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CURRENT ECONOMIC SITUATION AND SHORT-RUN OUTLOOK

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

EIGHTY-SIXTH CONGRESS

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CURRENT ECONOMIC SITUATION AND SHORT-RUN OUTLOOK

WEDNESDAY, DECEMBER 7, 1960

U.S. CONGRESS,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to notice, at 10 a.m., in room G-308, New Senate Office Building, Hon. Paul H. Douglas (chairman of the committee), presiding.

Present: Senators Douglas, Sparkman, Bush, and Butler; Representatives Patman, Bolling, Coffin, Curtis, and Widnall.

The CHAIRMAN. Ladies and gentlemen, the committee will come to order.

This morning we begin 2 days of hearings on the current economic situation and short-run outlook.

These hearings are designed to provide an objective, factual analysis of the various elements of strength and weakness in the current situation and outlook.

It is not planned to seek recommendations on economic policy at this time, since these hearings are preliminary to further hearings and analysis which the committee will conduct in January and February in connection with its review of the Economic Report of the President.

Our witnesses appearing today have been asked to characterize the present economic situation in terms of employment trends, rates of use of capacity, demand, et cetera; to evaluate the strengths and weaknesses of the present situation, and to relate these to longer run trends in the economy.

In particular, we want to find out if we are now in a recession and, if so, of what magnitude.

It is generally much safer for economists and statisticians to pronounce on these subjects than politicians because if the politician speaks in a pessimistic tone he is likely to be called a prophet of gloom and doom or if he speaks in an optimistic tone he is likely to be called a Pollyanna.

The witnesses who will appear tomorrow will discuss the short-run economic outlook with particular reference to prospects for consumption, investment, international trade, government expenditures, money markets, price movements, and employment.

They also will be asked to designate the areas of strength and weakness which they foresee in the economy during the coming months.

Each witness has been asked to summarize his views in 10 to 12 minutes. The persons appearing on the panel have also been asked to submit a longer statement and, if they wish, to include charts and tabular materials.

Without objection these materials and full statements will be included in the record.

I am going to ask our first panelist to begin the discussion, Mr. Seymour L. Wolfbein, Deputy Assistant Secretary of Labor, U.S. Department of Labor.

Mr. Wolfbein.

STATEMENT OF SEYMOUR L. WOLFBEIN, DEPUTY ASSISTANT SECRETARY OF LABOR, U.S. DEPARTMENT OF LABOR

Mr. WOLFBEIN. Good morning, Mr. Chairman and gentlemen of the committee, I do have a longer statement which you have in front of you and which I shall summarize very briefly.

In indicating the substance of these hearings, Mr. Chairman and gentlemen, you point to the importance of some of the longer term developments.

I want to spend just a few minutes on that particular element since I think that the current situation is very much a blend of some of the month-to-month and day-to-day developments we have been getting, plus some of these overriding important long-term developments.

And because I think they are quite familiar to you, I shall be very brief with them.

I do have a few charts here which I think will help and they will save a lot of words. As I indicate in the paper there are perhaps four really overriding matters of a long-term nature which are affecting us now in terms of employment and unemployment. One of them perhaps is the most familiar of all and that is the population of the United States of America which is experiencing a very, very substantial growth, and I particularly would like to call your attention to this chart which shows the number of young people becoming 18 years of age each year.

You see back in 1950 we were running about 2 million young people becoming 18 years of age each year. Now we are getting close to 3 million a year and, come 1965, we really almost go off the chart when we hit almost 4 million young people becoming 18 years of age each year.

What we are really doing, of course, is reaping the results of the postwar high birth rates. This, of course, means that we are already beginning to get a real big increase in the number of new young workers coming in for jobs.

Our estimate as a matter of fact is that there are going to be 26 million young workers entering the job market during the 1960's, 'way, 'way more than we ever had before, and that is something that began this year.

As you can tell, that is only the beginning and as we look into the immediate years ahead this is going to be a very important phenomenon with which we are going to have to deal.

At the same time, too, there are some very important changes in our occupational and industrial structure.

As I think you have all heard from testimony before, we are now in the position where the majority of our workers are engaged in the service-producing industries—many more than the goods-producing industries. As we will see in a minute as we take a look at the current economic situation particularly in terms of employment and unemployment, you can almost put your finger on the sectors in the goods-producing industries which are giving us trouble today, like steel and autos and metalworking and some of the others.

And these are long-term trends. They have been happening for quite some time and they, plus what we are getting today, are giving us the current situation.

There is one other long-term matter I would like to mention very, very briefly, and that is the developments in agriculture.

As you know, this is a sector where we are continuing to get employment declines and in a sense this means that much more pressure on the nonfarm sector to provide employment opportunities.

We are averaging about 6½ million people in agriculture and that is going consistently down year after year.

Now against that kind of background of an increasing population, especially among new young workers, and the crosscurrents we are getting in our industrial structure, I would like to now spend a few minutes on the current employment and unemployment situation.

If you will look at the records I think you will find that last year, around last spring, it looked very much like we were making a very good recovery. Unemployment, for example, fell by a full million, just in 2 months, March and April 1959, and employment moved up very significantly and so on and so forth.

There are charts in the testimony which indicate this.

Then, of course, it was followed by the 116-day steel strike and as we moved into the current calendar year, we found that again by the spring of 1960 unemployment was down on a seasonally adjusted basis to about 4.9 percent.

Employment was at a record for the month. And it looked again that after the winter of 1959–60 we might be pulling out.

Since that time, however, since about May 1960, we have had, I would say, a gradual but persistent uptrend in the unemployment rate as you can see from that chart.

The unemployment rate seasonally adjusted has moved from 4.9 percent in May 1960, to 6.4 percent the last month shown there.

The CHAIRMAN. Mr. Wolfbein, when are you going to publish the figures for November?

Mr. WOLFBEIN. The November figures will be out Monday, December 12. That is their schedule.

The CHAIRMAN. Would you say that relative changes in the numbers on unemployed compensation will be a fairly good index of relative changes in the number of percentage of the unemployed?

Mr. WOLFBEIN. I think that is a fair way to put it. You know, we have weekly data on the number of people drawing unemployment insurance and that particular figure has gone up by almost 300,000 between mid-October and mid-November. This is an 18-percent increase you see in unemployment insurance claims. Usually for this time of the year we get about a 7-percent increase.

So, on the basis of this kind of indicator, which we get every week, it certainly points to a continuing increase in unemployment.

The CHAIRMAN. Would you say, therefore, that the increase in the figures for unemployment compensation point to a November figure which is higher than the 6.4 percent of October?

Mr. WOLFBEIN. This is a little difficult. Let me tell you why I hesitate on that.

You know, these figures are taken as of the week containing the 12th of each month.

Now in November the week containing the 12th was the week of November 6 to 12. The 12th happened to hit on a Saturday. So that gave us a very, very early census week. So we may not have caught, you see, all of the developing unemployment which took place in mid-November.

But if the other unemployment insurance figures are any indication, and I think they are, there is obviously not a 1-to-1 relationship, then it is quite possible that it might go up.

The CHAIRMAN. Mr. Wolfbein, do you not actually have your percentages already computed down in the Department of Labor and are simply withholding them?

Mr. WOLFBEIN. These figures are now being calculated. I don't know them, Senator Douglas.

As you know, these overall figures become available, at least in their raw form, around the beginning of the month and then we add to them the payroll figures and come out with a package between the 10th and 12th of the month.

But, yes, the overall figures are available.

The CHAIRMAN. Proceed.

Mr. WOLFBEIN. That is the story very briefly on the unemployment rate.

One other aspect of unemployment which I think might be significant from the committee's point of view and from all points of view is what has happened to long-term unemployment. We do have figures you see, on the number of weeks during which people are unemployed.

Now there are a very, very significant number and proportion who are unemployed for only a very short time. Throughout the year you find somewhere between 40 and 50 percent of the unemployed, moving in and out, and they are unemployed for a month or less.

But we also have figures on the number of long-term unemployment and these are the folks who are out of a job but have been out of a job for at least 15 weeks or more.

That figure during the late spring and summer was riding at about 800,000 persons, but last month it went up rather sharply, I would say, to 1 million.

Representative PATMAN. May I ask a question?

The CHAIRMAN. Surely.

Representative PATMAN. What is your estimate of the unemployed now as of this date?

Mr. WOLFBEIN. That would be a rough one.

Representative PATMAN. Let us say December 1.

Mr. WOLFBEIN. What we have done is ask ourselves roughly this kind of question:

Each month we ask ourselves if we have the figure we have now, let us say for October 1960, what would it be like if just the regular seasonal movements occurred?

In other words, if you don't get a further deterioration, if you don't get a further improvement.

This gives you some kind of feel for what that might be if only the seasonal developments occurred. If it is different from that, then you have some standard against which to measure it.

Well, sitting in October 1960 when we had the figure of 3.6 million unemployed, we did look ahead and ask ourselves what would happen if there were no further deterioration, no further improvement, just the regular seasonal developments.

Well, if that, and that alone, were to happen, then we would have about 4.1 million people unemployed around the middle of November and then about 4.2 million unemployed around the middle of December, and that might help give you the answer.

Representative PATMAN. If you add one more month what would you say?

Mr. WOLFBEIN. To January 1961, our projections would show about 5¼ million unemployed.

The CHAIRMAN. Five and a quarter million?

Mr. WOLFBEIN. Yes, sir; just on the seasonal basis alone.

Representative CURTIS. With seasonal adjustment that would be what?

Mr. WOLFBEIN. This really means the seasonally adjusted unemployment rate would remain at 6.4 percent.

Now, one more word that might be helpful. We have followed industry developments and my colleagues here will be discussing them in more detail, so I will go over it very briefly. They are in the basic document. You might want to take a look at these two charts very briefly because they underscore in an essential way I think these cross-currents by industry that we have been talking about.

Here on the left-hand side we have the employment in what we call the service producing industries, like trade, like finance and service and insurance and, of course, State and local government.

You see what has been happening. For a long time and even in the recent months, there has been a steady uptrend in the service producing sectors of our economy, especially, of course, State and local government where you get teachers and other folks like that.

But when you move over to the right-hand side and take a look at the goods-producing industries, this is where you see really quite a different trend. The most volatile one and the one that really moves us, as I think you folks know, is the manufacturing industries, especially the hard goods.

You see, the way they move up and down with the business cycle, you can see here at the very end what has been happening this year, the decline in the durable goods sector of American industry.

This, of course, is steel and automobiles and some of the machinery industries.

For example, just in steel alone there has been a decline of 150,000 people on the payrolls since February 1960. That obviously is going to show up in this kind of chart.

You see, we have had quite a different movement both long term as well as even recently.

Representative CURTIS. On that steel, is that a decline in production, too, or has there been an increase in productivity?

Mr. WOLFBEIN. I am not up to date on the productivity angle. I just suspect we didn't have the figures in on this, but what has happened is a real big decline in employment, 150,000, and those were dropped from production, of course.

Representative CURTIS. I just want to see what happened in the steel production at the time. Some of that I suspect has been increased productivity, but I think some is actually decline in production.

Mr. WOLFBEIN. I think that is exactly it. I think under our economic indicators you will find a series on production. I suspect it is a combination of both.

There have been announcements, by some of the industry people on closing the plants and moving on to newer and more efficient plants, as we all know.

I have just one more point.

The Department of Labor has recently released this information on the various areas and I think this is familiar to you, but let me go over it very briefly.

We do keep a record on areas of substantial labor surplus. Back in November 1957, for example, the number of areas classified in that category of substantial labor surplus was 24.

In November 1958 when we were really on the downturn, it went way up to 83.

Last year, November 1959, it went down again to about 32, but now our most recent figure for November 1960 indicates it is up again to 51.

The CHAIRMAN. An increase of nine over the preceding——

Mr. WOLFBEIN. Over September.

The CHAIRMAN. In other words, the 1961 labor market areas which have a percentage of unemployment of over six?

Mr. WOLFBEIN. Yes, and where the outlook and prognosis is for continuing labor surplus——

The CHAIRMAN. There are both major and minor areas?

Mr. WOLFBEIN. No, I am just talking about the major areas.

The CHAIRMAN. What about the minor areas?

Mr. WOLFBEIN. Over a hundred minor areas.

The CHAIRMAN. How much of an increase in the number of minor areas?

Mr. WOLFBEIN. I think there was an increase of about 20 on——

The CHAIRMAN. An increase of 20——

Mr. WOLFBEIN. Yes. I will put the figures in the record. The number of localities officially classified as "smaller areas of substantial labor surplus" increased to 123, as compared to 116 in September and 112 in November 1959.

Senator BUSH. How do you define minor areas?

Mr. WOLFBEIN. This is just in terms of the size, in terms of population and the number of workers. Some are real major labor market areas in terms of population and labor force. Others are simply smaller.

I guess a better term would be large and small.

Senator BUSH. Is there a dividing line?

Mr. WOLFBEIN. Yes, sir; there is a specific dividing line.

Now, you will be hearing testimony on the outlook, of course, and again in terms of outlook may I state two points briefly, that might be of help in terms of facts.

One of them already has been presented to you in response to a question, that is, what would unemployment look like on the basis of seasonal projections.

The other point that might be of interest to the committee as it looks for the short run, immediately outlook, is the growth of the labor force.

Our estimates indicate that for calendar 1961, the year coming up, we might expect an increase in the labor force of about 1¼ million during 1961.

So that as we look toward the outlook, Mr. Chairman and gentlemen of the committee, it seems to mean that as we go, especially the beginning of next year, we may come into the situation where we have somewhere more than 5 million people unemployed and where our problem may also be not only the reemployment of some of those folks, if not all, but also of the growing labor force that is scheduled to come in 1961.

Thank you.

The CHAIRMAN. Mr. Bolling?

Mr. BOLLING. I would like to have that projected a little beyond 1961. You gave a gross figure in the 1960's and then a single figure for the increase in labor force of a million and a quarter in 1961. Could you go through 1962, 1963, and 1964?

Mr. WOLFBEIN. I may have it right here in the package. It is easier to work from the chart.

These are the 26 million new young workers we were talking about right here. These are now the new young workers with a major problem, I suspect, because they are in a sense people beginning their career development; they have the least amount of experience. They usually have the highest unemployment rates.

When you look at the trend here it is:

The number will run about 2 million as it is now, growing up to 2.1, 2.3 million as the decade proceeds.

Nineteen hundred and sixty-five is a real smashing year in terms of new entrants, going up to about 2.7 million and then 3 million in 1970. You can see here the difference, incidentally, between 1950 and 1960.

There is a 40-percent increase in the number of new young workers coming up in this decade over the past decade.

Representative BOLLING. In other words, there is a short increase as you turn to the 1960's and in the sixties each year there is virtually an increase over the year before.

Mr. WOLFBEIN. Absolutely.

Senator BUTLER. Mr. Chairman?

The CHAIRMAN. Yes, Mr. Butler.

Senator BUTLER. Have you any figures on the consumption of durable goods in the United States during the period of decline in production?

Mr. WOLFBEIN. There are figures available.

My colleague, Mr. Paradiso has those in his statement, Senator Butler.

Senator BUTLER. Thank you.

(The formal statement of Mr. Wolfbein is as follows:)

STATEMENT OF SEYMOUR L. WOLFBEIN, DEPUTY ASSISTANT SECRETARY OF LABOR, U.S. DEPARTMENT OF LABOR

Mr. Chairman and members of the committee, in this paper I shall attempt three things:

(1) To present the facts on some of the long-term developments which have in the past, are in the present, and will be expected in the future to have an overridingly important impact on our employment situation.

At any given period of time, the employment situation mirrors not only the current day-to-day or month-to-month developments, but reflects also the evolutionary changes which are taking place in the structure of our population, in the pattern of our industrial growth, in the geography of our jobs. Thus the present situation is significantly affected by the downturn in the steel industry; but it is and will also be strongly affected by such forces as the growing numbers of young workers or the continued rise in service-producing industries, as we will see. Both, therefore, have to be taken into account in trying to reach a sound assessment of where we are today and what may be in store for us in the immediate future.

(2) To describe the facts on recent developments in labor force, employment and unemployment in this country.

In this, the first year of the 1960 decade, there have been a number of major changes in our employment situation, in the differential growth of industries, in area unemployment, in the characteristics of the unemployed which warrant a careful look in terms of the economy as a whole.

(3) To set down some facts on projections for the immediate time ahead.

It is possible, working from the facts we have now, to make some projections (not predictions) based on the seasonal patterns we know are inherent in our labor force, employment and unemployment changes, as well as on some long-term trends. These can be used as a basis for perception on the immediate outlook and can also be used as a standard against which we can measure actual developments when they take place.

I

The long-term developments which are affecting our economic and employment situation have been documented in Bulletin 1242 of the Bureau of Labor Statistics ("Population and Labor Force Projections to 1975") and have been communicated extensively to business, industry, trade unions, educational, and other community agencies through the Labor Department publication, "Manpower—Challenge of the 1960's." These materials also have been presented to the Subcommittee on Labor and Health, Education, and Welfare of the House Appropriations Committee (hearings, January 25, 1960), and the recently established Subcommittee on Employment and Manpower of the Senate Committee on Labor and Public Welfare (hearings on manpower problems of the sixties, June 14, 1960). Since they are fairly well known, I will be brief in summarizing the highlights.

There are at least four major manpower forces now in operation in this country which are affecting our current economic situation:

1. The first, and perhaps best known, is our population growth. Our population, which moved up by 19 percent during the 1950's to about 180 million this year, is expected to go up by another 16 percent to 208 million in 1970. Some idea of the magnitude of the population phenomenon can be gaged from the fact that between the first full peacetime year after World War II (1946) to the last full year for which we have data (1959) some 55 million children were born in the United States.

This means that just about one out of every three persons now living in this country was not even around at the end of World War II. The effects of this enormous number of new young persons vary from the impact of their very numbers on the demand for jobs and services to the new attitudes and expectations and aspirations of this group (for education, for example) to the fact that a sizable portion of them are now becoming of labor force age.

2. The population growth of recent years as well as of the more distant past is already beginning to give us a very distinctive manpower posture. Thus, the labor force growth of the 1960's is expected to be distributed as follows:

	Percent
Net growth in labor force 1960–70	100
10 to 24 years	+47
25 to 34 years	+13
35 to 44 years	−1
45 years and over	+41

In a direct reversal of the developments of the 1950's, we can expect to see in this decade an enormous increase in the numbers of new young workers. In fact, a total of 26 million new young entrants are expected to come into the labor force during this decade seeking jobs—about 40 percent more than during the 1950's. This upsurge already was visible this year—but it was just the beginning of the tidal wave of the immediate years ahead. The numbers of new young workers are expected to take the following course (in millions):

1960	2.1	1966	2.8
1962	2.3	1968	2.9
1964	2.5	1970	3.0

As we will see in the next section, new young workers tend to have the highest rates of unemployment, and in the absence of any countervailing forces, the increases in their numbers alone would tend to give us a gradual rise in the numbers of unemployed. On the other hand, there is the actual decline in the critical age group 35–44, which in the presence of generally high levels of economic activity, can help to generate a more favorable prognosis for the employment and even accelerated career development for the younger workers.

3. Cutting across these developments has been the marked change in our industrial and occupational structure in the direction of relatively greater growth for the service-producing industries and white-collar occupations and relatively smaller growth for the goods-producing industries and manual occupations. These trends have been in evidence for many years. They culminated in 1949 in a picture which showed employment in service industries outnumbering for the first time employment in all production industries, and in 1956 when, inevitably, professional, office, and sales workers first outnumbered manual workers. The differences have been growing since and there is apparently nothing in the offing which is expected to change the direction of these movements.

Actually, they have persisted through various phases of the business cycle, have shown up very clearly again this year and have affected and are now affecting who and where the unemployed are, as we will see.

4. Finally, the long-term decline in farm employment continues. Fifty years ago, 1 out of every 3 persons lived and worked on a farm; today, the proportion is less than 1 in 10. This trend is still operative this year and results in a continued flow of youth from rural to city areas and puts that much additional pressure on the nonfarm sector for the provision of employment opportunities.

These, then, are some of the major overall population and employment trends which are impinging upon our economic situation. In a way, they represent the frame or background in which we are operating today. They have to be taken into account in examining the current situation; they also have to be taken into account in considering what programs and policies might be adopted to alleviate problems of employment and unemployment.

II

In terms of understanding what is happening now, the following brief background may be helpful:

In the spring of last year (1959), practically all signs were pointing toward a sustained and vigorous recovery from the 1957–58 downturn. Many of the major measures of economic activity—national product, personal income, industrial production, retail sales, new homes started, factory pay—were reaching record highs.

Unemployment fell substantially. It declined, in fact, by over 1 million in just the 2 months of March and April 1959, twice the seasonally expected drop for that period. By May 1959, unemployment—at 3.4 million—was 1½ million below May 1958. And the seasonally adjusted unemployment rate at 4.9 percent

in May 1959 was significantly and substantially below the 7.2 percent rate of May 1958.

Total employment also made big gains, increasing by almost 3⅓ million during the first 5 months of 1959—about 60 percent more than the seasonally expected rise for that period of the year. As a result, total employment in May 1959 was almost 2 million higher than in May 1958—and significantly enough—800,000 above May 1957.

