aggregate demand identities (consumption + investment = national output); and furthermore, since there are also governments in the world, C + I = Y, must be rewritten C + I + G = Y. This, however, is all on the demand side, and concentration on demand is a striking characteristic of what I call aggregative economics.

In this connection, there is almost nothing said about the dynamics of aggregate supply. I find it useful to start with the basic supply identity: the rate of growth of employment plus the rate of growth in productivity per man or per man/hour equals the rate of growth in total output. This is, of course, just a simple identity. It tells us just as little as C + I = Y tells us. But like C + I = Y, it takes a total and breaks it down into two parts, each of which asks questions. And here of course the significant questions are about the productivity variable.

Let us apply this basic supply identity to the United States. Of the two components that equal the rate of change in total output, one component is the rate of change in employment or in man/ hours. For the twenty years before 1929 the rate of growth in man hours in the United States was approximately 1.15% per year. It fell off dramatically during the Great Depression. During the last decade, the labor force as a whole in the United States grew at about 1%. This rate is now accelerating, and it is estimated that for the decade of the 1960's the total labor force will grow at a rate of about 1.5% a year. But, choosing to be conservative, I shall allow for some further shortening of hours and for some further decline in labor-force participation among the young and the old, and shall assume that the employment part of our supply identity calls for an increase in output (if these workers are to be employed) of

about 1.3% a year. This is higher than during the last decade but not far from the rate of increase in man/hours during the twenty years before 1929. Thus, from one point of view, nothing dramatic has happened on the labor supply side.

Now let us turn to the productivity side. For the period 1909 - 1929, the rate of increase in productivity per man/hour was approximately 1.6% a year. The Council of Economic Advisors has been using as a goal for the United States a total growth rate of 3.5% a year. This allows 1% for the growth of employment and 2.5% for growth in productivity. I consider this too low for the remainder of the 1960's. From here on, the growth in the potential supply of labor will be somewhat greater, and I believe also that the potential growth in productivity may be closer to 2.7% than to 2.5%. Further, if a growth in potential productivity of 2.5 - 2.7% is added to anticipated growth in the supply of labor of something like 1.3%, the resulting figure is close to 4%. Perhaps the figure is only 3.8%, but it is more than 3.5% and much more than the 2.8% that was achieved during 1909 - 1929. This is the growth rate that the United States needs in the 1960's if full employment is to be maintained.

Thus, in considering what economic policies are appropriate, the fact must be faced that potential supply in the United States is now growing at a rate about one percentage point higher than before 1929. And the change is almost entirely in productivity. Thus, the American growth problem of the last half-dozen years or more can be restated by saying that, at a time when America needed to expand output at a rate significantly higher than before 1929, conditions in the United States were such that the country was able to expand aggregate demand at only about the pre-1929 rate.

We must now turn to the demand side and ask: what has been wrong? Why, when America should have been expanding aggregate demand (in constant prices) at a rate of 3.5 - 4% per year, has it been able to expand aggregate demand in real terms only at a rate of something like 2.8%?

The first point to emphasize on the demand side is that the Federal Government must take a large part of the blame. The government component has failed badly to contribute its share to the necessary expansion of aggregate demand. Government spending did not rise rapidly enough, and, given the rate at which government spending did rise, the government did not employ tax, monetary, and other measures in such a way as to offset the deflationary effect of the behavior of government spending.

In real terms, total government spending in the United States showed a significant net decline

between the business-cycle peaks of 1953 and 1957. And from 1957 to 1960, when the next cyclical peak occurred, the net rise in government spending in real terms was only about 1%, at a time when total demand should have been expanding at about 4%. Of the slight expansion that took place between 1957 and 1960 in government expenditures, all of it was in state and local expenditures. During the 1953 - 1957 period, the first four years after the end of the Korean war, federal government spending in real terms declined by 25%. About half of this decline was offset by the continued rapid expansion in expenditures of state and local governments.

Many economists in the United States have been arguing for about two years that a substantial reduction in taxes is necessary if government spending is to behave in the way described. It can be said that my colleagues and I were about three years too late in waking up to this. A substantial cut in taxes should have come during the recession of 1957 - 1958. As things stand, the first large discretionary tax cut has not yet gone through the American Congress. Parenthetically, it is interesting to note over the last twenty years or so the gradual shift in emphasis in the way liberal economists in the United States treat fiscal policy. In the text books of the 1930's and immediately after the war, the emphasis was on govern-

ment spending as the variable element to offset changes in aggregate demand. Today, however, one would hear very few economists even of the strongest Keynesian persuasion arguing for large changes in government expenditures on goods and services. The emphasis has shifted to changes in tax rates.