Even back at that time last year, this particular phenomenon was noted: Employment was moving well ahead not only of the low levels of 1958, but also ahead of the relatively prosperous 1957 period. But this achievement was not recorded on the unemployment side. Unemployment, as we indicated, was well below 1958 levels—but still higher than 1957. Thus, in May 1959, unemployment was about 700,000 above the May 1957 level, the seasonally adjusted unemployment rate was almost a full percentage point higher than in May 1957; and long-term unemployment—although again well below May 1958—was still about double the May 1957 figure.

Although it is always difficult to pinpoint the exact causes of this kind of trend, an examination of employment by industry for these dates gives us a very good clue. As we have said, total employment in May 1959 was not only well ahead of May 1958, but the May 1957 levels as well. Various industry groups were quite different in their trends, however. Practically all of the service-producing industries in May 1959 were at or well ahead of May 1957 totals. On a seasonally adjusted basis, employment in trade in May 1959 was back to May 1957 levels; finance and insurance was nearly 100,000 ahead, service almost 200,000 ahead and State and local government employment fully 500,000 ahead.

Not so in the goods-producing industries. In mining and construction, May 1959 totals were still below those of May 1957 on a seasonally adjusted basis. But the biggest lag was in the biggest sector and most volatile area of all—manufacturing. Here the May 1959 totals were a half-million below the comparable month of 1957, with practically all of the employment decline in the durable goods sector—even though one of the major hard goods industries (steel) was operating at very high levels in anticipation of the strike.

For the remaining period of 1959 the employment and unemployment situation was significantly affected by the 116-day steel strike which, especially toward the end of calendar 1959, was generating a substantial amount of secondary unemployment. By December of that year, unemployment was a little over 3½ million, at a seasonally adjusted unemployment rate of about 6 percent.

With the resumption of steel production in early 1960 and the end of the winter season, both employment and unemployment took on an improved cast. By May 1960, the spring upturn was apparently on its way. Unemployment stood at 3,459,000 that month; the seasonally adjusted unemployment rate, at 4.9 percent was the same as May 1959; total employment, at 67,208,000 was a record for the month; the total employment figure in May 1960 was about 1 million higher than at the same time in 1959; payroll employment was also up in most nonagricultural industries over the year May 1959–60.

RECENT DEVELOPMENTS

Since May of this year, however, there have been developing many signs of a downturn even though overall employment has stayed relatively very high. Every one of the first 10 months of this year represented a record total employment for the month. Two of them (June and July) were record all-time highs. The same pattern has been shown for total nonagricultural employment as well.

On an over-the-year basis, this is the way total employment looked during the first 10 months of this year (excluding Alaska and Hawaii):

Difference in total employment between 1960 and 1959

[Millions]

January 1960	+1.0	June	+1.0
February	+1.5	July	+.8
March	+.2	August	+.8
April	+.9	September	+1.1
May	+.9	October	+.4

During a year like 1958 when the U.S. was definitely in a downturn, the pattern ran as follows:

Difference in total employment between 1958 and 1957

[Millions]

January 1958	−.4	July	−2.0
February	−1.2	August	−1.0
March	−1.6	September	−1.0
April	−1.4	October	−.7
May	−1.1	November	−.2
June	−1.5	December	−.4

The fact that total employment held up rather well for most of 1960 has been ascribed to the growth in our population and labor force—one of the overall long-term trends we described at the beginning of this paper. This no doubt played a part—although our population was also rising during 1958 when employment was doing just the reverse.

Perhaps more important was another of the long-term developments we alluded to before: the continued growth in the service-producing industries.

Between May and October 1960, total payroll employment seasonally adjusted (wage and salary workers in nonagricultural establishments) has gone down by about a quarter of a million. While most of the service-producing industries have held their own or gone up, the goods-producing industry par excellence—manufacturing—has gone down by about 400,000 workers.

Again, on a seasonally adjusted basis, about 60 percent of the manufacturing decline has occurred within the durable goods sector, 40 percent of the decline among the nondurables. By far the biggest drop has taken place in the metal-working industries, especially in steel and machinery. Textiles and apparel have also exhibited weakness more recently among the nondurables. All in all, every one of the 21 industry groups within manufacturing have shown a decline since May 1960, except printing.

The factory workweek has followed pretty much the same course. High in January 1960 under the impetus of the post steel strike activity, it declined through April—but mostly because of bad weather and holidays. Since May (our reference point) however, the downturn in hours has been clear. Although the workweek in manufacturing went up seasonally in October, mostly because of high auto production that month, the figures still show a 0.7 hour drop between May and October on a seasonally adjusted basis, with the preponderant majority of individual industries also showing declines in the workweek during that period of time.

All of this has shown up in a rise in unemployment. Between May and October, total unemployment in the United States went from 3,459,000 to 3,579,000. In between these months, unemployment went up as the young people entered the labor force in the summer, then dropped as they exited back to school. The slight increase May to October comes in the face of an expected decline for the period; as a result of the seasonally adjusted unemployment rate moved up from 4.9 percent in May to 6.4 percent in October—the latter being the highest since December 1958, when the rate was also 6.4 percent.

At this point in time and against the background of our latest available data (October 1960) we therefore note a developing downturn in a number of critical goods-producing industries and unemployment at a level higher than expected for the time of the year. Total and nonagricultural employment remain relatively very high, in good part because of continued growth in the service-producing industries. For those who are at work, overtime hours are still relatively high (averaging 2½ hours a week in manufacturing in October 1960). Factory weekly earnings also moved up, reaching, in fact, a high for the month in October 1960.

THE CHARACTERISTICS OF THE UNEMPLOYED

The Federal Government in recent years has made available a substantial amount of information on who and where the unemployed are. An examination of this dimension of unemployment gives a great deal of depth to our perception of the unemployment problem and also helps to give a sense of direction to programs and policies for ameliorating the problem.

There are at least five major points to be made briefly in this connection:

1. *Industry.*—In view of both the long-term and short-term industry developments we have described, it will come as no surprise to find that the highest unemployment rates are found in a number of the more volatile goods-producing industries. In October 1960, the rate of unemployment nationwide, not adjusted for seasonality, was 5 percent. In such goods-producing industries as mining (8 percent) and construction (8 percent), however, the rates were much higher. The rates of unemployment were particularly high in some of the critical manufacturing industries. Primary metals (steel) with a rate of 12.1 percent and autos with a rate of 9.1 percent were significantly above the national average. In such other metalworking sectors as electrical and nonelectrical machinery, the rates were only a little over 5 percent, but well above the levels of October a year ago. In the nondurables sector, workers in the apparel industry continue to show a rate of unemployment (10.6 percent) double the national average.

For some months now, the Bureau of Employment Security in the Labor Department has been making monthly sample surveys of the personal and economic characteristics of the insured unemployed, and they also confirm this industrial pattern among those claiming unemployment insurance benefits under State programs. They show, for example, that the higher rates of insured unemployment prevail among those from the steel industry and they also show the growing unemployment in the metalworking sector generally. In a report covering the May to August 1960 quarter, these reports show that workers from metalworking occupations accounted for 22 percent of all insured unemployed men in August as against 15 percent in May.

2. *Occupation.*—In view, again, of the longer term occupational trends discussed, it will also come as no surprise to find major occupational differentials in unemployment. The differentials here have prevailed for many years, through all phases of the business cycle. Unemployment always has been highest among the unskilled and semiskilled workers, lowest among the professional, technical, and managerial personnel.

Viewed against the seasonally unadjusted rate of unemployment of 5 percent in October 1960, the rates for professional personnel (1.5 percent), clerical personnel (4.1 percent), sales people (3.2 percent), and skilled craftsmen (4.3 percent) were relatively low. But the unemployment rate for semiskilled operatives was 7.3 percent and for unskilled laborers was 10.9 percent. These latter two groups, incidentally, accounted for almost 40 percent of all the unemployed in October 1960.

The skill pattern in unemployment was strikingly confirmed by the Bureau of Employment Security study of the occupational distribution of the insured unemployed in May and August 1960 to which we have already referred. It will be recalled that between those two dates, workers in the metalworking industries rose from 15 to 22 percent of the insured unemployed men. Here, definitely, was a sector for which all evidence (including the steel production rate) indicated a definite downturn. Between those two dates, the number of unskilled among the insured unemployed men in this section rose 93 percent; the number of semiskilled unemployed rose 44 percent; the number of skilled unemployed rose only 8 percent.

3. *Age.*—Throughout the postwar years, one age group has had by far the highest rate of unemployment—teenagers (14 to 19 years of age). The present situation is no exception. This perhaps is not surprising since many of these youngsters do change jobs more frequently at the beginning of their career development, have had little work experience, do not have the protection of long seniority, etc.

Recent studies by the Labor Department, however, show that a substantial part of the unemployment among young workers can be traced to the young people who drop out of school before getting their high school diplomas. We have found that the unemployment rate among these dropouts was, on the average, about double that among those who finished high school. These findings, incidentally, square with the data just presented on unemployment by occupation, which show the relatively higher joblessness among those with the least amount of education, training and skill development.

At any rate, the teenage group shows by far the highest unemployment rates, followed closely by the 20-to-24-year age group which is also near the beginning of its work careers. All together, the young workers (under 25 years of age) made up about 17 percent of the civilian labor force in October 1960, but accounted for about one-third (32 percent) of all the unemployed that month.

Since May of this year, unemployment (seasonally adjusted) has risen more sharply among men and women 20 years of age and over than among younger workers. The rates of unemployment among the adult workers are still generally below the national average, but have been moving up since they are the ones principally affected by recent job cutbacks in manufacturing and related industries.

One more point on the matter of age. Teenagers in the labor force this summer—although subject as usual to the highest unemployment rates—did fare about as well as they did last year. Here is the comparative record for 1959 and 1960:

Teenagers in the labor force

[Thousands]

	Civilian labor force	Employed	Unemployed	Unemployment rate
1960—May	5,573	4,807	765	13.7
June	7,792	6,224	1,569	20.1
July	7,847	6,827	1,020	13.0
August	7,243	6,438	805	11.1
September	5,680	5,015	665	11.7
October	5,624	4,961	663	11.8
1959—May	5,214	4,524	690	13.2
June	7,095	5,782	1,313	18.5
July	7,314	6,307	1,007	13.8
August	6,893	6,102	791	11.5
September	5,338	4,790	598	11.1
October	5,336	4,731	605	11.3

As of October 1960, we had about 300,000 more teenagers in the labor force than in October a year ago, with an unemployment rate just about the same for both years. As we have indicated, the numbers of these young workers will go up substantially in the immediate years ahead and represent one of the major challenges we have to face.

4. *Marital status.*—There has been considerable concern over the past several years with the impact of unemployment on married men with families. Actually, of course, most adult males do marry and they automatically are bound to make up a considerable proportion of the work force, of the employed, of the unemployed.

In looking at the rates of unemployment among men we find the following record:

Unemployment rates for men by marital status, October 1957–60

	1960	1959	1958	1957
All men	4.7	4.3	5.3	3.5
Married, spouse present	3.4	2.9	3.8	2.4
Married, spouse absent	5.5	6.9	9.3	6.0
Widowed or divorced	6.8	5.8	8.7	5.6
Single	10.0	9.8	11.1	7.8

Married men with wives and families present have the lowest rates of unemployment at all stages of the business cycle as well as now. Their unemployment rate in October 1960, at 3.4 percent, was below that of all men, and only about a third of the rate for single men. It has, however, been edging up during the past year, as the table indicates. So far as the single man is concerned, his relatively higher rate is an indication of his youth, and, as we have already indicated, the young have the highest rate of unemployment.

5. *Color.*—Finally, unemployment is also much higher for the Negroes than for white workers. In October 1960 there were about 700,000 unemployed Negro workers, accounting for almost one-fifth of all the unemployed, although they make up closer to one-tenth of the labor force.

These differentials stem in large part from a factor we have been stressing throughout this testimony—the importance of education and skill development. The fact is that the Negro workers are concentrated in unskilled and semiskilled occupations where unemployment is high to begin with. Thus, even

though Negroes account for only a shade over 10 percent of all workers, they make up 28 percent of all unskilled laborers—and as we noted before, this is where the unemployment rates are highest. On the other hand, only about 3½ percent of all professional and managerial workers are Negroes—and here is where unemployment rates are lowest.

THE DURATION OF UNEMPLOYMENT

When all is said and done, one of the most important problems about unemployment refers to the question: How long have the unemployed been out of work?

At any given time, there are always a significantly large group of unemployed workers who have been out of a job for relatively short periods of time. As this committee has heard a number of times, job mobility, turnover, migration, are prime characteristics of the American labor force—and play a big role in generating this kind of short-term or frictional or transitional unemployment. So do many of the seasonal movements. In an average month, 3 or 4 million persons enter the labor force and nearly the same number leave. A substantial part of these are women and students who take seasonal jobs in agriculture, in resort areas, in canneries, in stores during the Christmas season, etc.

For this reason, too, there is almost always a heavy turnover among the unemployed. Here is what happened between September and October 1960, a by no means atypical situation:

Unemployed in September 1960	3,400,000
Reductions in unemployment	−1,600,000
Found jobs	−1,100,000
Left the labor force	−500,000
Still unemployed in October 1960	1,800,000
Additions to unemployment	+1,800,000
Lost jobs	+1,200,000
Entered the labor force	+600,000
Unemployed in October 1960	3,600,000

Thus, a little less than half of the people unemployed in September 1960 either found jobs or exited from the job market altogether; about half were still unemployed in October; and another 1.8 million became newly unemployed—either through losing jobs or entering the job market in search of work.

As a result of all this shifting around, there are always bound to be a large number of workers unemployed for short spans of time. In October 1960, about 45 percent of all the unemployed had been out of work for less than 5 weeks. While the proportion of unemployed who have been out of work for this short a period obviously moves with the season and the stage of a business cycle, the figure has been running between 40 and 50 percent for a substantial period of time.

It is among the long-term unemployed, of course, that we find the most serious problems of unemployment. In this group are found some of the most intractable problems of all, for example, the structural unemployment generated by occupational, industrial, and geographical shifts and technological developments. Here, too, are those who have experienced long periods of cyclical unemployment, especially in the later periods of a business turn.

In October 1960, about 28 percent of all the unemployed had been out of work for 15 weeks or more—the group included in the description "long-term unemployed." Although this proportion was below the 37-percent long-term unemployment figure of October 1958, it was already above the 22-percent figure of October a year ago.

In terms of numbers, the course, of long-term unemployment has been as follows: During the 1958 downturn, the number of persons unemployed for 15 weeks or more moved up very substantially. In October 1958, they numbered 1.4 million—almost triple the October 1957 figure. With the improvement in 1959, the long-term unemployed fell substantially—and by October 1959 totaled 700,000—or half of the October 1958 figure. For 4 months in 1960 (June, July, August, and September) long-term unemployment held at about 800,000. But in October it rose to the 1 million level, putting it about 300,000 above October a year ago, double the October 1957 level.

The long-term unemployed follow very closely in pattern the major characteristics of the overall unemployed discussed before.

Thus, more than two out of every five of the long-term unemployed fall into the semiskilled and unskilled categories of workers. These, then, have both a high level and a high duration of unemployment. On the other hand, while long-term unemployment has been increasing among white collar workers too, they make up about 40 percent of the labor force, but only 20 percent of the long-term unemployed.

Long-term joblessness hits harder at the Negro worker. About 42 percent of all Negro men unemployed in October 1960 were out of work for 15 weeks or more—half again as high as for white unemployed men.

The rate of long-term unemployment is highest among workers in the durable goods industries, where about 1 in 3 of the unemployed have been out for 15 weeks or more.

Finally, the evidence continues to show that the older worker also faces a major problem of long-term unemployment. The older man does not have a significantly higher unemployment rate than workers in other age groups, but the duration of his unemployment is higher. About 38 percent of the unemployed men 45 to 64 years of age were in the long-term unemployed category in October 1960.

PART-TIME EMPLOYMENT

One other phase of the overall employment and unemployment situation is represented by the numbers of persons at work on full-time and part-time jobs. Information is available on the trends in the numbers of full-time workers and the number of them who work part time for economic reasons or do so voluntarily.

All these three categories have increased over the year. Between the third quarter of 1959 and the corresponding period of 1960, the number of workers on full-time schedules rose by 400,000. Voluntary part-time work—a phenomenon which has exhibited a substantial growth in the postwar period—also went up by 300,000 during the same period of time. Most of these, as expected, were women and teenagers in the trade and service industries.

However, there also has been an increase in the number of regular full-time workers who have been cut back to part time because of economic reasons. In the third quarter of 1960 they averaged about 1.2 million—up 300,000 over the same quarter of 1959. Practically all of the over-the-year increase occurred among factory workers, and they now account for about one out of every two workers on reduced workweeks—confirming again the concentration of the recent downturn in the manufacturing sector of the economy.

AREA DEVELOPMENTS

Every business turn emphasizes again a longstanding phenomenon of the American employment picture: the concentration of a significant amount of joblessness in areas of "substantial and persistent labor surplus"—defined as areas where the unemployment rate is 6 percent or more (for more than just seasonal or temporary factors) and where the unemployment rate has been for some time significantly and substantially higher than the national average.

Twenty-two such major labor market areas were identified by the Bureau of Employment Security in its last report (for September 1960) and most of them can be identified as areas whose unemployment problems go back for a long time in the past. Of the 19 areas in the continental United States (3 are in Puerto Rico) about half are located in 2 States: 4 (Fall River, Lawrence-Haverhill, Lowell, and New Bedford)—in Massachusetts, and 5 (Altoona, Erie, Johnstown, Scranton, and Wilkes-Barre-Hazleton)—in Pennsylvania. These, of course, emphasize the long-term declines in coal and textiles. Others such as Detroit, Muskegon, Evansville, Terre Haute, and Wheeling focus attention on the declines in the metalworking sector of the economy. There are, in addition, about 75 smaller areas located in 23 States included in this classification.

The Bureau of Employment Security regularly classifies on a bimonthly basis about 150 major labor market areas (including all of the above) in terms of their current labor supply-demand situation. For all those whose unemployment rate is 6 percent or more, where jobseekers are in excess of job openings and where this situation is expected to continue over the next 4 months, the term areas of "substantial labor surplus" is applied.

Back in September 1958, 89 areas were so classified. With the improvement in the economic situation, this number was cut substantially to 35 by September 1959. Since then the number of these areas have edged up to 37 in July 1960 and 42 in September 1960.

The unemployed in these areas are not only numerically significant, but represent one of the hard cores of the overall problem of unemployment. The areas of substantial labor surplus account for about 12 percent of the country's nonfarm wage and salary workers and contribute 17 percent of the total unemployed.

Experience has shown that the jobless worker in these areas finds it difficult to shift to a new line of work. Even if there are openings in his own community, they tend to be in trade and service activities which hire mostly women and younger workers. And even if a job shift within the community is possible the unemployed worker is faced with the decision of accepting wages much lower than he is accustomed to getting. Here again, incidentally, the more mature worker with a family is at a disadvantage.

These difficulties become all the more severe when the worker considers movement from the area altogether. Such a step may involve an irrevocable decision to abandon hard-earned job rights in a plant which might possibly reopen, sale of a home, breaking up of community and school ties. Then again, the prospect of getting a job does not necessarily improve just by moving.

The Congress has considered various proposals relating to area development. Perhaps most needed are measures which will help these areas renew their economic potential and which will help the individuals involved endow themselves with new skills, making them more adaptable and more flexible so that their prognosis for reemployment may be improved.

This committee will be receiving testimony from others relating to the outlook for the future. It may be helpful, however, to set down some projections which can serve as a basis for looking ahead.

One measure of the developments for the immediate future lies in seasonal projections of unemployment. Taking off from the latest figures on unemployment (October 1960), it is possible to answer the following question: If only seasonal forces prevail, what would the level of unemployment be in the months ahead? In other words, assuming neither improvement nor further deterioration in the employment situation, what would the course of unemployment be?

Seasonally projected unemployment, October 1960 to April 1961

[Thousands]

October 1960 (actual)	3,579	February	5,282
November	4,088	March	5,046
December	4,247	April	4,683
January 1961	5,187		

An assessment of possible trends in the very immediate future depends a great deal upon the particular part of the season of the year one is taking off from. Today, we know that the next few months normally witness an increase in unemployment because of seasonal declines in agriculture, construction, and other outdoor activities which prevail in midwinter. On a seasonally projected basis alone therefore—and it should be emphasized that this is not a prediction or forecast, but rather is based upon an assumption of no change in the seasonally adjusted rate of unemployment of 6.4 percent in October 1960—unemployment would move past the 5 million mark in early 1961. To the extent that the underlying economic situation improves, unemployment will, of course, fall short of these figures; to the extent that the opposite occurs, unemployment would move above these levels.

These projections should also be viewed against one other matter of major import—developments in the size of the labor force itself.

The civilian labor force in the third quarter of 1960 was at a seasonally adjusted level of 70.8 million. By about this time next year (fourth quarter 1961) the working age population will have increased by about 3 million. If the expected long-term developments in labor force participation rates among the various age and sex groups continue to operate, this would give us an increase in the civilian labor force of about 1½ million between third quarter 1960 and fourth quarter 1961.

Whether this 1½ million growth in the labor force actually takes place, however, is going to depend in some part upon general economic conditions, since the evidence of past years shows that labor force participation among women and young people is affected by the very existence of job opportunities.

A further downturn in the underlying economic situation would generate additional unemployment from two sources—disemployment among those now on the job and failure to absorb into employment some part of the new labor force growth. An improvement in the underlying economic situation, on the other hand, would do the opposite—by generating the reemployment of the jobless as well as the absorption of new labor force growth.

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(Thousands of persons 14 years of age and over)

Year and month	Total noninstitutional population	Total labor force including Armed Forces: Number	Total labor force including Armed Forces: Percent of noninstitutional population	Civilian labor force: Total	Civilian labor force: Employed: Total	Civilian labor force: Employed: Agriculture	Civilian labor force: Employed: Nonagricultural industries	Civilian labor force: Unemployed: Number	Civilian labor force: Unemployed: Percent of labor force: Not seasonally adjusted	Civilian labor force: Unemployed: Percent of labor force: Seasonally adjusted	Not in labor force
1957: January	119,614	68,638	57.4	65,821	62,578	4,935	57,643	3,244	4.9	4.2	50,973
February	119,745	69,128	57.7	66,311	63,190	5,195	57,996	3,121	4.7	4.0	50,617
March	119,899	69,562	58.0	66,746	63,865	5,434	58,431	2,882	4.3	3.8	50,337
April	120,057	69,771	58.1	66,951	64,261	5,755	58,506	2,690	4.0	3.9	50,286
May	120,199	70,714	58.8	67.893	65,178	6,659	58,519	2,715	4.0	4.0	49,485
June	120,383	72.661	60.4	69,842	66,504	7,534	58,970	3,337	4.8	4.4	47.722
July	120,579	73,051	60.6	70,228	67,221	7,772	59,449	3,007	4.3	4.2	47,528
August	120,713	71,833	59.5	68,994	66,385	6,823	59,562	2,609	3.8	4.2	48,880
September	120,842	71,044	58.8	68,225	65,674	6,518	59,156	2,552	3.7	4.5	49,797
October	120,983	71,299	58.9	68,513	66,005	6,837	59,168	2,508	3.7	4.7	49,684
November	121,109	70,790	58.5	68,061	64,873	5,817	59,057	3,188	4.7	5.2	50,318
December	121,221	70,458	58.1	67,770	64,396	5,385	59,012	3,374	5.0	5.3	50,763
1958: January	121,325	69,379	57.2	66,732	62,238	4,998	57,240	4,494	6.7	5.8	51,947
February	121,432	69,804	57.5	67,160	61,988	4,830	57,158	5,173	7.7	6.5	51,627
March	121,555	70,158	57.7	67.510	62,311	5,072	57,239	5,198	7.7	6.8	51,397
April	121,656	70,681	58.1	68,027	62,907	5,558	57,349	5,120	7.5	7.2	50,975
May	121,776	71,603	58.8	68,965	64,061	6,272	57,789	4,904	7.1	7.2	50.173
June	121,900	73,049	59.9	70,418	64,981	6,900	58,081	5,437	7.7	7.0	48,851
July	121,993	73,104	59.9	70,473	65,179	6,718	58,461	5,294	7.5	7.3	48,889
August	122,092	72,703	59.5	70,067	65,367	6,621	58,746	4,699	6.7	7.5	49,389
September	122,219	71,375	58.4	68,740	64,629	6,191	58,438	4,111	6.0	7.2	50,844
October	122,361	71,743	58.6	69,111	65,306	6,404	58,902	3,805	5.5	7.1	50,618
November	122,486	71,112	58.1	68,485	64,653	5,695	58,958	3,833	5.6	6.2	51,374
December	122,609	70,701	57.7	68,081	63,973	4,871	59,10	4,108	6.0	6.4	51,909

Table 1.--Employment Status of the Noninstitutional Population
January 1957 to Date (cont'd.)
(Thousands of persons 14 years of age and over)

Year and month	Total noninstitutional population	Total labor force including Armed Forces		Civilian labor force							Not in labor force
					Employed			Unemployed			
		Number	Percent of noninstitutional population	Total	Total	Agriculture	Nonagricultural industries	Number	Percent of Labor Force: Not seasonally adjusted	Percent of Labor Force: Seasonally adjusted	
1959: January	122,724	70,027	57.1	67,430	62,706	4,693	58,013	4,724	7.0	6.0	52,697
February	122,832	70,062	57.0	67,471	62,722	4,692	58,030	4,749	7.0	5.9	52,770
March	122,945	70,768	57.6	68,189	63,828	5,203	58,625	4,362	6.4	5.7	52,177
April	123,059	71,210	57.9	68,639	65,012	5,848	59,163	3,627	5.3	5.1	51,849
May	123,180	71,955	58.4	69,405	66,016	6,408	59,608	3,389	4.9	4.9	51,225
June	123,296	73,862	59.9	71,324	67,342	7,231	60,111	3,982	5.6	5.1	49,435
July	123,422	73,875	59.9	71,338	67,594	6,825	60,769	3,744	5.2	5.1	49,547
August	123,549	73,204	59.3	70,667	67,241	6,357	60,884	3,426	4.8	5.4	50,345
September	123,659	72,109	58.3	69,577	66,347	6,242	60,105	3,230	4.6	5.6	51,550
October	123,785	72,629	58.7	70,103	66,831	6,124	60,707	3,272	4.7	6.0	51,155
November	123,908	71,839	58.0	69,310	65,640	5,601	60,040	3,670	5.3	5.9	52,068
December	124,034	71,808	57.9	69,276	65,699	4,811	60,888	3,577	5.2	5.5	52,225
1960:[1] January	124,606	70,689	56.7	68,168	64,020	4,611	59,409	4,149	6.1	5.2	53,917
February	124,716	70,970	56.9	68,449	64,520	4,619	59,901	3,931	5.7	4.8	53,746
March	124,839	70,993	56.9	68,473	64,267	4,565	59,702	4,206	6.1	5.4	53,845
April	124,917	72,331	57.9	69,819	66,159	5,393	60,765	3,660	5.2	5.0	52,587
May	125,033	73,171	58.5	70,667	67,208	5,837	61,371	3,459	4.9	4.9	51,862
June	125,162	75,499	60.3	73,002	68,579	6,856	61,722	4,423	6.1	5.5	49,663
July	125,288	75,215	60.0	72,706	68,689	6,885	61,805	4,017	5.5	5.4	50,074
August	125,499	74,551	59.4	72,070	68,282	6,454	61,828	3,788	5.3	5.9	50,948
September	125,717	73,672	58.6	71,155	67,767	6,588	61,179	3,388	4.8	5.7	52,045
October	125,936	73,592	58.4	71,069	67,490	6,247	61,244	3,579	5.0	6.4	52,344

1/ Data for 1960 include Alaska and Hawaii and are therefore not strictly comparable with previous years. This inclusion has resulted in an increase of about half a million in the noninstitutional population 14 years of age and over, and about 300,000 in the labor force, four-fifths of this in nonagricultural employment. The levels of other labor force categories were not appreciably changed.

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and Employment Statistics

Table 2.—Employees on Payrolls of Nonfarm Industries
January 1957 to Date

(Seasonally adjusted, in thousands)

Year and month	Total	Mining	Contract construction	Manufacturing			Transportation and public utilities
				Total	Durable goods	Nondurable goods	
1957: January	52,194	808	2,798	17,030	10,017	7,013	4,181
February	52,254	807	2,831	16,978	9,991	6,987	4,161
March	52,207	803	2,859	16,949	9,952	6,997	4,164
April	52,243	812	2,855	16,947	9,940	7,007	4,157
May	52,340	814	2,891	16,930	9,928	7,002	4,158
June	52,415	823	2,899	16,909	9,921	6,988	4,159
July	52,464	828	2,847	16,876	9,893	6,983	4,163
August	52,457	820	2,805	16,826	9,863	6,963	4,179
September	52,224	814	2,782	16,678	9,726	6,952	4,170
October	52,015	802	2,763	16,604	9,681	6,923	4,141
November	51,758	789	2,710	16,455	9,562	6,893	4,104
December	51,516	784	2,679	16,252	9,393	6,859	4,070
Average	52,162	809	2,808	16,782	9,821	6,961	4,151
1958: January	51,223	766	2,652	15,965	9,155	6,810	4,045
February	50,575	747	2,455	15,648	8,895	6,753	3,990
March	50,219	733	2,573	15,389	8,717	6,672	3,930
April	50,054	723	2,624	15,243	8,566	6,677	3,890
May	50,147	718	2,698	15,202	8,498	6,704	3,877
June	50,315	713	2,698	15,275	8,556	6,719	3,888
July	50,411	709	2,693	15,312	8,596	6,716	3,877
August	50,570	701	2,711	15,330	8,605	6,725	3,867
September	50,780	707	2,698	15,529	8,801	6,728	3,858
October	50,582	708	2,698	15,358	8,625	6,733	3,887
November	50,877	708	2,690	15,693	8,937	6,756	3,875
December	50,844	709	2,550	15,701	8,956	6,745	[illegible]
Average	50,543	721	2,648	15,468	8,743	6,72[illegible]	[illegible]03

Table 2.—Employees on Payrolls of Nonfarm Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Year and month	Total	Mining	Contract construction	Manufacturing			Transportation and public utilities
				Total	Durable goods	Nondurable goods	
1959: January....	51,086	704	2,650	15,764	9,007	6,757	3,894
February...	51,194	693	2,626	15,819	9,049	6,770	3,880
March.....	51,456	688	2,719	16,006	9,192	6,814	3,885
April.....	51,887	701	2,829	16,182	9,319	6,863	3,886
May.....	52,125	708	2,787	16,372	9,462	6,910	3,917
June.....	52,407	709	2,799	16,527	9,573	6,954	3,928
July.....	52,558	714	2,800	16,580	9,635	6,945	3,920
August.....	52,023	633	2,814	16,037	9,094	6,943	3,893
September..	52,154	617	2,776	16,141	9,214	6,927	3,899
October....	52,002	621	2,762	16,022	9,129	6,893	3,900
November...	52,253	657	2,792	16,174	9,266	6,908	3,902
December...	52,674	665	2,800	16,436	9,542	6,894	3,917
Average..	51,975	676	2,767	16,168	9,290	6,878	3,902
1960: January....	52,880	658	2,775	16,562	9,655	6,907	3,941
February...	52,972	669	2,781	16,567	9,667	6,900	3,933
March.....	52,823	666	2,601	16,509	9,603	6,906	3,920
April.....	53,128	684	2,752	16,527	9,552	6,975	3,924
May.....	53,105	684	2,783	16,540	9,537	7,003	3,927
June.....	53,140	678	2,790	16,498	9,499	6,999	3,926
July.....	53,145	658	2,858	16,417	9,452	6,965	3,910
August.....	53,046	665	2,835	16,265	9,338	6,927	3,892
*September..	52,952	660	2,799	16,266	9,385	6,881	3,879
*October....	52,854	657	2,810	16,150	9,305	6,845	3,878

* Preliminary

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and Employment Statistics

Table 2.—Employees on Payrolls of Nonfarm Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Year and month	Wholesale and retail trade	Finance, insurance, and real estate	Service and miscel-laneous	Government		
				Total	Federal	State and local
1957: January....	11,275	2,321	6,268	7,513	2,230	5,283
February...	11,306	2,330	6,306	7,535	2,234	5,301
March.....	11,258	2,329	6,279	7,566	2,225	5,341
April.....	11,265	2,326	6,284	7,597	2,227	5,370
May.....	11,298	2,335	6,306	7,608	2,224	5,384
June.....	11,327	2,342	6,347	7,609	2,222	5,387
July.....	11,368	2,349	6,395	7,638	2,230	5,408
August.....	11,402	2,359	6,372	7,694	2,234	5,460
September..	11,349	2,366	6,380	7,685	2,212	5,473
October....	11,315	2,373	6,343	7,674	2,189	5,485
November...	11,290	2,372	6,367	7,671	2,170	5,501
December...	11,237	2,365	6,382	7,747	2,205	5,542
Average..	11,302	2,348	6,336	7,626	2,217	5,409
1958: January....	11,305	2,368	6,368	7,754	2,170	5,584
February...	11,235	2,367	6,367	7,766	2,173	5,593
March.....	11,116	2,360	6,330	7,788	2,163	5,625
April.....	11,050	2,356	6,352	7,816	2,172	5,644
May.....	11,087	2,370	6,360	7,835	2,173	5,662
June.....	11,105	2,367	6,392	7,877	2,195	5,682
July.....	11,121	2,363	6,433	7,903	2,203	5,700
August.....	11,175	2,377	6,420	7,989	2,214	5,775
September..	11,151	2,392	6,440	8,005	2,207	5,798
October....	11,154	2,392	6,399	7,986	2,206	5,780
November...	11,119	2,386	6,426	7,980	2,194	5,786
December...	11,143	2,385	6,448	8,049	2,221	[illegible]
Average..	11,141	2,374	6,395	7,893	2,[illegible]	[illegible]

Table 2.—Employees on Payrolls of Nonfarm Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Year and month	Wholesale and retail trade	Finance, insurance, and real estate	Service and miscel-laneous	Government		
				Total	Federal	State and local
1959: January....	11,216	2,387	6,443	8,028	2,190	5,838
February...	11,279	2,395	6,462	8,040	2,188	5,852
March.....	11,263	2,398	6,441	8,056	2,179	5,877
April.....	11,333	2,403	6,479	8,074	2,184	5,890
May.....	11,363	2,413	6,486	8,079	2,181	5,898
June.....	11,425	2,418	6,525	8,076	2,196	5,880
July.....	11,465	2,426	6,570	8,083	2,201	5,882
August.....	11,529	2,437	6,549	8,131	2,205	5,926
September..	11,464	2,452	6,584	8,221	2,197	6,024
October....	11,478	2,453	6,549	8,217	2,201	6,016
November...	11,452	2,450	6,593	8,233	2,214	6,019
December...	11,486	2,450	6,613	8,307	2,225	6,082
Average..	11,385	2,425	6,525	8,127	2,197	5,930
1960: January....	11,594	2,454	6,606	8,290	2,184	6,106
February...	11,627	2,464	6,616	8,315	2,186	6,129
March.....	11,595	2,456	6,577	8,499	2,355	6,144
April.....	11,652	2,463	6,611	8,515	2,358	6,157
May.....	11,675	2,469	6,618	8,409	2,234	6,175
June.....	11,712	2,471	6,645	8,420	2,215	6,205
July.....	11,736	2,480	6,682	8,404	2,216	6,188
August.....	11,764	2,499	6,652	8,474	2,228	6,246
*September..	11,654	2,516	6,669	8,509	2,218	6,291
*October....	11,659	2,514	6,638	8,548	2,212	6,336

*Preliminary
Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and Employment Statistics

Table 3.—Employees on Payrolls of Manufacturing Industries
January 1957 to Date

(Seasonally adjusted, in thousands)

Industry group	1957											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Manufacturing	17,030	16,978	16,949	16,947	16,930	16,909	16,876	16,826	16,678	16,604	16,455	16,252
Durable goods	10,017	9,991	9,952	9,940	9,928	9,921	9,893	9,863	9,726	9,681	9,562	9,393
Ordnance	135	134	134	133	131	131	130	130	127	123	121	120
Lumber	680	663	647	663	672	673	666	654	644	640	627	625
Furniture	369	370	372	377	379	384	385	385	380	375	368	365
Stone, clay, glass	563	555	553	554	556	557	547	554	556	550	547	537
Primary metals	1,354	1,347	1,337	1,333	1,329	1,323	1,318	1,315	1,293	1,280	1,258	1,229
Fabricated metals	1,136	1,137	1,133	1,136	1,133	1,137	1,142	1,135	1,126	1,133	1,126	1,108
Machinery(exc.elect.)	1,777	1,785	1,788	1,776	1,761	1,747	1,751	1,736	1,736	1,710	1,669	1,630
Electrical machinery	1,223	1,219	1,215	1,212	1,217	1,229	1,249	1,251	1,251	1,230	1,209	1,178
Transportation equipment	1,953	1,959	1,951	1,926	1,917	1,906	1,872	1,857	1,770	1,809	1,817	1,804
Instruments	340	340	340	341	339	338	339	343	338	336	334	329
Miscellaneous manufacturing	487	482	482	489	494	496	494	503	505	495	486	468
Nondurable goods	7,013	6,987	6,997	7,007	7,002	6,988	6,983	6,963	6,952	6,923	6,893	6,859
Food	1,544	1,531	1,533	1,520	1,513	1,516	1,510	1,503	1,497	1,491	1,484	1,503
Tobacco	97	98	97	96	94	94	92	94	95	91	91	94
Textile prod.	1,022	1,016	1,012	1,013	1,009	1,005	1,015	1,013	1,010	1,000	978	963
Apparel	1,186	1,183	1,196	1,226	1,224	1,222	1,207	1,196	1,195	1,189	1,195	1,171
Paper	572	569	570	572	570	570	565	563	562	563	561	560
Printing & publ.	858	859	859	859	855	854	858	857	861	861	861	856
Chemicals	839	841	841	845	852	853	852	851	844	841	838	835
Petroleum & coal prod.	250	252	251	251	249	248	249	250	251	249	249	247
Rubber	273	270	270	253	263	256	266	267	266	268	267	264
Leather	372	368	368	372	373	370	369	369	371	370	369	366

Table 3.—Employees on Payrolls of Manufacturing Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Industry group	1958											
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Manufacturing	15,965	15,648	15,389	15,243	15,202	15,275	15,312	15,330	15,529	15,358	15,693	15,701
Durable goods	9,155	8,895	8,717	8,566	8,498	8,556	8,596	8,605	8,801	8,625	8,937	8,956
Ordnance	120	121	122	123	124	125	127	129	130	129	134	136
Lumber	624	607	596	598	604	622	625	623	634	642	636	642
Furniture	356	351	348	345	350	355	358	365	368	368	366	364
Stone, clay glass	528	510	501	499	502	510	522	521	529	513	519	520
Primary metals	1,179	1,130	1,100	1,066	1,057	1,071	1,070	1,077	1,103	1,108	1,140	1,150
Fabricated metals	1,073	1,035	1,013	999	991	1,008	1,022	1,030	1,057	1,024	1,053	1,050
Machinery (exc. elect.)	1,598	1,564	1,543	1,507	1,476	1,462	1,465	1,462	1,492	1,482	1,485	1,489
Electrical machinery	1,154	1,124	1,107	1,092	1,085	1,087	1,105	1,120	1,133	1,113	1,153	1,151
Transportation equipment	1,737	1,676	1,620	1,570	1,546	1,548	1,529	1,500	1,572	1,462	1,670	1,681
Instruments	325	321	315	313	310	310	311	312	313	316	318	318
Miscellaneous manufacturing	461	456	452	454	453	458	462	466	470	468	463	455
Nondurable goods	6,810	6,753	6,672	6,677	6,704	6,719	6,716	6,725	6,728	6,733	6,756	6,745
Food	1,498	1,493	1,485	1,478	1,486	1,499	1,470	1,473	1,457	1,463	1,467	1,474
Tobacco	92	94	93	91	91	90	89	88	91	88	89	88
Textile prod.	947	938	928	928	926	931	946	955	955	955	949	940
Apparel	1,158	1,144	1,113	1,138	1,166	1,165	1,171	1,152	1,163	1,164	1,177	1,167
Paper	554	548	546	546	543	542	542	548	548	550	550	549
Printing & publ.	856	856	854	854	849	847	849	853	855	853	852	849
Chemicals	836	828	817	822	822	819	816	822	818	820	819	821
Petroleum & coal prod.	247	243	240	240	237	237	237	236	237	233	236	236
Rubber	259	250	244	238	232	234	238	241	244	251	251	253
Leather	363	359	352	342	352	355	358	357	360	356	366	368

Table 3.—Employees on Payrolls of Manufacturing Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Industry group	1959											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Manufacturing	15,764	15,819	16,006	16,182	16,372	16,527	16,580	16,037	16,141	16,022	16,174	16,436
Durable goods	9,007	9,049	9,192	9,319	9,462	9,573	9,635	9,094	9,214	9,129	9,266	9,542
Ordnance	137	137	138	138	138	140	142	142	145	145	147	150
Lumber	645	628	635	650	658	670	681	671	666	662	658	664
Furniture	369	371	375	381	388	394	395	391	390	386	383	385
Stone, clay, glass	519	516	533	544	554	563	570	566	566	555	558	558
Primary metals	1,161	1,190	1,226	1,256	1,278	1,291	1,276	859	834	824	1,196	1,259
Fabricated metals	1,045	1,041	1,055	1,074	1,091	1,106	1,110	1,064	1,083	1,048	1,034	1,074
Machinery (exc. elect.)	1,504	1,534	1,561	1,576	1,612	1,633	1,651	1,654	1,685	1,660	1,637	1,654
Electrical machinery	1,162	1,170	1,176	1,190	1,215	1,241	1,272	1,278	1,302	1,302	1,289	1,300
Transportation equipment	1,689	1,679	1,702	1,706	1,710	1,704	1,693	1,620	1,685	1,692	1,511	1,656
Instruments	320	325	327	329	333	340	344	346	350	351	352	352
Miscellaneous manufacturing	456	458	464	475	485	491	501	503	508	504	501	490
Nondurable goods	6,757	6,770	6,814	6,863	6,910	6,954	6,945	6,943	6,927	6,893	6,908	6,894
Food	1,474	1,484	1,494	1,497	1,488	1,494	1,456	1,480	1,447	1,438	1,457	1,471
Tobacco	87	90	91	91	90	90	87	91	92	88	86	86
Textile prod.	942	942	949	960	969	975	992	989	987	979	960	947
Apparel	1,170	1,170	1,176	1,208	1,243	1,246	1,231	1,213	1,217	1,215	1,233	1,216
Paper	551	552	553	557	561	565	566	564	565	562	560	562
Printing & publ.	851	856	858	862	862	863	871	877	882	880	880	880
Chemicals	821	825	830	841	851	853	859	862	858	856	857	859
Petroleum & coal prod.	235	229	238	239	236	236	235	227	230	230	233	234
Rubber	257	257	261	240	233	256	270	267	273	271	267	266
Leather	369	365	364	368	377	376	378	373	376	374	375	373

Table 3.—Employees on Payrolls of Manufacturing Industries
January 1957 to Date (cont'd.)