There are two considerations which argue against the large-scale use of expenditure policy at the federal level in the United States to stimulate demand and growth. One reason, which I am not competent to discuss, lies in the domain of the social psychologist and the political scientist. This has to do with the basic conservative psychology of the great American middle class and the influence which this attitude has on Congress. The second reason for this shift in attitude toward fiscal policy is simpler to explain. It is no more than a matter of simple arithmetic, but it is one that one seldom sees emphasized. American textbooks continue to be written as if there were only one level of government in the United States and as if that level of government had one homogeneous type of public service on which to expend funds the amount of which could be changed with complete freedom. Consider now these shocking facts: Of the total federal budget, non-defense expenditures account for only one-sixth of the total; five-sixths are for defense. And the federal budget, including

defense, is only slightly larger than the total of state and local expenditures. Let us now assume there occurs an increase of 10% in the total of federal non-defense expenditures on goods and services. This would increase the total of government spending on goods and services — federal, state and local, defense and non-defense — by approximately 1%. Thus the range for freedom of action at the federal level on the expenditure side is very limited.

What I have said so far is that the federal government budget in the years from 1953 on, particularly from 1953 to 1960, was a major deflationary influence operating on the American economy. Expenditures on real goods and services declined in the face of the need for an expansion of total aggregate demand, and there were no adequate offsets on the revenue side that might have stimulated private spending.

But this is not the whole problem; the behavior of private investment must also be considered. Between 1957 and 1960, when the federal budget wat not expanding, private investment in the United States showed no increase at all. Between 1960 and 1962 it increased at about 3% per annum. Over the whole period of five years from 1957 to 1962 the rate of expansion in private investment in real terms was only about 1.2% a year. Thus private capital formation also failed to contribute

its proportional share to the needed increase in aggregate demand.

Now in discussing the problems that led to an unsatisfactory rate of expansion in private investment during these years, we must warn against the danger of over-aggregating. Given the way official statistics are usually presented, one can break gross capital formation down into what may loosely be called industrial investment (manufacturing, public utilities, transportation, and mining), commercial investment (retail and wholesale trade, various service industries, office building, and so on), residential construction, and finally a catch-all category which is largely nonprofit building (private schools, colleges, universities, hospitals, etc.). Of total private gross capital formation in the United States, industrial investment makes up about 40%; manufacturing alone makes up about 25%; commercial investment comprises about 15% of the total; residential building makes up about 25%. I think I am not overstating the case by saying that most of what has been written about the theory of investment at the aggregative level in the last twenty years has implicitly referred to only industrial and particularly only manufacturing investment. This is one of the reasons why I urge disaggregation: because the type of investment that economists most talk about amounts to about only 25% of all private gross capital formation in the United States.

Let us briefly consider each of these types of investment in the United States in the last decade. The chief problem has been with industrial investment—not only manufacturing but also with that highly dynamic industry, electric power, which has been—and this is not as well known as it should be—a significant deflationary force on the investment side in the United States for half a dozen years now.

What were the reasons for the setback in manufacturing investment? During the period 1953-1957, when the growth rate was at a high but not exceptionally high level, there was a private investment boom in the United States. This investment boom, particularly marked during the years 1955 to 1957, led (to use a somewhat old-fashioned but nonetheless useful term) to a partial exchaustion of investment opportunitites in the United States.

Among the factors that I think were building up during the first postwar decade, were the following: There was a tremendous pent-up demand for consumers' durable goods after the war that had not yet been satisfied at the time the Korean War broke out. American industry rushed to satisfy this demand after the Korean War ended. Recall the tremendous automobile boom that took place in the United States in the middle fifties.

This pent-up demand for consumers' durables had been largely satisfied by 1957. Second, there was a similar demand for expansion and modernization of capacity, which again had been held back by the Korean War, and this also was largely satisfied by 1957. Third, and here I only surmise, the United States reached a peak in what might be called the first wave of the «automation revolution» — automation in the narrow sense in which it is used in the United States, of electronic controls, push buttons, etc. (In Europe the word automation is much more loosely used to cover what in the United States was called «mass production» in the nineteen twenties). United States industry, particularly in manufacturing and I think especially in durable goods, but also in oil refining and certain other lines, went through a major wave of adaptation to what might be called the electronic revolution. This, I suspect, was the first wave of adjustment. This initial period had tapered off by 1957, and then industry slowed down further investment to wait to see what the engineers would think up next. And, finally, yet another depressing factor came into operation. In 1955 - 1957 American industry simply overinvested in the old-fashioned sense. Businessmen were too optimistic; they overestimated the continued expansion of demand. All measurements that we have made since then indicate clearly that by

the end of the investment boom in 1957 there was substantial excess capacity, however one measures this rather elusive concept.