(Seasonally adjusted, in thousands)

Industry group	1960									
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.*	Oct.*
Manufacturing	16,562	16,567	16,509	16,527	16,540	16,498	16,417	16,265	16,266	16,150
Durable goods	9,655	9,667	9,603	9,552	9,537	9,499	9,452	9,338	9,385	9,305
Ordnance	149	150	151	150	149	150	146	150	150	146
Lumber	663	655	641	651	658	664	661	651	641	634
Furniture	386	385	388	393	396	401	398	397	391	386
Stone, clay, glass	560	558	550	554	558	560	561	553	548	543
Primary metals	1,270	1,276	1,268	1,251	1,230	1,203	1,165	1,147	1,135	1,126
Fabricated metals	1,091	1,097	1,089	1,080	1,085	1,090	1,088	1,073	1,079	1,074
Machinery (exc. elect.)	1,663	1,673	1,670	1,661	1,650	1,648	1,652	1,644	1,634	1,611
Electrical machinery	1,310	1,309	1,301	1,294	1,299	1,306	1,323	1,326	1,325	1,293
Transportation equipment	1,722	1,721	1,701	1,665	1,653	1,608	1,591	1,525	1,619	1,640
Instruments	351	354	352	352	352	354	354	355	352	350
Miscellaneous manufacturing	490	489	492	501	507	515	513	517	511	502
Nondurable goods	6,907	6,900	6,906	6,975	7,003	6,999	6,965	6,927	6,881	6,845
Food	1,490	1,489	1,487	1,503	1,487	1,483	1,461	1,457	1,453	1,458
Tobacco	87	91	90	90	90	88	89	83	90	85
Textile prod.	949	943	948	955	960	962	968	963	947	934
Apparel	1,209	1,202	1,209	1,235	1,266	1,262	1,241	1,216	1,204	1,193
Paper	563	562	562	567	568	567	565	565	560	560
Printing & publ.	879	886	886	889	889	892	896	901	902	898
Chemicals	858	862	861	877	885	888	890	888	878	876
Petroleum & coal prod.	235	234	234	234	231	231	227	227	225	223
Rubber	267	268	267	263	258	258	259	259	258	255
Leather	370	363	362	362	369	368	369	368	364	363

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and
Employment Statistics

* Preliminary

Table 4.--Hours and Earnings of Factory Production Workers
January 1957 to Date

Year and Month	Total Manufacturing			Durable Goods			Nondurable Goods		
	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings
1957: January	40.2	$2.05	$82.41	40.9	$2.18	$89.16	39.1	$1.86	$72.73
February	40.2	2.05	82.41	40.9	2.17	88.75	39.2	1.86	72.91
March	40.1	2.05	82.21	40.8	2.18	88.94	39.1	1.87	73.12
April	39.8	2.06	81.99	40.5	2.18	88.29	38.8	1.87	72.56
May	39.7	2.06	81.78	40.3	2.18	87.85	38.9	1.88	73.13
June	40.0	2.07	82.80	40.5	2.19	88.70	39.2	1.89	74.09
July	39.8	2.07	82.39	40.0	2.20	88.00	39.4	1.89	74.47
August	40.0	2.07	82.80	40.3	2.21	89.06	39.5	1.88	74.26
September	39.9	2.08	82.99	40.2	2.22	89.24	39.6	1.90	75.24
October	39.5	2.09	82.56	39.8	2.23	88.75	39.0	1.90	74.10
November	39.3	2.11	82.92	39.7	2.24	88.93	38.8	1.91	74.11
December	39.4	2.10	82.74	39.7	2.24	88.93	39.0	1.92	74.88
Average	39.8	2.07	82.39	40.3	2.20	88.66	39.1	1.88	73.51
1958: January	38.7	2.11	81.66	38.9	2.24	87.14	38.3	1.92	73.54
February	38.4	2.10	80.64	38.6	2.24	86.46	38.1	1.92	73.15
March	38.6	2.11	81.45	39.0	2.25	87.75	38.1	1.93	73.53
April	38.3	2.11	80.81	38.8	2.25	87.30	37.7	1.94	73.14
May	38.7	2.12	82.04	39.1	2.26	88.37	38.1	1.94	73.91
June	39.2	2.12	83.10	39.6	2.27	89.89	38.7	1.94	75.08
July	39.2	2.13	83.50	39.4	2.28	89.83	39.0	1.94	75.66
August	39.6	2.13	84.35	39.8	2.29	91.14	39.4	1.93	76.04
September	39.9	2.14	85.39	40.2	2.30	92.46	39.5	1.95	77.03
October	39.8	2.14	85.17	40.1	2.29	91.83	39.4	1.95	76.83
November	39.9	2.17	86.58	40.3	2.34	94.30	39.4	1.96	77.22
December	40.2	2.19	88.04	40.8	2.36	96.29	39.6	1.97	78.01
Average	39.2	2.13	83.50	39.5	2.28	90.06	38.8	1.94	75.27

Table 4.--Hours and Earnings of Factory Production Workers
January 1957 to Date (cont'd.)

Year and Month	Total Manufacturing			Durable Goods			Nondurable Goods		
	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings
1959: January	39.9	$2.19	$87.38	40.4	$2.35	$94.94	39.3	$1.98	$77.81
February	40.0	2.20	88.00	40.3	2.36	95.11	39.4	1.98	78.01
March	40.2	2.22	89.24	40.8	2.38	97.10	39.5	2.00	79.00
April	40.3	2.23	89.87	40.9	2.39	97.75	39.5	2.00	79.00
May	40.5	2.23	90.32	41.1	2.40	98.64	39.7	2.00	79.40
June	40.7	2.24	91.17	41.4	2.40	99.36	39.8	2.00	79.60
July	40.2	2.23	89.65	40.5	2.39	96.80	39.8	2.01	80.00
August	40.5	2.19	88.70	40.8	2.35	95.88	40.1	2.00	80.20
September	40.3	2.22	89.47	40.8	2.37	96.70	39.8	2.03	80.79
October	40.3	2.21	89.06	40.9	2.36	96.52	39.5	2.02	79.79
November	39.9	2.23	88.98	40.1	2.38	95.44	39.6	2.03	80.39
December	40.6	2.27	92.16	41.1	2.43	99.87	39.8	2.04	81.19
Average	40.3	2.22	89.47	40.8	2.38	97.10	39.6	2.01	79.60
1960: January	40.3	2.29	92.29	41.0	2.46	100.86	39.4	2.05	80.77
February	39.8	2.29	91.14	40.4	2.45	98.98	39.0	2.05	79.95
March	39.7	2.29	90.91	40.3	2.45	98.74	38.8	2.06	79.93
April	39.3	2.28	89.60	39.9	2.44	97.36	38.6	2.06	79.52
May	39.9	2.29	91.37	40.4	2.44	98.58	39.3	2.07	81.35
June	40.0	2.29	91.60	40.4	2.45	98.98	39.5	2.08	82.16
July	39.8	2.29	91.14	39.9	2.45	97.76	39.6	2.08	82.37
August	39.8	2.27	90.35	40.0	2.43	97.20	39.5	2.07	81.77
*September	39.5	2.30	90.85	39.9	2.46	98.15	39.0	2.09	81.51
*October	39.6	2.31	91.48	40.2	2.46	98.89	38.9	2.09	81.30

*Preliminary

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and Employment Statistics

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Table 5.—Workers on Full-time and Part-time Schedules, 1955–60

(In thousands)

Work schedule	Third quarter average					
	1960	1959	1958	1957	1956	1955
Total nonfarm employment	61,367	60,586	58,548	59,389	58,753	57,089
With a job but not at work	5,445	5,651	5,119	5,104	4,962	4,704
At work:						
On full-time schedules	48,331	47,967	46,151	47,677	47,398	46,731
On part-time schedules	7,591	6,968	7,278	6,607	6,393	5,653
Economic reasons	2,727	2,383	2,851	2,212	2,122	1,947
Usually full-time	1,218	933	1,349	1,078	1,052	854
Usually part-time	1,509	1,450	1,502	1,134	1,070	1,093
Other reasons	4,864	4,585	4,427	4,395	4,271	3,706

NOTE: Above data exclude Alaska and Hawaii.

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and
Employment Statistics

Table 6.—Selected Unemployment Data, May and October 1957-60
(Persons 14 years of age and over)

Item	1957		1958		1959		1960	
	May	October	May	October	May	October	May	October
	(In thousands)							
Duration of unemployment								
Total unemployed	2,715	2,508	4,904	3,805	3,389	3,272	3,459	3,579
Less than 5 weeks	1,398	1,272	1,778	1,522	1,405	1,607	1,638	1,637
5 to 14 weeks	681	713	1,374	892	864	939	900	949
15 to 26 weeks	377	268	1,146	581	515	333	509	492
27 weeks and over	260	255	605	811	605	393	411	500
Average duration (weeks)	11.2	11.2	14.1	16.6	15.8	13.1	12.8	13.8

Table 6.—Selected Unemployment Data, May and October 1957-60 (cont'd.)
(Persons 14 years of age and over)

Item	1957		1958		1959		1960	
	May	October	May	October	May	October	May	October
	Rate 1/							
Age and Sex								
Total unemployed	4.0	3.7	7.1	5.5	4.9	4.7	4.9	5.0
Male	3.6	3.5	7.1	5.3	4.5	4.3	4.7	4.7
14 to 19 years	10.3	9.0	15.2	13.1	12.4	12.3	13.6	12.3
20 to 24 years	7.1	6.5	13.3	9.5	6.5	6.7	7.7	7.1
25 to 44 years	2.5	2.7	6.2	4.3	3.6	3.2	3.5	3.7
45 years and over	3.1	2.9	5.5	4.4	3.7	3.8	3.7	3.9
Female	4.8	4.0	7.2	5.9	5.7	5.4	5.4	5.7
14 to 19 years	12.6	6.5	15.0	10.1	14.5	10.1	14.0	11.2
20 to 24 years	5.5	4.8	9.0	7.7	6.9	7.2	8.0	7.0
25 to 44 years	4.5	4.1	7.2	5.8	4.9	5.3	4.7	5.7
45 years and over	3.0	3.0	4.8	4.4	4.2	3.8	3.2	4.0
Marital Status and Sex								
Male	3.6	3.5	7.1	5.3	4.5	4.3	4.7	4.7
Single	8.2	7.8	13.3	11.1	10.1	9.8	10.3	10.1
Married, wife present	2.4	2.4	5.3	3.8	3.0	2.9	3.1	3.4
Other marital status	6.2	5.8	11.8	8.9	7.7	6.2	7.8	6.3
Female	4.8	4.0	7.2	5.9	5.7	5.4	5.4	5.7
Single	6.7	4.1	8.5	6.1	7.7	5.9	8.1	6.4
Married, husband present	3.7	3.8	6.8	5.8	4.7	4.9	4.3	5.5
Other marital status	5.0	4.4	6.8	5.9	6.0	6.0	5.2	5.6
Color and Sex								
White	3.6	3.3	6.4	5.0	4.3	4.1	4.4	4.6
Male	3.2	3.1	6.3	4.8	3.9	3.7	4.1	4.2
Female	4.5	3.8	6.8	5.4	5.1	5.0	4.9	5.4
Nonwhite	7.2	6.3	12.7	9.8	9.5	9.0	9.0	8.4
Male	7.4	6.8	14.4	10.4	9.5	9.7	9.4	8.7
Female	6.8	5.5	10.2	8.9	9.4	8.3	8.4	7.8

Table 6.--Selected Unemployment Data, May and October 1957-60 (cont'd.)

(Persons 14 years of age and over)

Item	1957		1958		1959		1960	
	May	October	May	October	May	October	May	October
	Rate 1/							
Industry 2/								
Total unemployed	4.0	3.7	7.1	5.5	4.9	4.7	4.9	5.0
Experienced wage and salary workers	4.3	3.9	7.6	5.8	4.9	4.8	4.9	5.2
Agriculture	4.7	4.3	8.2	4.8	6.5	4.9	6.1	4.9
Nonagricultural industries	4.4	3.9	7.5	5.8	4.9	4.8	4.8	5.2
Mining, forestry, fisheries	5.1	7.0	13.0	6.9	8.0	11.1	6.0	8.5
Construction	8.3	6.1	11.6	9.1	10.2	8.2	10.1	8.0
Manufacturing	5.2	4.9	11.2	7.3	5.4	5.4	5.7	6.1
Durable goods	4.6	5.4	12.6	8.6	5.0	5.3	5.7	6.5
Lumber and wood products	7.5	7.2	12.1	6.9	7.9	7.8	7.0	8.0
Furniture and fixtures	4.4	7.5	11.1	8.8	8.5	3.9	7.6	4.4
Stone, clay and glass products	3.4	4.1	11.3	7.0	3.5	3.6	4.8	3.7
Primary metal industries	3.8	3.5	13.9	7.5	3.4	5.4	5.0	12.1
Fabricated metal products	4.9	3.7	10.2	8.2	3.7	8.4	6.2	4.7
Machinery, except electrical	2.5	4.5	9.9	8.1	3.1	3.9	4.2	5.2
Electrical machinery	5.5	3.7	11.3	6.4	5.9	2.8	5.4	5.6
Transportation equipment	5.1	8.3	15.8	10.9	5.1	5.8	6.8	6.6
Automobiles	6.0	11.7	27.2	16.5	5.9	5.2	8.4	9.1
All other	4.3	5.5	6.8	7.0	4.4	6.4	5.5	4.5
Other durable goods	5.2	5.1	13.2	10.1	8.1	5.8	6.2	5.3
Nondurable goods	6.0	4.2	9.3	5.7	5.9	5.5	5.6	5.7
Food and kindred products	7.1	3.5	8.4	4.8	7.7	5.6	5.7	5.6
Textile-mill products	8.7	6.5	11.4	8.2	5.8	7.5	5.5	6.1
Apparel and other finished textile products	10.4	6.4	16.4	9.5	9.7	9.5	9.9	10.6
Printing and publishing industry	2.0	2.4	4.9	3.0	2.8	3.1	3.7	3.2
Chemicals and allied products	2.2	2.8	5.9	4.4	2.7	3.9	2.3	3.1
Other nondurable goods	4.6	3.6	8.2	4.5	5.0	3.8	5.5	4.6
Transportation and public utilities	2.7	2.8	6.5	3.8	3.3	3.6	3.1	4.3
Wholesale and retail trade	4.6	3.8	6.7	5.9	5.5	5.3	5.5	6.0
Finance, insurance, and real estate	1.9	2.5	2.8	3.1	2.8	2.4	1.7	2.5
Service industries	3.2	2.9	4.1	4.7	3.5	3.9	3.2	3.8
Public administration	2.0	1.6	2.8	2.3	2.1	1.9	2.5	2.5

Table 6.--Selected Unemployment Data, May and October 1957-60

(Persons 14 years of age and over)

Item	1957 3/		1958		1959		1960	
	April	October	May	October	May	October	May	October
	Rate 1/							
Occupation								
Total unemployed	4.0	3.7	7.1	5.5	4.9	4.7	4.9	5.0
Professional, technical and kindred workers	.9	1.3	2.2	1.7	1.2	1.7	1.1	1.5
Farmers and farm managers	.3	.1	.5	.4	.3	.1	.1	.4
Managers, officials, and proprietors, except farm	1.0	.8	1.8	1.7	1.2	1.0	1.3	1.5
Clerical and kindred workers	2.6	2.9	4.8	4.0	3.4	3.7	3.4	4.1
Sales workers	2.4	2.7	3.3	2.9	3.3	3.0	3.4	3.2
Craftsmen, foremen, and kindred workers	4.0	3.2	7.0	5.5	4.3	4.3	3.9	4.3
Operatives and kindred workers	6.8	5.9	13.1	8.2	6.6	6.5	7.4	7.3
Private household workers	3.3	3.6	3.9	4.6	5.0	5.1	4.0	4.5
Service workers, except private household	4.7	4.7	6.2	7.5	6.3	5.5	5.2	6.0
Farm laborers and foremen	3.4	2.5	4.4	3.1	3.2	3.0	3.7	3.4
Laborers, except farm and mine	10.2	7.1	15.4	11.1	10.2	9.8	9.9	10.9
No previous work experience	-	-	-	-	-	-	-	-

1/ Percent of civilian labor force in each category who were unemployed.
2/ Includes self-employed, unpaid family workers, and persons without previous work experience, not shown separately.
3/ Data for May 1957 not available.

Note: 1960 data include Alaska and Hawaii, but comparisons with previous years are not materially affected by this inclusion.

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and
Employment Statistics

Table 7.—Average Weekly Insured Unemployment Under State Programs,[1/]
January 1957 to date

Insured unemployed	Avg.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number (thousands)													
1957	1,450	1,726	1,718	1,579	1,464	1,337	1,238	1,268	1,133	1,150	1,218	1,490	2,085
1958	2,509	2,845	3,131	3,243	3,273	2,956	2,641	2,482	2,174	1,879	1,696	1,757	2,086
1959	1,682	2,489	2,368	2,077	1,768	1,464	1,298	1,333	1,291	1,203	1,309	1,677	1,841
1960		2,180	2,157	2,210	1,939	1,682	1,588	1,686	1,657	1,598	1,678		
Rate (actual)[2/]													
1957	3.6	4.6	4.5	4.2	3.8	3.5	3.2	3.2	2.9	2.9	3.1	3.8	5.3
1958	6.4	7.2	7.9	8.2	8.2	7.4	6.6	6.2	5.5	4.7	4.3	4.4	5.3
1959	4.4	6.3	6.0	5.3	4.5	3.8	3.4	3.5	3.4	3.1	3.4	4.4	4.8
1960		5.6	5.5	5.7	4.9	4.3	4.0	4.3	4.2	4.0	4.2		
Rate (seasonally adjusted) [2/]													
1957		3.5	3.5	3.4	3.3	3.3	3.4	3.5	3.5	3.9	4.3	4.8	5.3
1958		5.5	6.0	6.6	7.1	7.1	6.9	6.7	6.7	6.2	6.0	5.6	5.3
1959		4.9	4.6	4.3	3.9	3.6	3.5	3.7	4.1	4.1	4.8	5.5	4.8
1960		4.3	4.2	4.6	4.2	4.1	4.2	4.6	5.1	5.3	5.9		

1/ Includes data for Alaska and Hawaii for the entire period.
2/ Insured unemployment as percent of average covered employment in a 12 month period ending 6 to 9 months prior to month of reference.

SOURCE: Bureau of Employment Security

Prepared by: U. S. Department of Labor
Bureau of Labor Statistics
Division of Manpower and
Employment Statistics

Chart I.

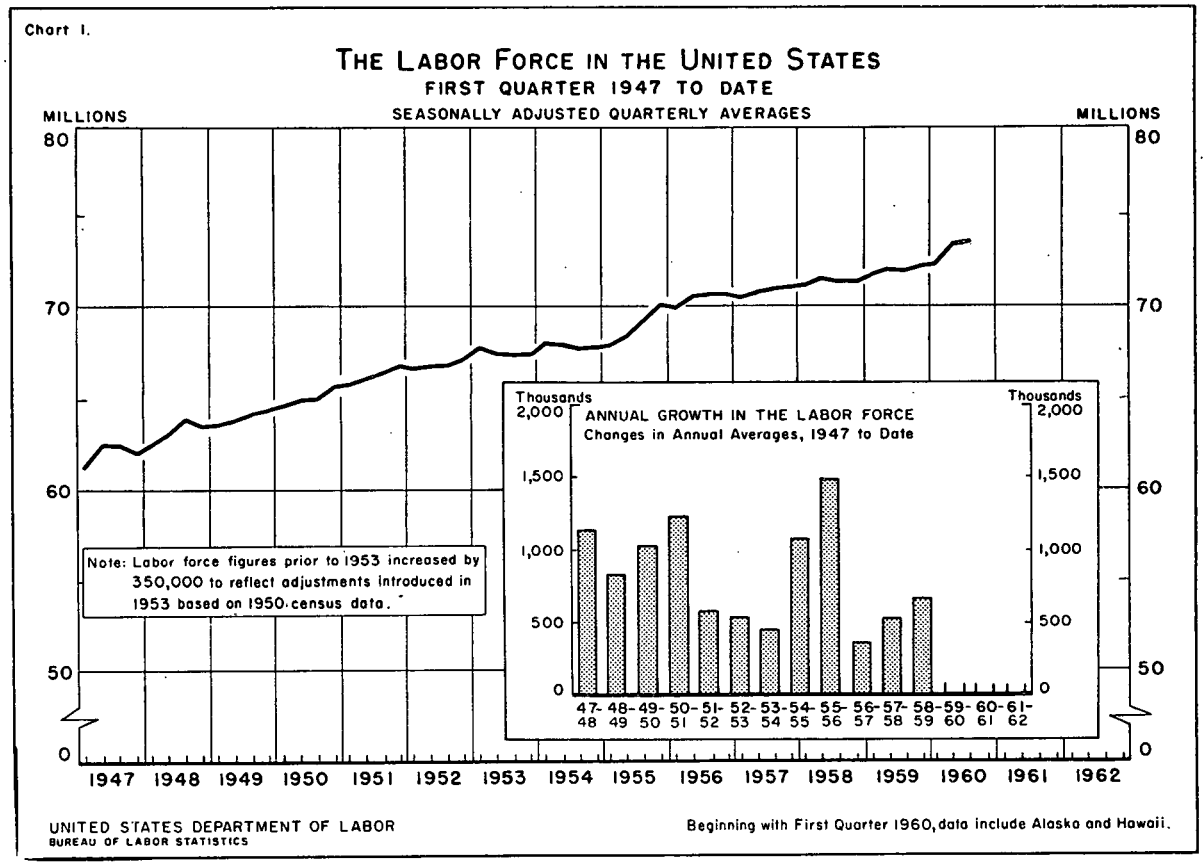

THE LABOR FORCE IN THE UNITED STATES
FIRST QUARTER 1947 TO DATE
SEASONALLY ADJUSTED QUARTERLY AVERAGES
MILLIONS
MILLIONS
80
70
60
50
0
Note: Labor force figures prior to 1953 increased by 350,000 to reflect adjustments introduced in 1953 based on 1950 census data.
Thousands
ANNUAL GROWTH IN THE LABOR FORCE
Changes in Annual Averages, 1947 to Date
2,000
1,500
1,000
500
0
47-48 48-49 49-50 50-51 51-52 52-53 53-54 54-55 55-56 56-57 57-58 58-59 59-60 60-61 61-62
1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
Beginning with First Quarter 1960, data include Alaska and Hawaii.

Chart 2.

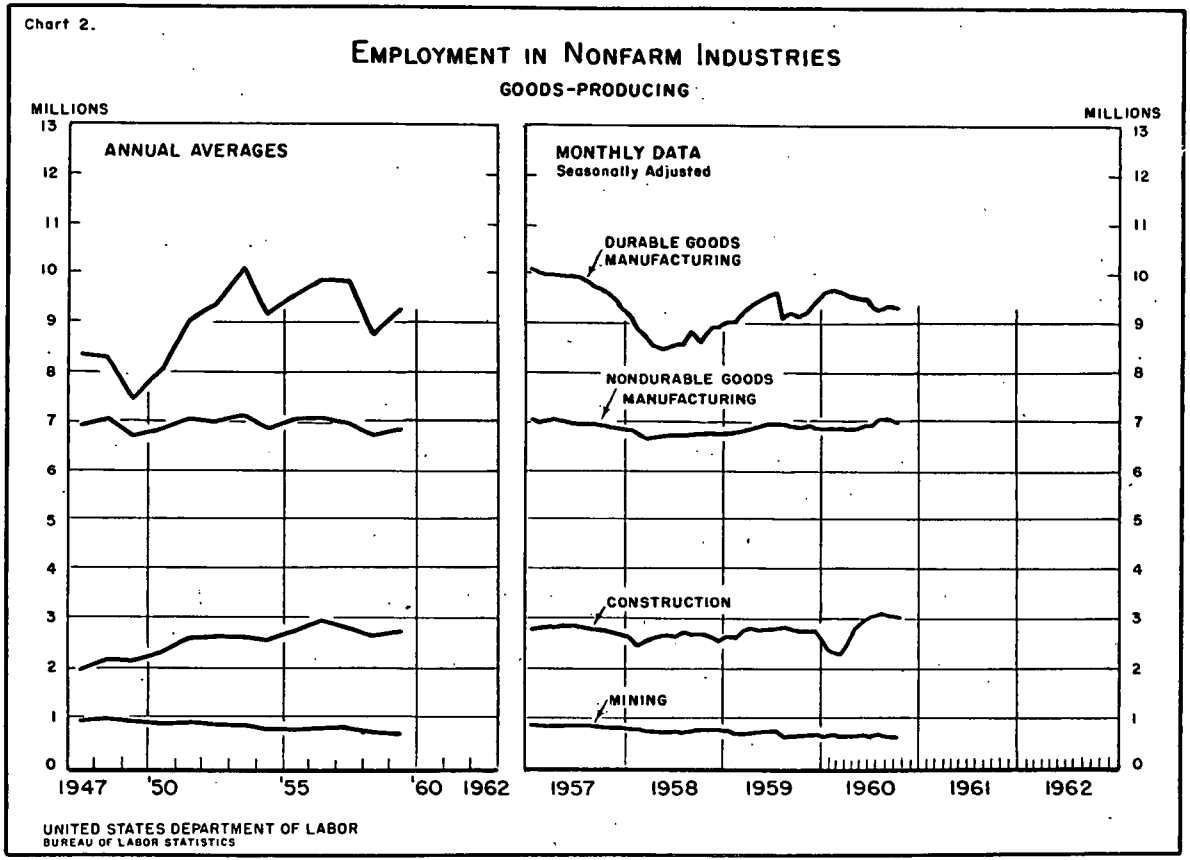

EMPLOYMENT IN NONFARM INDUSTRIES
GOODS-PRODUCING
MILLIONS
ANNUAL AVERAGES
MONTHLY DATA
Seasonally Adjusted
DURABLE GOODS MANUFACTURING
NONDURABLE GOODS MANUFACTURING
CONSTRUCTION
MINING
0
1
2
3
4
5
6
7
8
9
10
11
12
13
1947
'50
'55
'60
1962
1957
1958
1959
1960
1961
1962
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Chart 3.

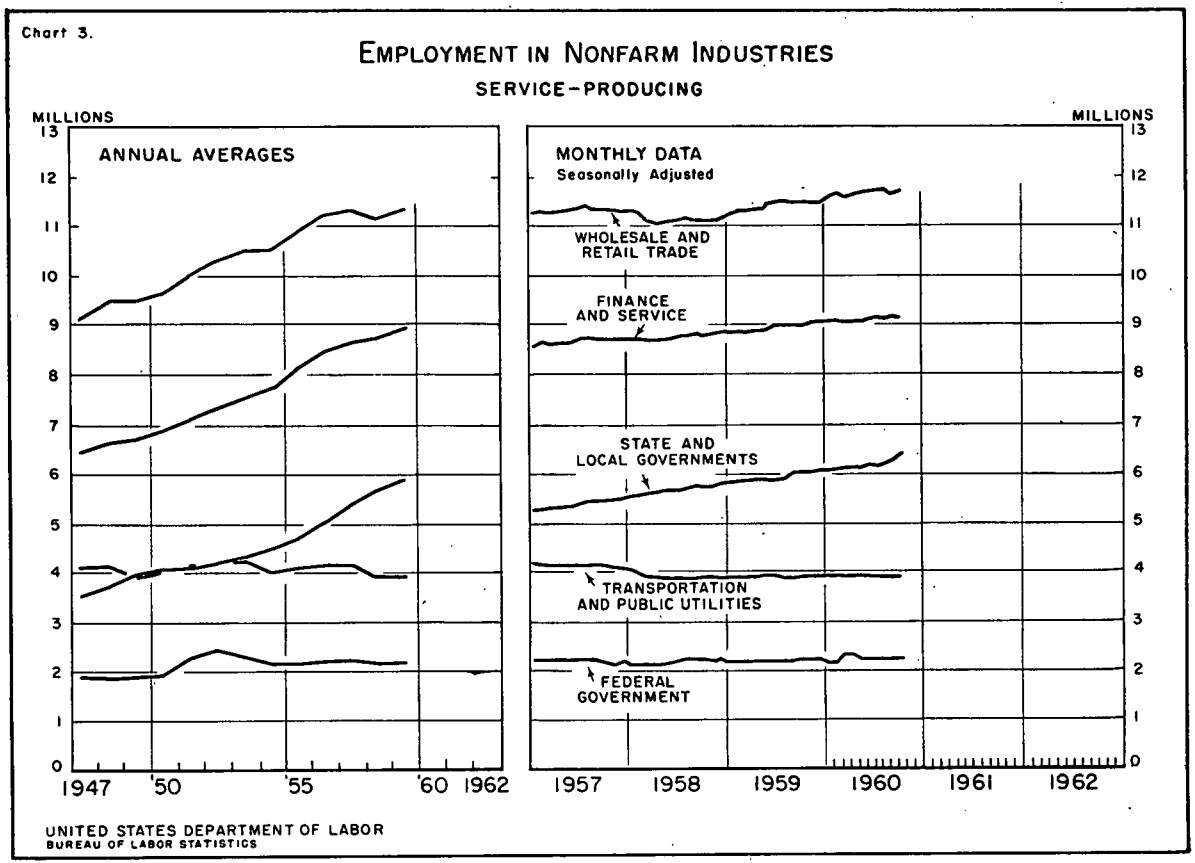
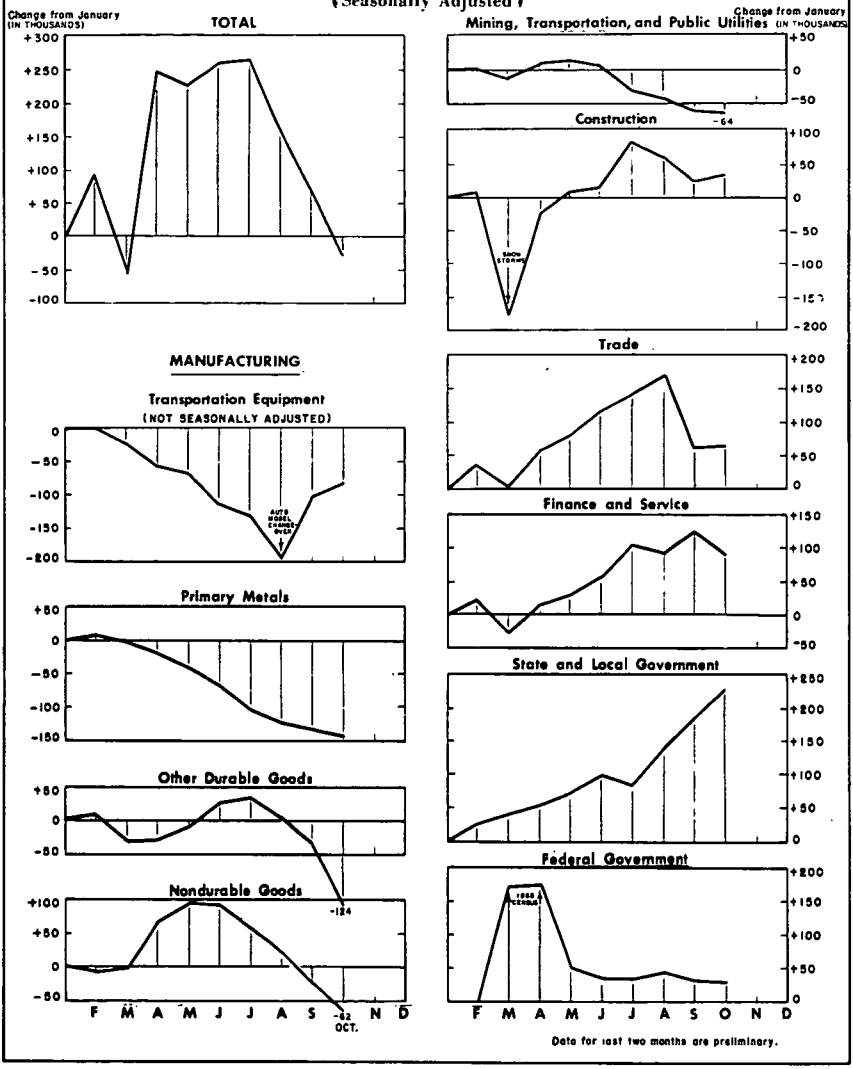

EMPLOYMENT IN NONFARM INDUSTRIES
SERVICE-PRODUCING
MILLIONS
ANNUAL AVERAGES
MONTHLY DATA
Seasonally Adjusted
WHOLESALE AND RETAIL TRADE
FINANCE AND SERVICE
STATE AND LOCAL GOVERNMENTS
TRANSPORTATION AND PUBLIC UTILITIES
FEDERAL GOVERNMENT
0
1
2
3
4
5
6
7
8
9
10
11
12
13
1947
'50
'55
'60
1962
1957
1958
1959
1960
1961
1962
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Chart 4

CHANGES IN NONFARM PAYROLL EMPLOYMENT FROM JANUARY 1960

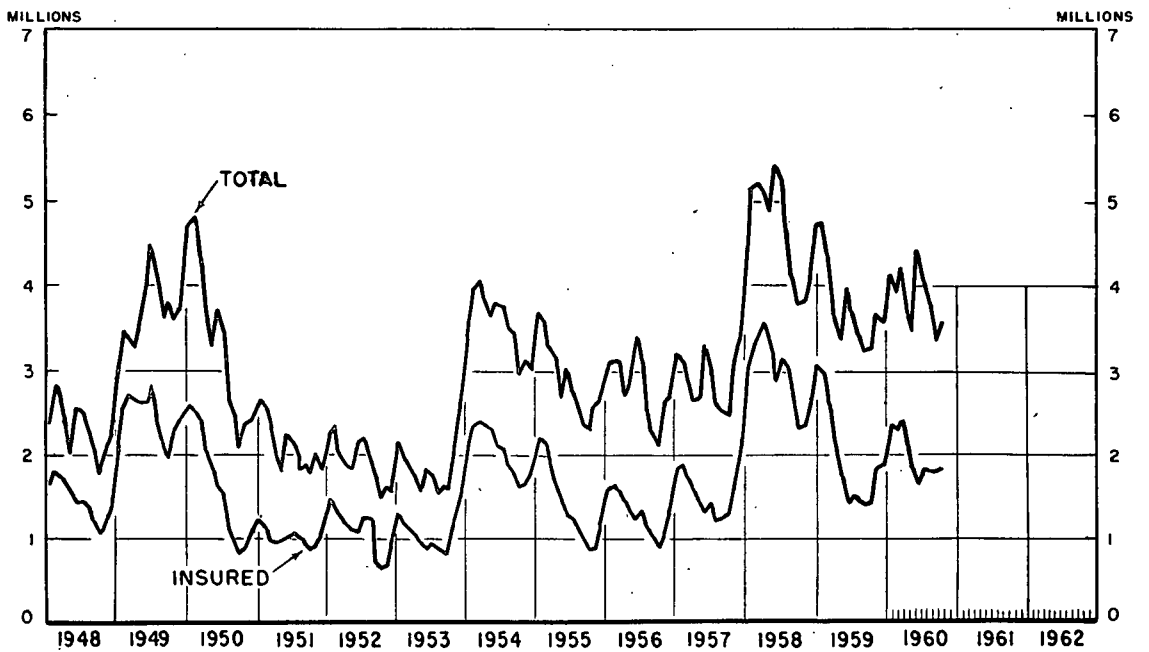
(Seasonally Adjusted)



Data for last two months are preliminary.

Chart 5.

TOTAL AND INSURED UNEMPLOYMENT



UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

Beginning in January 1960, data include Alaska and Hawaii.

Source: Bureau of the Census, Bureau of Labor Statistics, Bureau of Employment Security, Railroad Retirement Board, and Veterans Administration.

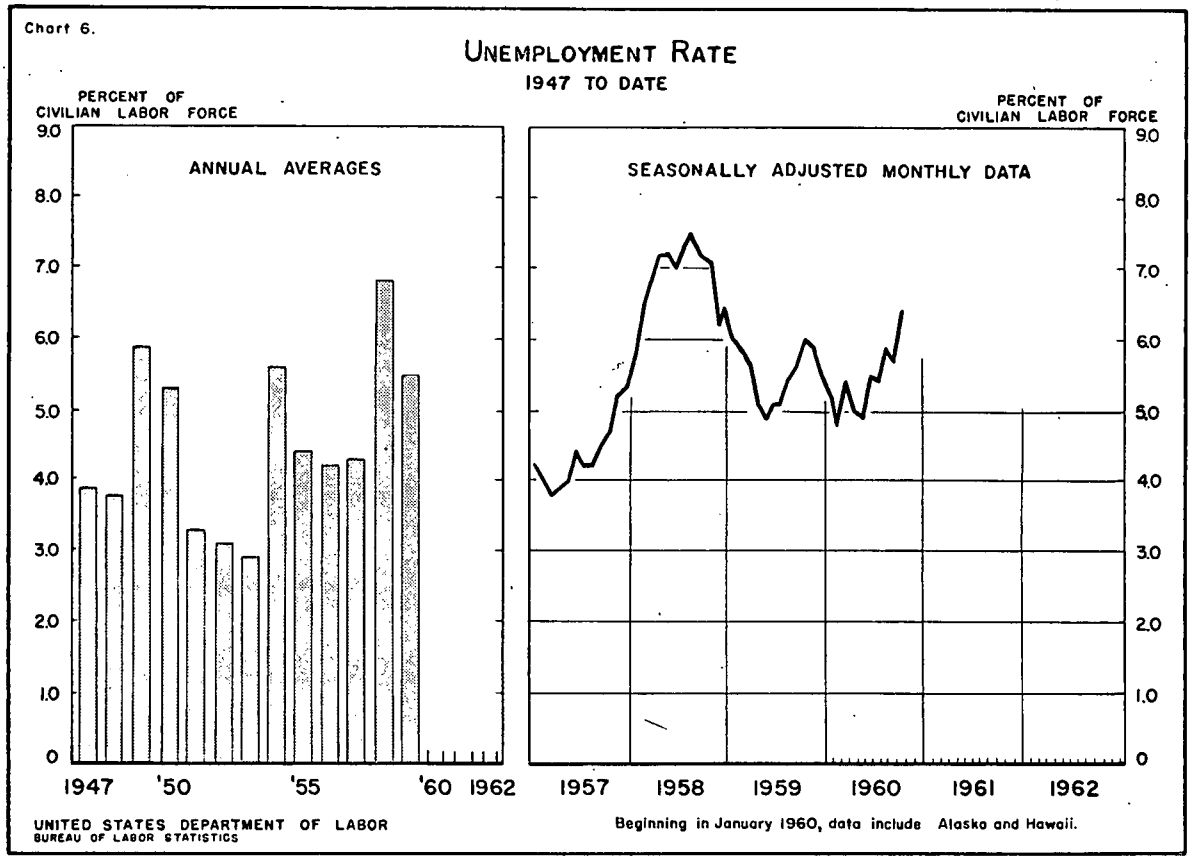


Chart 6.
UNEMPLOYMENT RATE
1947 TO DATE
PERCENT OF CIVILIAN LABOR FORCE
ANNUAL AVERAGES
SEASONALLY ADJUSTED MONTHLY DATA
PERCENT OF CIVILIAN LABOR FORCE
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0
1947
'50
'55
'60
1962
1957
1958
1959
1960
1961
1962
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
Beginning in January 1960, data include Alaska and Hawaii.