Thus, for all of these reasons, manufacturing had a much less strong stimulus to invest after the recession of 1957 - 1958, when the economy began to move up slowly again. Investment no longer provided an additional strong, partly autonomous, stimulus to aggregate demand but waited for demand from the consumption side or from the government side to expand first.

Now I come to the case of the electric power industry. In the face of continued expansion in the production of electric power of 7% per year after 1957, investment in the electric power industry (in constant prices) went through an absolute decline. Now it is true that electric power production in the first postwar years had risen at an even faster rate than 7%. But from 1957 on, expansion in output did continue at a rapid rate something like 7% a year. In the face of this, and despite the fact that there was no noticeable excess capacity, investment in the electric power industry showed an absolute decline after 1957. Here again the notion of pent-up demands and investment opportunities is useful in understanding what happened. The electric power industry in the United States did a job during World War II that most experts in 1939 and 1940 would

have said was absolutely impossible. The industry generated more power out of a given rated capacity than the producers of the equipment ever conceived of. And in the course of this, it developed systems of long-distance transmission to make use of every possible kilowatt of available capacity. When the war ended, the industry launched into a tremendous investment program, modernizing and expanding capacity in order both to catch up with the continued expansion of demand for power and also to get back into a more normal and economical basis of operation. This process was largely achieved by 1957, so that from 1957 on the electric power industry needed to continue to invest only to satisfy further increases in demand for output and no longer to meet the backlog of accumulated needs.

As to the other types of investment, there was some flattening out in residential building after 1959. Residential construction held up nicely during the 1958 recession, but after 1959 there was a slackening and even a cessation of further net growth. Commercial investment also fell; although it did not decline absolutely, its rate of increase was retarded after 1957. Here again we can speak of at least a partial satisfaction of accumulated investment opportunities. There was at least partial completion of a wave of adjustment to the expansion of the service industries, to the huge move-

ment of population to the suburbs, and so on. The laying out of shopping neighborhoods and other «infrastructure» investment did not have to continue at such a frantic pace as during the earlier postwar years. Here again there was some loss of expansionary stimulus.

And now, just beginning to show, there is some tapering off in the huge office building boom of the past decade in the United States. The newspapers are beginning to speak of a decline in intentions to build in New York and of some parallel developments in others parts of the country.

Thus, for a variety of rather interrelated reasons, there was a tapering off and some mild decline in private investment after the mid-1950's. This was, of course, exacerbated by the decline in government spending. If government spending had continued to rise, it would have created other opportunities for private investment. In view of the moderate decline in private investment and the significant decline in government expenditures, it is almost a wonder that the American situation was not even worse in the latter part of the 1950's than it actually was.

III

Let us try to draw a few general inferences from all this. First, as I have already suggested, it seems to me still useful to approach the study of investment from the point of view of changing states of investment opportunities. To appreciate this point of view, perhaps it is worthwhile to reread D.H. Roberston, Alvin Hansen, and Schumpeter for the insight they offer regarding irregularities in the process of growth and the role of changing investment opportunities in this process.

Secondly, as I have mentioned, many types of analytical problems, particularly if we deal with the real world and with policy implications, call for more disaggregation of the conventional aggregates than most economists have in the past been prepared to engage in. American developments cannot be understood by relating total gross capital formation in a simple functional relationship to total output, total capital stock, and possibly a few other aggregative variables.

Different sets of forces have been at work in manufacturing, in electric power, in commercial building, in residential construction, etc. For «industrial» investment — in industrial manufacturing, mining, electric power, etc. — it may be possible to formulate a generalized type of investment function that can then be applied separately to reasonably homogeneous sectors, for example, durable manufacturing, nondurable manufacturing, electric power, and so on. Perhaps this is still too aggregative. But, conceptually, one can think

of a large number of investment functions, all of the same general form, each referring to a homogeneous sector of the economy. Thus, one could consider investment in any sector as a function of output in that sector, the capital stock in that sector, and what other variables were eventually discovered to be important. But conceive of a function along these lines for each homogeneous industrial sector of the economy, and think also of separate functions with to some extent different variables for residential building, for commercial building, etc. Then one must accept the fact that the complex process of growth in a reasonably free society (as a matter of fact even in an unfree society) will involve not only changes in the parameters of each sectoral function but also, as growth goes on, dramatic changes in relative weights when one comes to add the separate sectoral functions. Perhaps along those lines it would be possible to develop a more precise formulation of this loose notion of investment opportunities, which in spite of efforts to discard it seems to keep cropping up again whenever a discussion arises on the uneven pace at which economic growth proceeds.

This leads me to offer a few comments on two concepts which have been used in studies of growth and economic fluctuations. One concerns the distinction between major and minor cycles and

the usefulness of this distinction in interpreting history; the other has to do with long waves in economic growth. The distinction between major cvcles (which Schumpeter called «Juglars») and minor cycles (which he called «Kitchin» cycles) has been stressed by Alvin Hansen and is a fundamental part of Schumpeter's schema. This distinction has been challenged, most recently by R.C.O. Matthews in his excellent little book on the trade cycle, and in the light of his criticisms, I would today modify somewhat an article I published in the Review of Economics and Statistics in 1955 on investment opportunities and the distinction between major and minor cycles. I would still define an «appropriate capital stock» in much the same way and would retain the notion of «investment opportunities» as the difference between the appropriate capital stock and that which actually exists at a particular time. I would also continue to think of the inducements to exploit this difference between the appropriate capital stock and that which currently exists. These inducements are subject to more short-term fluctuations. What I said in the article was that minor cycles, minor recessions, reflected chiefly changes in the inducements to exploit a given stock of investment opportunities, while major depressions reflected a significant change in the underlying stock of investment opportunities itself. I am now prepared to meet my

critics at least part of the way. While I would continue to attach importance to the notion of changing investment opportunities, I am prepared to make concessions regarding the sharpness of the distinction between major and minor depressions. I would now place stress on the notion of changing investment opportunities—in part for reasons which are usually considered «exogenous» in formal models—in a growth setting. Thus, changes in the stock of investment opportunities over time can lead to swings in growth. And, at least before the second world war, some of these swings in growth could generate serious depressions, particularly when the financial structure was weak, the built-in stabilizers were not strong, and the economy was potentially unstable in other respects.

From this point of view, I would say that what has happened in the United States since the middle of the 1950's has been a moderately significant impairment of investment opportunities for the reasons I cited, compounded by an absolute decline for a significant period in the level of goverment spending. This has led to substantial retardation in the rate of growth of output. Associated with this retardation was the 1957-1958 recession, which was by a significant margin the most serious of the whole postwar period in the United States. The revival which then occured from 1958 to 1960 was quite incomplete. In 1960, total pri-

vate investment was barely back to its 1957 level, and unemployment was still relatively high. Thus, while it stretches familiar terms too much to say that 1957-1958 was a «major depression», I think it is fair to say that the 1957-58 downswing marked the initial reaction of the American economy to a significant impairment of investment opportunities. A variety of structural factors—financial and monetary reforms, the much larger relative role of government in total spending with the correspondingly smaller role of private investment, the built-in stabilizers, and other factors that may easily be added to this list—kept 1957-58 from being a «major depression» in the old pre-World War II sense.

IV

Obviously, it is exceedingly rash to attempt prercisely to predict the future. There are some moderately optimistic factors for the second half of the 1960's. America will come into a new upsurge of household formation as the postwar babies enter into marriage and begin to have children and aquire homes. The economy's excess capacity slowly is beginning to recede. There are growing backlogs of the new advanced technology to be exploited through private investment. And there is accumulated obsolescence from the holding down of

gross investment in recent years. These are all optimistic factors—if not for next year, at least for the second half of the decade. There are also some pessimistic factors, among which the most dangerous seems to me the possible ending of the huge commercial building boom in the United States.

But, in looking into the future, the most important point I wish to make takes the form not of a positive statement but of a question—namely, will the political temper of the American people permit their government to play the role that it must play, if aggregate demand is to rise at the necessary rate and without at the same time holding back private investment. Today, very roughly, government spending on goods and services constitutes 20 % of agregate demand, and private investment comprises 13 %. Assume that the necessarv conditions can be created for private investment to grow at 4 %. Assume also that state and local government expenditures will grow at 4 %. But assume that federal spending does not increase at all in real terms, that it remains constantwhich is what a large part of Congress would like to see it do. Under these assumptions, the overall increase in these nonconsumption types of supports to aggregate demand would average only 2.8% per year; even more weight would have to be placed on tax cuts than is now the case. The Administration has not been notably successful in getting a substantial tax reduction through the current session of Congress.

As an economist I should perhaps apologize for ending on what is essentially a political note. But one can say very little about the future trend of aggregate demand in the United States without raising the question as to what role the federal goverment will play.