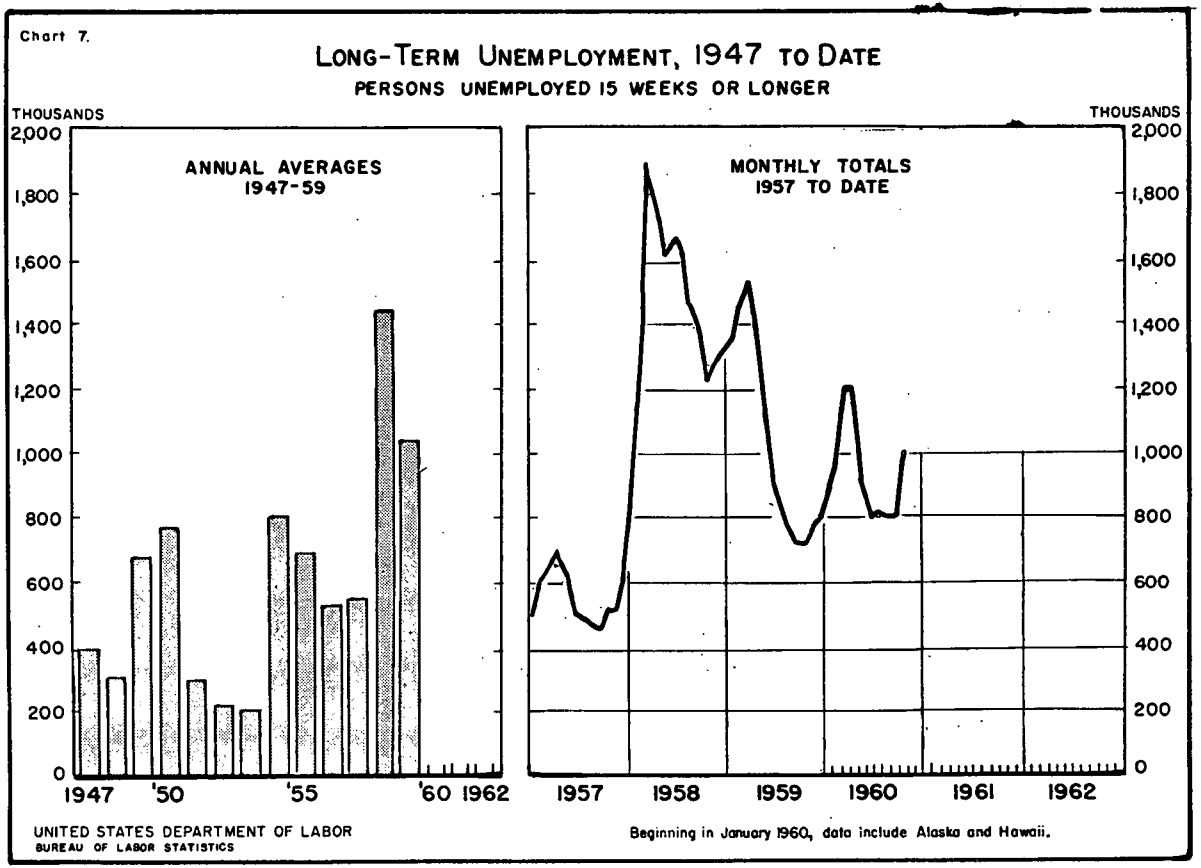


Chart 7.
LONG-TERM UNEMPLOYMENT, 1947 TO DATE
PERSONS UNEMPLOYED 15 WEEKS OR LONGER
THOUSANDS
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
ANNUAL AVERAGES
1947-59
1947
'50
'55
'60
1962
THOUSANDS
MONTHLY TOTALS
1957 TO DATE
1957
1958
1959
1960
1961
1962
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
Beginning in January 1960, data include Alaska and Hawaii.

MANPOWER – CHALLENGE OF THE 1960's
(U.S. Department of Labor, James P. Mitchell, Secretary)

This pamphlet shows the changes in our population and labor force which are expected to take place between 1960 and 1970.

These changes will be accompanied by major shifts in our occupational and industrial structure and have important implications for the education and training of young people, as well as the management and utilization of our overall labor supply.

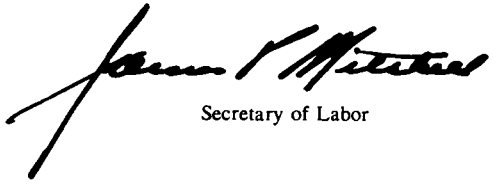
The outlook for the 1960s presented here is based on 3 assumptions:

(1) a continuation of the relatively high levels of economic activity and employment which have prevailed in the United States for the past 15 years, consistent with the goals expressed in the Employment Act of 1946.

(2) a continuation of scientific and technological advance, affecting our industrial methods of production, our medical, health and educational services, and our consumption patterns.

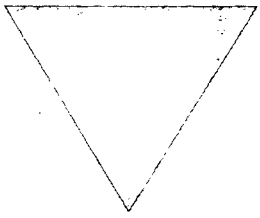
(3) the absence of war or any other cataclysmic event which would substantially alter the rate of our economic growth.

As this pamphlet shows, the level of living of the American people can increase significantly if we make the best use of our manpower potential.



Secretary of Labor

the United States has the manpower resources

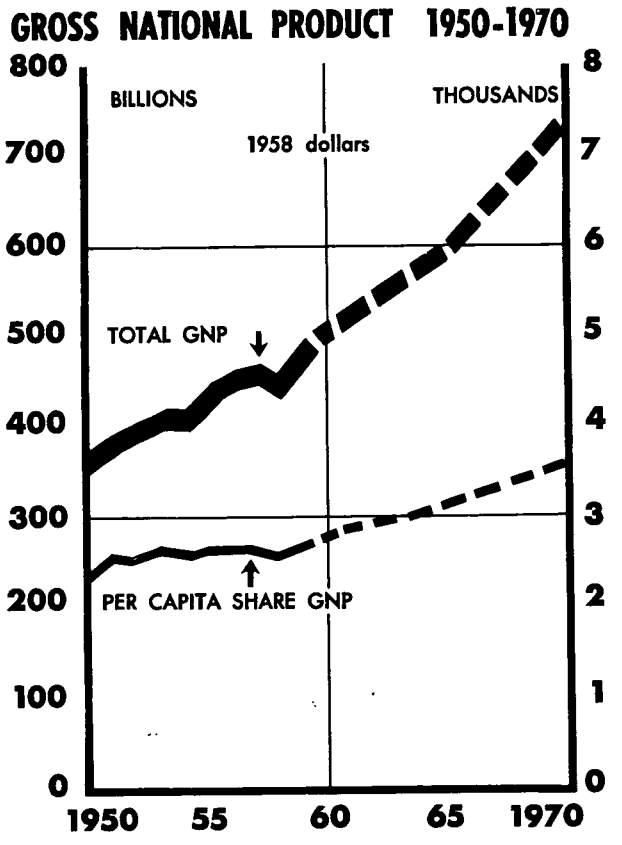


Our manpower potential is great enough,
with an improving technology,
to increase the production of goods and services
by about 50% from 1960 to 1970.

We begin the 1960s
with a Gross National Product of 500 billion
dollars. We can reach a level of 750 billion dollars
by 1970.

This means that by 1970
we can provide our expanding population
with a 25% increase in its
standard of living.

for a much higher standard of living during the 1960s



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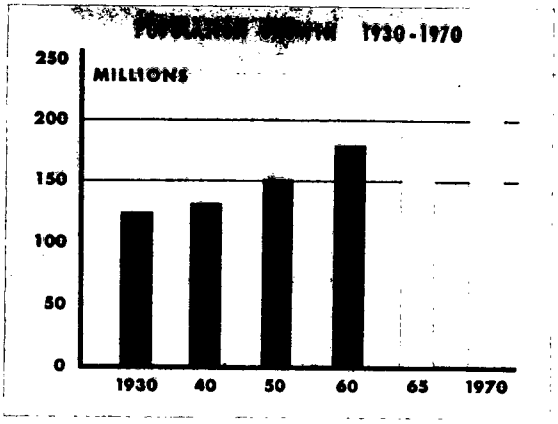
our population will increase from 180 to 208 million

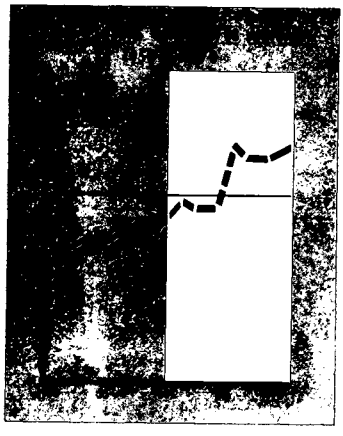
up 28 million, or 15%, over the decade

The dramatic growth in population during the 1950s will continue through the next decade. Birth rates are expected to remain high and death rates to continue to decline.



ESPECIALLY RAPID POPULATION GROWTH WILL OCCUR AMONG YOUTH REACHING WORKING AGE

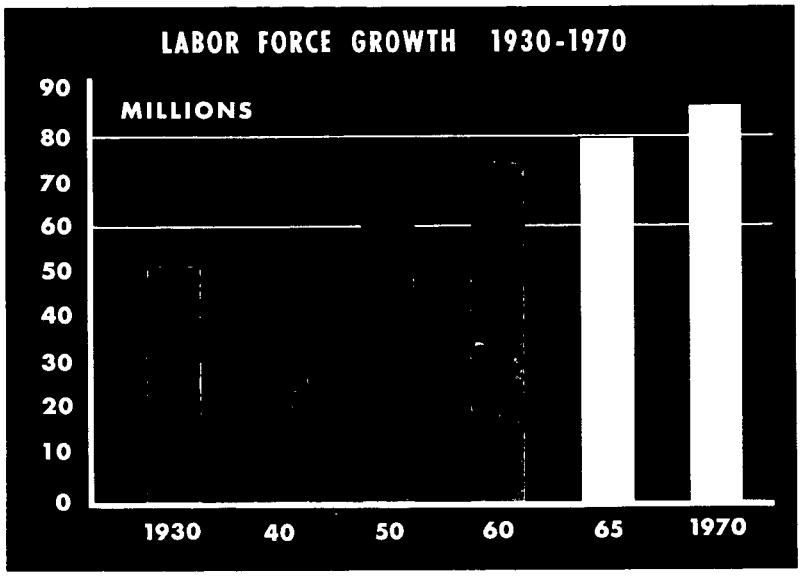
The number of young people reaching 18 each year,
ready to enter the labor force
or go on to college,
will increase from 2.6 million in 1960 to 3.8 million in the single year 1965, a rise of nearly 50%.



the number of workers will grow faster, by nearly 20%

up 13.5 million to 87 million in 1970

The increase in the number of workers during the 1960s will be by far the largest for any 10-year period in our history—50% greater than during the 1950s.



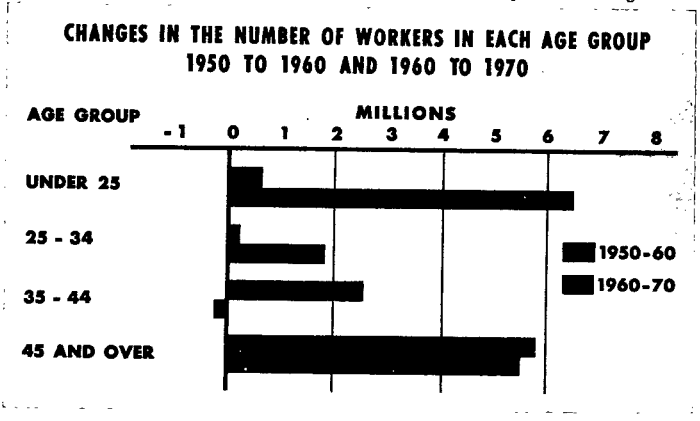
Along with this large increase in the total number of workers, major changes will take place in the composition of the labor force and in the kinds of jobs which the economy will demand.

young workers will account for a major share of the changes in the working population during the 1960s

THERE WILL BE:

	1960 (Millions)	1970 (Millions)	Change 1960 to 70 Numbers (Millions)	Change 1960 to 70 Percent
MANY MORE YOUNG WORKERS Workers under 25 will account for nearly half of the labor force growth during the 1960's, even though they will stay in school longer.				46
A RELATIVELY SMALL INCREASE AMONG WORKERS 25-34				12
ACTUALLY FEWER WORKERS AGE 35-44 Many of these persons were born during the depression of the 1930's when birth rates were low.				−1
LARGER NUMBERS OF OLDER WORKERS More workers will be 45 years and over in 1970 than in 1960, despite earlier retirements.				20

These changes during the 1960s will be substantially and significantly different from those that we experienced during the 1950s.

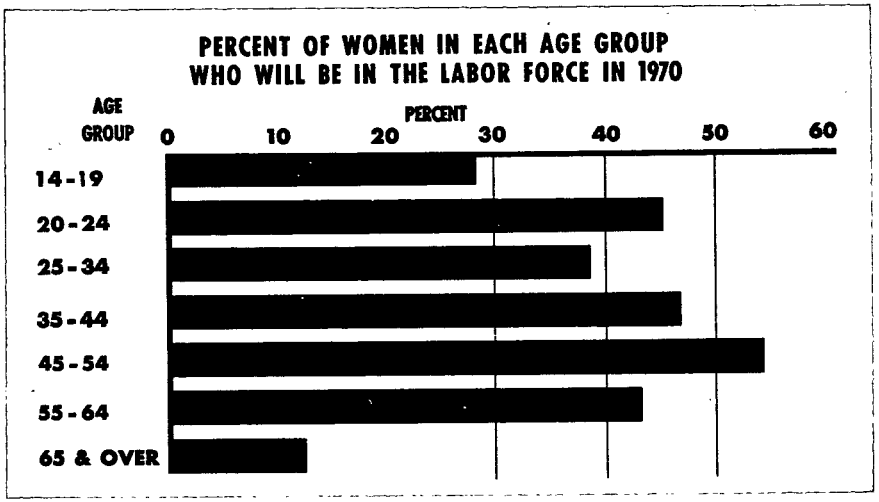


and the number of women workers will increase at nearly twice the rate for men

By 1970, there will be about 30 million women workers,
six million more than in 1960. This represents a 25% increase for women, as compared to a 15% increase for men.

One out of every three workers will be a woman.

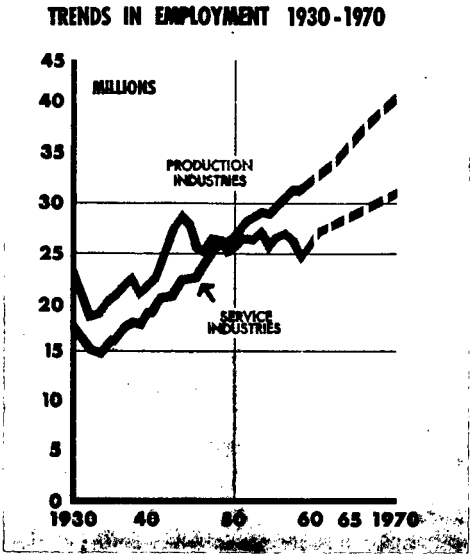
A LARGER PROPORTION OF WOMEN—ESPECIALLY OF OLDER WOMEN—WILL WORK



Except for teen-age girls (most of them still in school) and women 65 and over (most of them either retired or past working age), at least two out of every five women in 1970 will be in the labor force.

Among women whose children are in school or past school age, the proportion who work will be much higher than now.

as the economy grows, changes take place in its industrial makeup



EMPLOYMENT WILL CONTINUE TO GROW FASTER IN THE SERVICE INDUSTRIES THAN IN THE PRODUCTION INDUSTRIES

As our technology advances, proportionately fewer workers will be needed to produce the goods we need.

More workers will be needed to provide the increasing services required as our standard of living goes up.

As the decade opens, these are the numbers of employees in the production and service industries, excluding domestic service and the self-employed outside of agriculture.

Production Industries	(Millions)
Manufacturing	16
Agriculture	6
Construction	3
Mining	1
	26

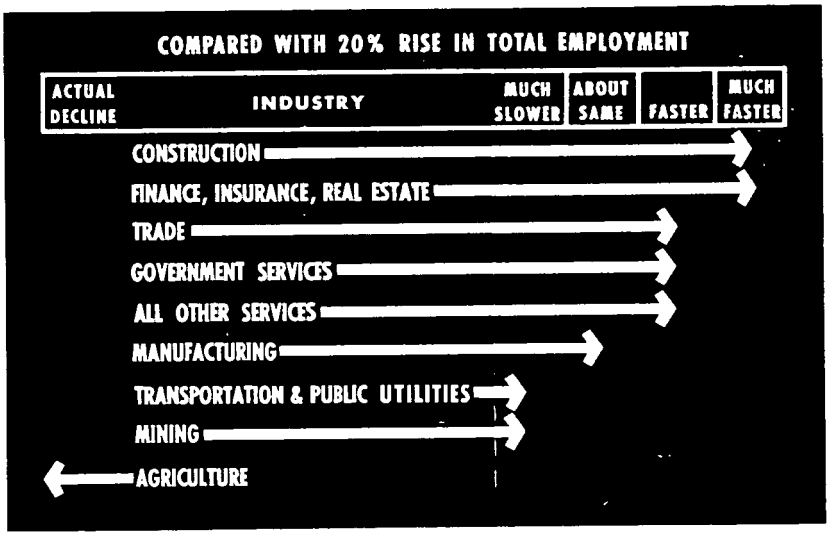
Service Industries	(Millions)
Trade	11½
Government Services	8
Transportation and Public Utilities	4
Finance, Insurance, Real Estate	2½
All other services	6½
	32½

and industries will vary widely

in their rate of growth

BETWEEN 1960 AND 1970 TOTAL EMPLOYMENT WILL RISE BY ABOUT 20%

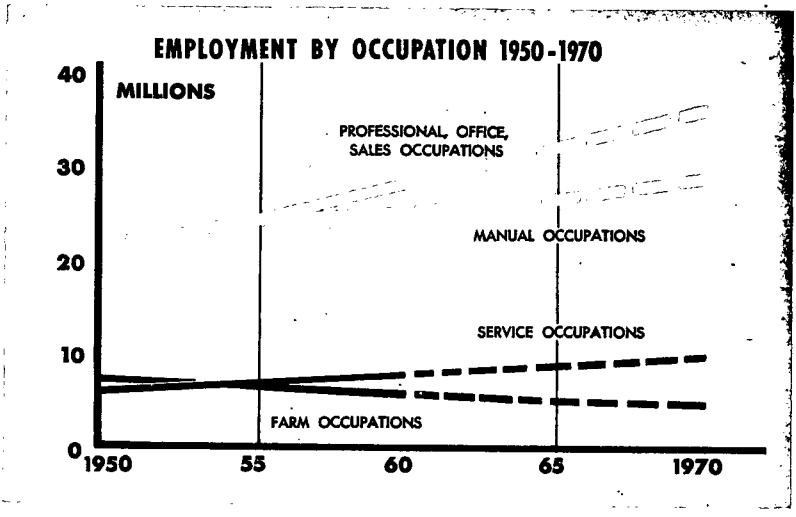
Here is how the major industries in the United States are expected to grow in the next ten years.
compared with the overall rise in total employment.



the kinds of jobs industry will need workers for

are also changing

PROFESSIONAL, OFFICE AND SALES JOBS WILL GROW THE FASTEST

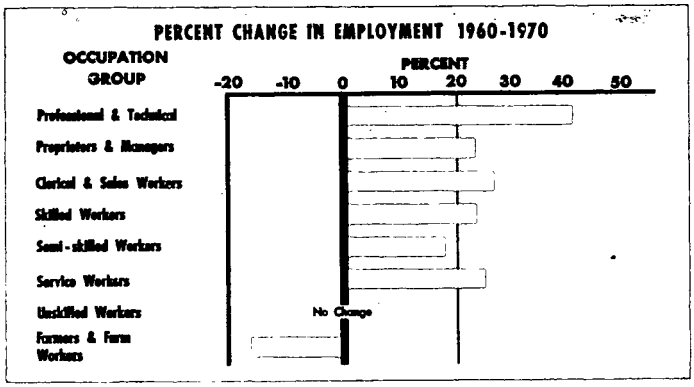


During the past decade, professional, office and sales workers as a group exceeded for the first time in our history the number of persons employed in manual occupations (skilled, semi-skilled and unskilled jobs).

During the coming decade, this trend will continue. The fastest growth will occur among professional and technical occupations, especially engineers, scientists and technicians.

Among the manual occupations, the need for skilled craftsmen will increase, but the number of unskilled jobs will stay about the same, continuing their long term relative decline.

and the biggest increases will occur in occupations requiring the most education and training



Average years of school completed of those working in 1959

Occupation Group	Years
Professional & technical	16.2
Proprietors & managers	12.4
Clerical & sales	12.5
Skilled	11.0
Semi-skilled	9.9
Service	9.7
Unskilled	8.6
Farmers & farm workers	8.6

These anticipated changes in employment in various occupation groups during the coming decade will result from several major causes:

- The continuing shift from an agricultural economy to one that is predominantly industrial
- The rapid expansion in research and development activities
- The tremendously rapid increase in application of technological improvements
- The increasing size and complexity of business organization
- The widespread growth of record keeping among all types of enterprises
- The growing need for educational and medical services

The United States has a highly mobile labor force

every year

MILLIONS OF WORKERS VOLUNTARILY COME IN AND OUT OF THE LABOR FORCE

Many more persons work at some time during the year than are employed at any one time. Most of them enter the labor force for a short while only, to help meet the demand for part-time and seasonal workers. Others are beginning or ending their work careers.

every year

MILLIONS OF WORKERS CHANGE JOBS

For example, in a recent year, more than 8 million different workers changed jobs.

These 8 million workers made 11½ million job changes.

About 2/3 of these job changes were to a completely different industry.

About ½ of them were to a completely different occupation group.

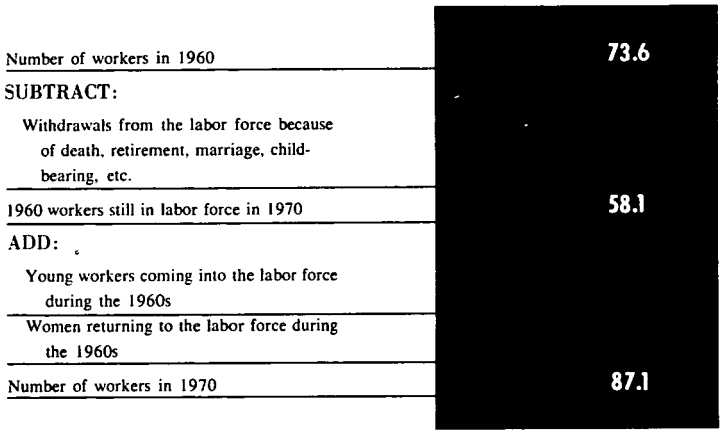
every year

MILLIONS OF WORKERS MOVE FROM ONE PLACE TO ANOTHER

About 7 percent of all male workers are now living in a county different from the one they were in the year before. More than half of them are also now living in a different State.

to sum up

here is the labor force balance sheet for the 1960s



In 1970, more than 100 million persons will be working at some time during the year—
a number equal to the total population of the United States around 1920.

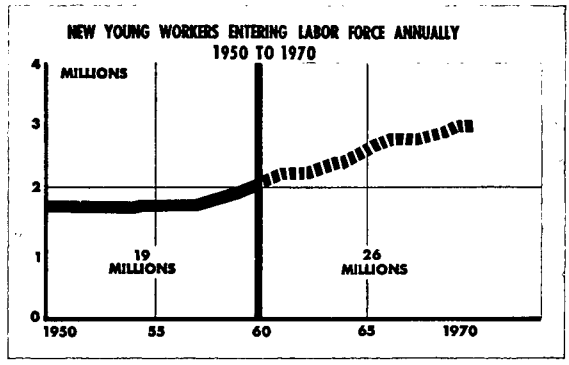
BECAUSE OF THE MANY CHANGES EXPECTED IN OUR LABOR FORCE THE NATION WILL HAVE TO FACE MAJOR CHALLENGES IF IT IS TO MAKE THE BEST USE OF ITS MANPOWER

Here are some of the groups requiring special attention
- New young workers
- Middle aged and older workers
- Part-time workers, many of them working mothers
- Negro workers
- Farm workers

the number of new young workers will increase sharply during the 1960s

By the late 1960s three million new young workers will enter the labor force each year, as compared with TWO MILLION A YEAR now starting their work careers.

Altogether 26 million new young workers will enter the labor force during the 1960s—almost 40% more than during the 1950s.



THIS LARGE NUMBER OF NEW YOUNG WORKERS WILL MEAN THAT . . .

EMPLOYERS

Will find they have even a bigger stake in a sound educational system
Will have to employ a larger proportion of young and inexperienced persons
Will have to provide more and better training on the job, and concentrate on supervision and safety education
Will have to expect more turnover
Will have to allow for more part-time workers

YOUNG WORKERS

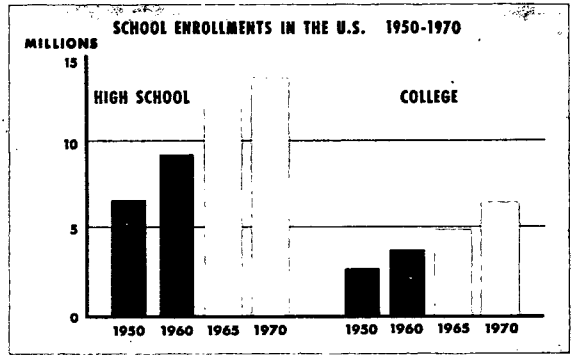
Will have to prepare themselves for a rapidly changing and more complex world of work
Will need more education and training, with better guidance and counseling
Will have to compete more keenly for the better jobs

education and training in the United States will get even more emphasis during the 1960s

SCHOOL ENROLLMENTS WILL CONTINUE TO INCREASE SIGNIFICANTLY

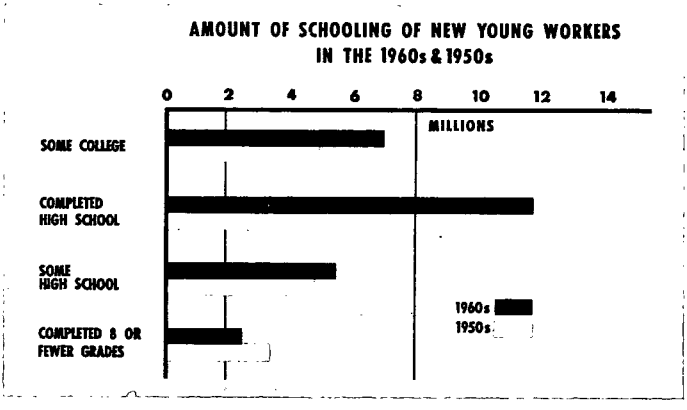
HIGH SCHOOL ENROLLMENTS
Will increase by nearly 50% during the 1960s—on top of a 40% increase during the 1950s.

COLLEGE ENROLLMENTS
Will increase by 70% during the 1960s—as compared with 40% during the 1950s.



NEW YOUNG WORKERS WILL HAVE MORE EDUCATION

70% of new young entrants to the labor force in the 1960s will be high school graduates or better, as compared with 60% in the 1950s.



but, millions of new young workers will not have had a high school education

EMPLOYERS WILL REQUIRE AT LEAST HIGH SCHOOL DIPLOMAS FOR MORE AND MORE JOBS

NEVERTHELESS

7.5 million young people entering the labor force during the 1960s will not have completed high school.

AND 2.5 MILLION OF THESE will not have completed even a grade school education.

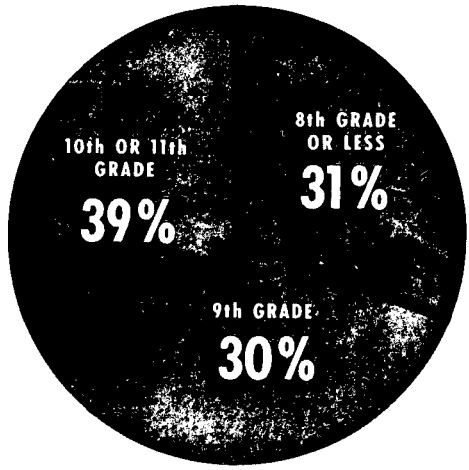
THE PROSPECT THAT 30% OF ALL YOUNG WORKERS ENTERING THE LABOR FORCE DURING THE 1960s WILL LACK A HIGH SCHOOL EDUCATION — POINTS TO THE NEED TO:

Encourage boys and girls to get all the education and training possible.

Develop courses of training designed to meet the needs of these young people.

Provide guidance and counseling earlier in their school years.

SCHOOL GRADES OF YOUTH LEAVING BEFORE HIGH SCHOOL GRADUATION

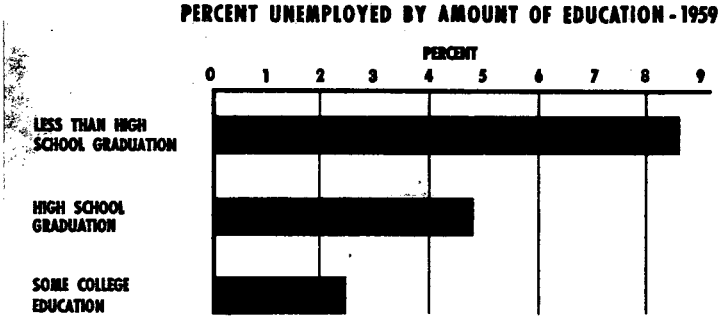


the kind and amount of education young persons receive affect their lifetime careers

PEOPLE WHO WORK IN THESE OCCUPATIONS

	HAVE THIS KIND OF EDUCATION: Percent with		
	Less than high school graduation	High school graduation	Some college education
Professional & technical workers	6	19	75
Proprietors & managers	38	33	29
Clerical or sales workers	25	53	22
Skilled workers	59	33	8
Semi-skilled workers	70	26	4
Service workers	69	25	6
Unskilled workers	80	17	3
Farmers & farm workers	76	19	5

IN GENERAL, THOSE WITH MORE SCHOOLING HAVE HIGHER EARNINGS MOREOVER UNEMPLOYMENT IS MUCH HIGHER AMONG THOSE WITH THE LEAST EDUCATION



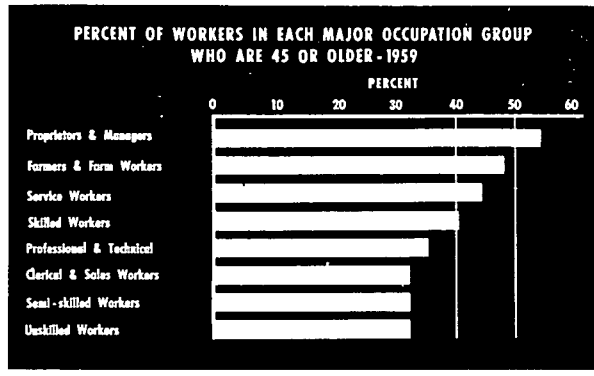
during the 1960s 2 out of 5 workers will be 45 years or older

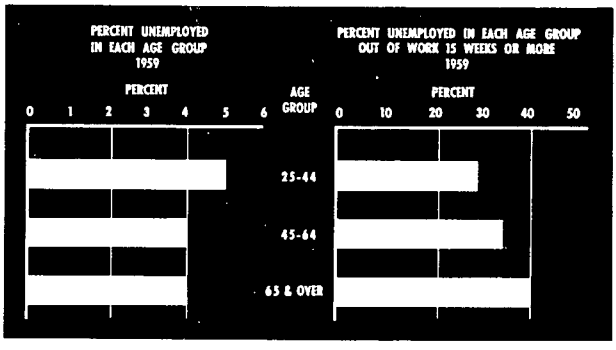
By 1970, over 33 million men and women 45 years or older will belong to the labor force, 5.5 million more than in 1960.

OLDER WORKERS

Have the skill and work experience needed for our growing economy.

They now account for a significant proportion of our managerial and skilled workers.





OLDER WORKERS

Do not experience a markedly different rate of unemployment than do workers in other age groups

BUT

Once out of work, they remain unemployed for longer periods of time.

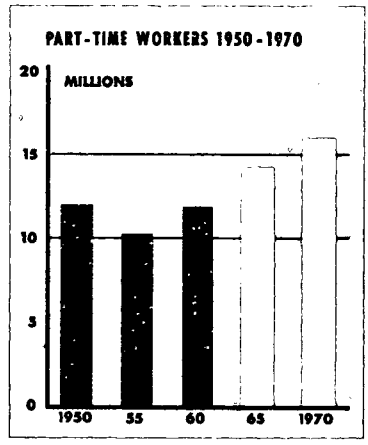
THESE FACTS POINT TO

The need to eliminate discrimination in hiring on the basis of age

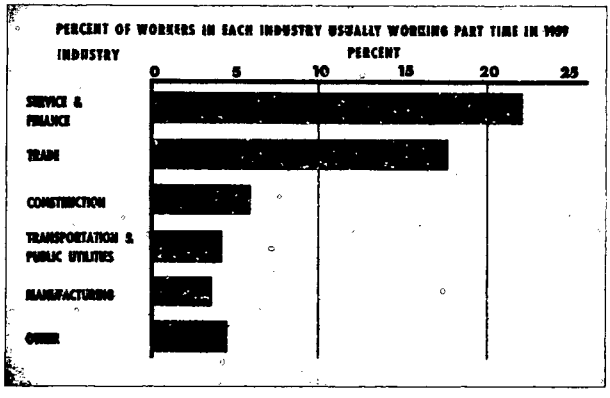
The need for training and retraining of older persons to help them keep up to date on technological changes

more people will choose to work part time

16 million persons will be part-time workers in 1970, a 30 percent increase from 1960.



There will be a very large increase in the number of persons able and willing to work only part time. This will occur because most of the labor force growth will be among *young people*, many of whom will still be in school, and among *adult women*, many of whom will have home responsibilities.



The increase in the number of part-time workers will provide employers with a flexible manpower supply

BUT

other industries as well as trade and service will have to reschedule more of their jobs to a part-time basis if this large supply of workers is to be used effectively.

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Negro workers represent an important manpower resource

One out of every ten workers is a Negro.

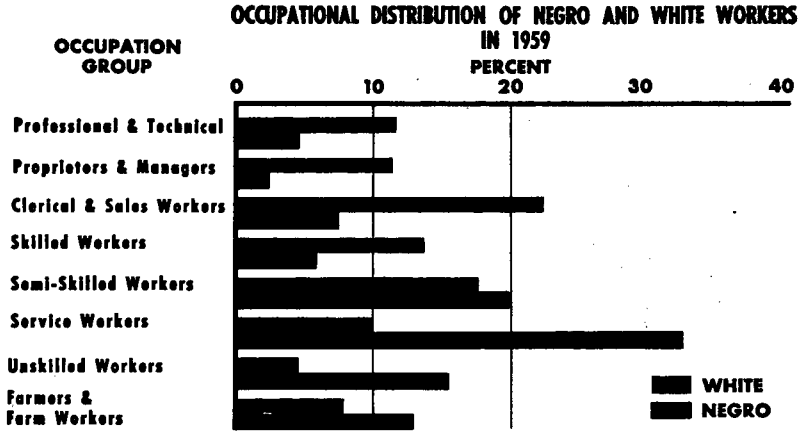
For a variety of reasons—lack of education and experience, discrimination—
many Negro workers are not being used to their fullest capabilities.

The kinds of jobs in which Negro workers are employed are substantially different from those of white workers.

These job differences have become less pronounced in recent years.

For example, the percent of Negro workers in professional, clerical, sales and skilled jobs has doubled during the past 20 years.

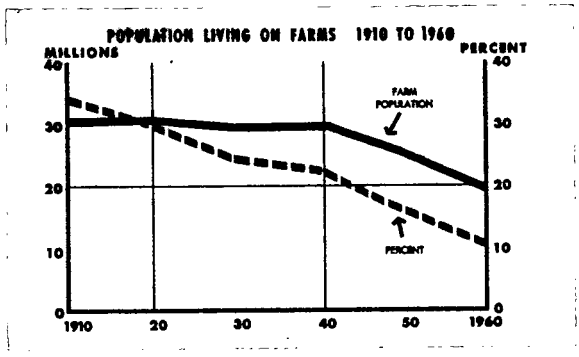
NEVERTHELESS, THERE IS STILL A LONG WAY TO GO in the development and effective use of Negro workers.



many of our manpower resources will come from the farm population

The number of persons living on farms has decreased substantially over the years.

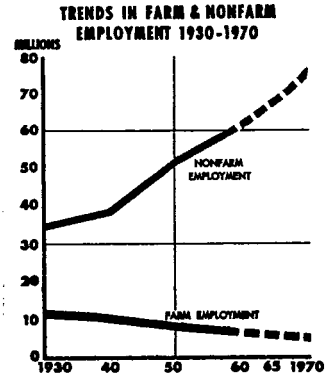
The movement of farm people to urban areas has been one of the major trends of this century, reflecting in part the continuing reduction in farm manpower requirements.



YOUNG PEOPLE, ESPECIALLY, ARE LEAVING THE FARMS IN GREATER PROPORTION THAN ANY OTHER AGE GROUP

They will need the kind of education and guidance that will help them adjust to work and to compete for the better jobs in nonfarm settings.

PERSONS WHO REMAIN ON THE FARMS WILL ALSO NEED BETTER EDUCATION AND TRAINING



Farming as a business requires more knowledge and skill to operate effectively.

Many more farm jobs require special skill and training.

More and more of our farm population depend partly on nonfarm jobs to supplement their incomes.

Almost one-third of all income of farm residents comes from nonagricultural sources.

CONCLUSIONS

As a Nation we are advancing in scientific and technical know-how at a tremendous rate. The end is not in sight. How well we will realize the potential of this advance in terms of the well-being of our people depends in large measure on how effectively our people as individuals—our manpower—are able to use the new tools at hand.

This brief presentation describes our expected manpower resources and requirements for the 1960s. Undoubtedly the facts as they develop will differ in detail from what we now anticipate, but these general conclusions will stand:

WE MUST

Improve individual competence, present and prospective, across the board

Use *all* our manpower resources without regard to race, sex, age or physical handicap

Strive to place every worker in a job that best fits his talents and then press for full use of these talents on the job

Help every worker to develop a sense of purpose and pride in his job

Prepare now for new and changing manpower needs within the total work force

Develop jobs for all kinds of worker capabilities

Plan on full use of better quality as well as increasing quantity of manpower

THE JOB AHEAD

In a democratic society everyone must accept his appropriate share of the responsibility for developing our human resources—individuals and organizations alike. Here are some of the steps to be taken to assure that our work force is adequate, well qualified and fully used in the 1960s.

WE MUST

Expand and improve all forms of training on the job, including apprenticeship for the skilled trades

End all forms of discrimination in hiring and use of manpower

Develop and then make full use of increasingly effective placement services

Support and strengthen our school systems

Expand and improve guidance and counseling services

Improve health and safety in the work place

Develop better national and local information on manpower resources and requirements

The 1960s hold the promise of a decade of historic significance, in the development of this Nation, in achieving a better life for our citizens, and in aiding other nations which seek a higher standard of living for their people.

The United States is rich in human resources. It is essential in the national interest that we recognize our manpower capacities and develop them well.

SOURCES OF DATA

The facts of the past and projections for the future used in this pamphlet have been assembled from a number of Federal agencies.

The following are the principal sources of data used:

Department of Labor
- Bureau of Labor Statistics
- Bureau of Employment Security

Department of Commerce
- Bureau of the Census
- Office of Business Economics

Department of Agriculture

Department of Health, Education and Welfare
- United States Office of Education

The CHAIRMAN. Mr. Paradiso.

STATEMENT OF LOUIS J. PARADISO, ASSISTANT DIRECTOR, CHIEF STATISTICIAN, OFFICE OF BUSINESS ECONOMICS, DEPARTMENT OF COMMERCE

Mr. PARADISO. I have a little longer statement which you have on your desk.

I have a summary of this statement which, with your permission, I should like to read.

The CHAIRMAN. Proceed.

Mr. PARADISO. At the present time no major forces are in sight to provide the upward thrust needed for resumption of economic growth. The basic indicators are still showing mixed movements, with many easing off, while others are extending their growth trends.

The economy continues to be characterized by sluggishness in purchases of goods for final use and by rapid shifts in the pattern of inventory buying—from accumulation to holding the inventory line, and then to liquidation.

I might point to that chart on my right which shows the gross national product in constant dollars, which means we have eliminated from the movements the effect of price change and it also shows final purchases and the difference between the two indicates the effect of inventory change on our production and employment.

You will notice that in the most recent period inventories have played a very important role, and there has been a very significant shift from large accumulation to a rapidly progressing cutting down of that accumulation, to practically no change in the third quarter of this year.

The reduced buoyancy of final purchases reflects diverse tendencies among the major buyers, depicted briefly, as follows:

The second chart is rather interesting because it shows the trends of the major purchasers, the major final purchasers of our product, for the postwar years.

The three recessionary periods are shaded. Here you will notice, first, the diverse trends involved in the major purchasers, and, second, the large fluctuations which have been of tremendous influence in the course of our total output. The main features are:

1. Consumer purchasing, which usually follows closely the course of income, turned down somewhat in the third quarter of this year, whereas incomes continued to increase.

I think this contract is rather important. The decrease in consumer demand was due mainly to a substantial reduction in durable goods sales, particularly automobiles and home equipment items.

In the October–November period, consumer buying showed little change.

The recent easing off tendency is in sharp contrast to the persistent strength of consumer demand throughout the past recovery period.

You will notice from the chart that nondurable goods and services, the top panel on the left-hand side, has shown a steady upward growth. This has been an important stabilizing element in the course of the total economy.

2. Residential construction is sharply below year-ago volumes. The continuing downtrend of housing starts in the face of somewhat more favorable money market does not provide encouragement for an early upturn in housing activity.

In the 3 months, August–October, new private housing units started were one-sixth below the similar period of last year.

Here, again, I might call your attention to the third line on that chart on the left-hand side, showing the very wide swings in housing activity which we have experienced in the postwar period and the most recent decline as shown there for this year.

3. Business spending on plant and equipment has been generally upward, but quite volatile in the postwar period. Due to slow business sales, generally ample capacity, reduced profits and other factors, outlays for fixed investment have tended to level off this year.

In fact, the survey just completed by the Department of Commerce and the Securities and Exchange Commission, which was released this morning, shows that businessmen anticipate in the first quarter of next year a further small reduction in plant and equipment expenditures—to $1.4 billion less than this year's second quarter high of $36.3 billion. These are all at seasonally adjusted annual rates.

Confirming the results of this survey is the fact that in the past 4 months orders placed with nonelectrical machinery companies, which are the major suppliers of business equipment, have fallen short of sales by a moderate margin.

I think this is significant that we have now confirmation from two approaches, namely, from our survey, and from the new orders received by business for items bearing on this very important area of plant and equipment spending.

Representative CURTIS. How does that compare with a year ago?

Mr. PARADISO. The year ago total for this year is expected to be about 10 percent above last year's total.

This, by the way, is a very significant reduction for what business reported to us early this year.

In March of this year the figure reported was 14 percent above a year ago. Progressively the percentage has been going down and our latest survey shows a 10-percent rise this year over last year.

Representative CURTIS. So it has not increased as much?

Mr. PARADISO. Yes. The latest survey shows a downward movement from recent rates.

4. A favorable development in recent months, as far as its contribution to the gross national product is concerned, has been the improvement in our net export balance on goods and services. This has resulted from a broad rise in our exports and some reduction of our imports effectuated in part by American industries recapturing some of our domestic markets from foreign competitors.

In particular, I have in mind there a switch in our steel exports.

Now, they are greater than imports and there has also been a considerable reduction in our imports of cars from last year.

Thus, the U.S. net exports of goods and services shifted from an adverse balance of a half billion dollars, at an annual rate, in the fourth quarter of last year, to a favorable balance of about three and a half billion dollars in the third quarter of this year.

However, our other transactions have developed adversely resulting in a sizable and rising deficit in our total international balance of payments this year.

This deficit is running around $4 billion.

Senator BUSH. May I ask a question?

The CHAIRMAN. Surely.

Senator BUSH. You say this deficit, that is our balance of payments, is running at the annual rate of about $4 billion.

Mr. PARADISO. Yes.

Senator BUSH. Are you taking 1 month to indicate that rate?

Mr. PARADISO. The third quarter.

Senator BUSH. The third quarter indicates an annual rate?

Mr. PARADISO. An annual rate of about $4 billion deficit in our total balance of payments, including not only our merchandise balance and our service balance, but also all our other items on a financial basis.

Senator BUSH. That would be a larger figure then than either of the 2 preceding years?

Mr. PARADISO. I think that is correct.

As I recall it, in 1958 the deficit was $3.5 billion and last year it was $3.8 billion.

The CHAIRMAN. Is it not true that the balance of trade in physical commodities is favorable; that is there is an excess of exports over imports of approximately $3 billion a year?

Mr. PARADISO. This year the rate is somewhat larger.

The CHAIRMAN. So that what we have is a deficit in the so-called invisible items of about $7 billion; is that not true?

Mr. PARADISO. It is more than $8 billion at an annual rate for all items in our international transactions other than trade commodities.

As a matter of fact, our exports of merchandise have been rising this year on a rather broad basis.

Now I want to go on to the Federal Government position.

5. During the past fiscal year Federal purchases of goods and services—and that, by the way, is a Government component of our gross national product—have been tending downward, mostly due to some easing of defense spending.

I am talking now about the period from the middle of 1959 to the middle of this year.

On the basis of the anticipated expenditures set forth in the mid-year budget review, these outlays for goods and services are scheduled to rise during this fiscal year.

The September quarter showed an increase in such outlays of $1 billion to a $52½ billion annual rate. This was in large part, but not completely, due to the pay raise for Federal employees.

Of greater significance than current purchases for measuring the near-term impact on business are contracts placed for future deliveries of goods and services.

In this context, in the third quarter just past, the Defense Department's obligations for procurement, research, and construction were placed at higher rates than is usually the case in this period, reflecting in part expansion of basic programs.

On the basis of contracts already placed and the fulfillment of present intentions, it appears that Federal purchases of goods and services will increase moderately in the coming months, by perhaps as much as $3 billion at annual rate, by mid-1961—and thus this rate of spending will be a positive influence on our economy.

I might point to the chart on the Federal Government purchases shown over there. You will notice the lower section of that chart represents the trend of defense expenditures, of defense purchases, the middle strip comprises other purchases than defense—this is for the Federal Government.

Then the upper part of it represents State and local government purchases.

These expenditures of State and local governments are continuing upward. Increasing volume of larger payrolls, mainly for more teachers, and outlays for additional school buildings and to some extent expansion of other construction, particularly highways.

During this fiscal year, State and local purchases may rise by approximately $3 billion although I may point out here that we do not have budgets for these State and local governments which provide guides to the actual expenditures that may be made.

So these indications are based primarily on recent trends and whatever we know about specific programs.

Senator BUSH. What does that pink area say?

Mr. PARADISO. That represents purchases by the Federal Government other than for defense purposes and this is purchases, for example, of agricultural products from the farmer and purchases of services of Federal Government employees.

Senator BUSH. Does it include the building of Government buildings, post offices, and improvements of that kind?

Mr. PARADISO. Yes, it does.

Senator BUSH. It includes all of that?

Mr. PARADISO. Yes, it includes all of that.

Senator BUSH. That is a relatively small factor in the whole, is it not?

Mr. PARADISO. That is right, it currently runs around $8 billion at an annual rate as compared with $45 billion for the lower part, which is defense purchases.

Thus, combined Government purchases could contribute an additional $5 to $6 billion, at an annual rate, to the gross national product from the second quarter of this year to the second quarter of next year.

I think this is rather important because if this rise should eventuate it would provide an offset or an addition, to whatever other developments are occurring in the private economy.

6. Currently the value of inventories held by nonfarm business is estimated at about $100 billion.

In the first quarter of this year, inventories were being accumulated at an annual rate of $11 billion.

Now, because I regard inventories as being a special development this year, I will take a little bit more time in tracing through the shifts that have occurred because I believe part of the problem associated with reduced employment and a higher unemployment is traceable to the developments in the inventory area.

In the early part of this year, business inventories were being accumulated at an annual rate of $11 billion.

A marked shift has occurred since then and in October, instead of accumulation, business inventories were liquidated. This sharp turn in the inventory picture was concentrated in manufacturing, particularly in the durable goods industries.

The chart on my right shows a breakdown of business inventories for manufacturing, retail trade, and wholesale trade, with the red lines being the durable goods part for these industries.

The top red line there, for example, shows the inventory changes for the durable goods manufacturing industries. You will note that throughout the postwar period the volatile part of the inventory movement was concentrated in durable goods manufacturing industries.

Similarly, in the bottom chart, the next red line, represents the inventories of durable goods retailers and the fluctuations are concentrated in that sector, particularly the inventories held by automobile dealers.

So the problem of inventories is primarily a problem centered in durable goods manufacturing and durable goods trade.

In the past 3 months factory stocks have been drawn down at an annual rate of $2½ billion. This is contrasted to an accumulation which was occurring earlier this year. The liquidation was concentrated in purchased materials and goods in process reflecting an adjustment of a large buildup of stocks earlier this year due partly to the effects of the steel strike and partly to anticipation of higher sales volume by business.

I want to point out in this next chart a rather interesting development. The chart covers manufacturing industries. The left-hand side of the chart shows the durable-goods industries and the right-hand side, nondurable-goods industries.

Notice the recent liquidation in purchased materials shown by the red area. These are the materials purchased by business firms for manufacturing their products.

Notice also the red section for goods-in-process liquidation again.

Then, finally, the bottom part of that chart shows the accumulation of finished goods inventories.

Representative CURTIS. Is that a seasonal thing, Mr. Paradiso. It looks like it might be.

Mr. PARADISO. These are all seasonally adjusted.

By the way, the middle red section on the top panel there represents the liquidation which occurred during the steel strike.

That is rather interesting. Then following that liquidation there was a very substantial accumulation of inventories which occurred earlier this year. More recently, businessmen reduced their inventories, particularly raw materials stocks.

You see, what happened is this: Businessmen thought they were going to get increases in sales this year. Now last March, manufacturers reported in the Commerce-SEC survey that they expected an 8-percent rise in their sales in 1960 over 1959.

Actually, these sales are turning out to be only 3 percent higher and this obviously does cause a shift in inventory plans.

Finished goods inventories, as I have just indicated, have been increasing and I think in this case the increases have been largely of an involuntary nature partly because of the fact that they did not get the expected rise in sales and partly because I think many firms are letting suppliers hold more of the inventories.

Therefore, the supplier is saddled, you might say, with a lot more finished goods than he would ordinarily have to stock.

Senator BUSH. May I ask a question, Mr. Chairman?

The CHAIRMAN. Certainly.

Senator BUSH. On that left-hand side, the top of it there, the first two exhibits there, you have a large accumulation in the first half of 1959.

Mr. PARADISO. That is right.

Senator BUSH. Then an exhaustion of that inventory. Then following the settlement of the strike you have given a large accumulation and then an exhaustion.

Now would you say that that whole wide variation was a result of the first, the impending strike, then the strike itself, then the settlement of the strike, and the result of overproduction which followed the settlement of the strike?

Mr. PARADISO. I would say that in large part that variation can be attributable to the strike in the offing earlier in 1959, then later the inventory change resulting from that strike, then in the third quarter of last year steel shipments were extremely low and this resulted in no steel coming in. After the strike was settled there was a great deal of optimism on the part of many firms.

They thought that this year the trend of sales was going to be up, so in addition to rebuilding the stocks which they had liquidated during the strike period of last year, they also accumulated in anticipation of higher sales which did not materialize.

As a result they found themselves with a lot more inventory in the last 4 or 5 months than they needed. So a liquidation process began and I believe this is still continuing.

Senator BUTLER. Mr. Chairman, may I ask a question?

The CHAIRMAN. Yes, certainly.

Senator BUTLER. Did foreign competition have any effect on the depletion of inventory?

Mr. PARADISO. It had earlier this year and last year, yes. As you recall, there was a time last year when the companies could not get steel and so they accelerated their purchases of steel from abroad. As a result they were able to get steel on hand and, therefore, the liquidation of steel inventories was not as great as it would have been if steel had not been imported.

So when the steel strike was settled they had a lot more inventories on hand than would have otherwise been the case.

By the way, I might say this: That I think one of the problems of the steel industry is that the steel consumers do have considerable steel stocks on hand. While we don't have direct information on steel stocks held by steel consumers, nevertheless indirectly through reports that the companies themselves make to the Office of Business Economics and the Census Bureau, we are able roughly to gage the changes in these inventories.

It is quite clear that looking at the purchased material inventories held by steel users—these are the fabricating metal companies, the transportation equipment companies, and the machinery companies—the inventories of purchased materials mostly the raw materials held by these steel users are still very high. They accumulated these inventories early this year at a very rapid rate and because their sales have not shown any significant increase this year, these inventories still look high.

Also it appears that the steel companies themselves accumulated finished goods inventories in the early part of this year so that the companies themselves have a lot of goods on hand.

I think this in a large measure explains why the rest of the economy is operating at pretty high levels and yet the steel industry is still operating at around 50 percent rate of capacity.

Senator BUTLER. May I ask this further question? It may or may not have some relation to what you are talking about.

What is the total consumption of your durable goods in relation to the production of durable goods in the United States? Do you have figures on total consumption of durable goods?

Mr. PARADISO. We do not have this kind of information put together so that we can say how much total production amounts to and how much total consumption is.

Senator BUTLER. What I am trying to elicit from you is this: You hear so frequently said today that we have priced ourselves out of the market. Now what is consumption in this country and what is production and how have we if we have—how have we priced ourselves out of the market?

Mr. PARADISO. Let me answer it this way: The total amount of production currently is potentially much larger than consumption. Take the steel industry. It is operating at 50 percent of capacity. You can examine industry after industry, and find that the rate of operation is considerably below the total capacity that is available for producing goods.

Senator BUTLER. On the other hand, you have imports in those sectors during the period of depression in the durable-goods industry. Has that increased, has it been steady, or has it decreased?

Mr. PARADISO. You are talking about the exports, Senator?

Senator BUTLER. I am talking about imports of durables.

Mr. PARADISO. I don't recall about the imports of durables.

Senator BUTLER. That is a very important factor in this question.

Mr. PARADISO. In recent period the imports of durables has been declining because we have reduced our imports of automobiles considerably and we also have reduced our imports of steel products considerably.

Senator BUTLER. How about our machines and machine tools? There has been a steady increase in importation?

Mr. PARADISO. There has been an increase in machine tools and office machinery but imports of most other types of machinery have recently declined.

Senator BUTLER. What is the effect of that? That would reduce inventories, materials purchases?

Do you have any figures to show what the impact of the foreign competition is on the American market?

Mr. PARADISO. I will be glad to obtain those. I don't have those at the moment.

Senator BUTLER. I think it would be very important to consider in any such discussion on this record.

Mr. PARADISO. I will put them in the record.

(The information referred to follows:)

Illustrative examples of relationships between U.S. production, exports, and imports of selected manufactured products

	Exports	Imports	Net exports (+) or net imports (−)	Domestic [1] production	Net exports as a percent of domestic production	Net imports as a percent of domestic production	Total imports as a percent of domestic production
	Thousand short tons						
Iron and steel products:							
1959 annual total	1.8	4.6	−2.8	69.4	----------	4.0	6.6
January-September 1959	1.5	3.2	−1.7	54.9	----------	3.1	5.8
January-September 1960	2.4	3.0	−.6	57.6	----------	1.0	5.2
July-September 1960	.9	.6	.3	14.8	2.0	----------	4.1
	Millions of dollars						
Electrical machinery:							
1959 annual total	983	250	733	22,078	3.3	----------	1.1
January-June 1959	481	99	382	10,383	3.7	----------	1.0
January-June 1960	506	119	387	11,590	3.3	----------	1.0
	Millions of dollars						
Other machinery:							
1959 annual total	2,865	411	2,454	32,064	7.7	----------	1.3
January-June 1959	1,455	213	1,242	16,067	7.7	----------	1.3
January-June 1960	1,625	247	1,378	17,320	8.0	----------	1.4
	Millions of dollars						
Civilian aircraft, complete:							
1959 annual total	134	10	124	899	13.8	----------	1.1
January-September 1959	74	10	64	607	10.5	----------	1.6
January-September 1960	416	3	413	993	41.6	----------	.3
	Thousand cars						
Passenger cars, new:							
1959 annual total	105	668	−563	5,591	----------	10.1	11.9
January-September 1959	77	499	−422	4,311	----------	9.8	11.6
January-September 1960	77	381	−304	4,926	----------	6.2	7.7
July-September 1959	17	165	−148	1,034	----------	14.3	16.0
July-September 1960	14	69	−55	1,132	----------	4.9	6.1
	Million square yards						
Cotton piece goods:							
1959 annual total	474	241	233	10,545	2.2	----------	2.3
January-June 1959	239	82	157	5,249	3.0	----------	1.6
January-June 1960	234	252	−18	5,396	----------	.3	4.7

[1] Manufacturers' shipments of iron and steel and civilian aircraft; manufacturers' sales of machinery and passenger cars; production of cotton piece goods.

Source of production data: Office of Business Economics, "Industry Survey" and "Business Statistics."
Source of basic foreign trade: U.S. Department of Commerce, Bureau of the Census, Dec. 9, 1960.

Mr. PARADISO. I might say in most of these cases the totals involved in relation to our total production is relatively small.

Senator BUTLER. That is right.

Mr. PARADISO. But that margin can have a considerable effect.

Now, I have just a little bit more here, Mr. Chairman.

Although inventory sales ratios are about the same as last year they do not provide useful guides to the inventory position at this time.

As you know, many businessmen use inventory sales ratios as guides in their own policies, in guiding their own policies with respect to inventories.

However, I don't think these are useful because there are many shifts going on.

Apparently stocks of raw materials and goods in process are not high relative to current sales. This is primarily because there has been some liquidation already occurring in these areas.

And in the short run these inventories will probably move in concert with fluctuations in sales and orders.

This is rather interesting because that means if we get a pickup in sales and orders, then I think these inventories will rise.

On the other hand, if sales and orders begin to drop, then I think the inventory needs for materials and goods in process will also decline.

In the case of finished goods inventories, however, some adjustment may occur in the coming months with the pattern of change in these stocks reflecting the usual lag relative to sales.

The reason for this is that finished goods inventories, I believe, in many cases, are on the high side and consequently even with some improvement in sales, if there should be some improvement in the near term, we may still be seeing some liquidations in these areas.

Finally, I want to discuss very briefly, the change in stocks held by automobile dealers. These, as we saw on that previous chart, have dominated total trade inventories. Currently, dealers' holdings of new cars may be somewhat on the high side although the motor vehicle industry is taking steps to adjust production to demand.

These stocks by the way, comprise over a million units and while it is true that there are many more makes and more compacts this year than in other years, and so dealers will have to hold somewhat more of these inventories, nevertheless a stock of a million new cars is high no matter how you look at it.

So in summary, while the economy at the present time is operating at high rates, nevertheless, there are no dynamic upward forces of sizable magnitude as yet to push total economic activity in an upward course.

Thank you.

Representative CURTIS. One thing I did not note you referred to, Mr. Paradiso, is disposable income, which, of course, has continued up and apparently it is at an alltime high.

How would you relate that to this picture because there is one of the basic ingredients.

Mr. PARADISO. Yes, I made a note on disposable income by indicating that personal income was higher in the third quarter than in the second, which is a rather interesting phenomenon because ordinarily when you get a rise in disposable income, then consumer spending rises and this time it did not happen.

The change in consumer purchasing has two elements:

One, consumers did not buy as many cars in the third quarter nor as many articles of furniture and electrical appliances.

The latter is affected by the downtrend in housing sales which is reflected in some deterioration in the purchases of electrical appliances and furniture.

Now, in the case of automobiles there was just a slowdown in the purchase of cars in the third quarter, perhaps associated with the idea that consumers wanted to wait to see what the new compacts and other cars were like.

So in the third quarter incomes went up while consumption went down. Also, another rather unusual development occurred. Usually nondurable goods purchasing is closely geared to changes in income. Yet in the third quarter an extremely unusual situation happened where nondurable purchasing declined a little mostly because of a drop in food purchases which were affected by a decline in food prices after adjustment for seasonal variations.

So what happened was that consumers were buying probably as much food, but the total dollar amount that they spent on food was somewhat less.

Now the net result of all this was that consumer savings increased in the third quarter.

Now one more point: In October retail sales increased very nicely, by 2½ percent seasonally adjusted over September. The increases occurred all along by lines of trade.

It appears to us that the consumer rate of saving in October actually had declined.

To show you how mixed this picture is, I am not sure that November is going to show any increase in retail sales. We don't have the figures. We will have them in a couple of days, but the department store sales are lower and automobile sales, while good, dropped from the very high October rate. Actually, figures just available show that total retail sales in November were unchanged from October, seasonally adjusted.

So in the consumer expenditure pattern we are getting indeed a very mixed picture.

Representative CURTIS. But the factor of consumer income would strengthen this picture. It looks like we have a mixture in demand, a change in the buying habits because services have continued to increase, have they not?

Mr. PARADISO. That is right. There appears to be a change in the buying habits. Whether this is some hesitation or some loss of confidence on the part of the consumer temporarily, or what it is, is not clear.

Representative CURTIS. Could it actually be that the demand itself is not there? I have suggested in the field of agriculture certainly to a large degree we have reached the point where we are producing as much as people want; even if they had more purchasing power they would not buy it. Is that not entirely possible in the field of housing, in the field of automobiles, in the field of other things? Is this not possibly the result of the desires of our people?

Mr. PARADISO. That is quite true.

As a matter of fact, I think in the case of housing the problem now is really a problem of demand coupled with some of the physical properties that have developed.

The vacancy ratios are somewhat high in some areas. Housing demand in my opinion is much more directly now a function of income and employment and the prospects of income and employment.

In other words, how the consumer feels with regard to the stability of his employment.

Finally, I think it is also a function of the price.

In other words, in my opinion, it is the economic factors that are dominating the scene in the housing area rather than, say, what happened a year ago when the factors were more in the monetary area, the interest rate, and the amount of money which was available.

I think this is true all along the line.

Now the economic factors are becoming the dominant factors in demand, both from the consumer side as well as from the business side.

Business profits are down, so businessmen are looking twice at their programs with respect to plant and equipment expansion.

This is an economic factor.

The CHAIRMAN. You would not want to leave the impression, would you, that everyone has all the goods and services he wishes, would you?

Mr. PARADISO. I certainly would not.

The CHAIRMAN. Is it not true if you have an increase in money income on the part of consumers or decreases in taxes with the same amount of income, that you would have an increased effective demand?

Mr. PARADISO. Yes.

Representative CURTIS. Lest that be taken from what I had said, I was not posing it from a question of certain segments of our society, but as taking our society as a whole.

I think that probably this becomes an important factor to which to pay attention. That does not mean that we should not be paying attention to some—fortunately it looks like—relatively small segments of our society where possibly they could use more agricultural products or they could use the other goods, but let us get that in context of what I referred to the economy as a whole.

Mr. PARADISO. Right.

(Mr. Paradiso's formal statement follows:)

STATEMENT PREPARED BY LOUIS J. PARADISO, ASSISTANT DIRECTOR, CHIEF STATISTICIAN, OFFICE OF BUSINESS ECONOMICS

The economy continues to be featured by sluggish sales of goods for final use and by marked shifts in the pattern of inventory buying. To illustrate the rapiod change which has occurred this year, in the first quarter GNP increased $15 billion at annual rate from the previous quarter; $9 billion of this advance was in final purchases by consumers, business, and government, and $6 billion was in increased inventory investment. In the third quarter, GNP dropped a little to an annual rate of $503½ billion—or $1½ billion below the second quarter rate. Final purchases increased $3 billion while inventory investment dropped $5 billion.

On the whole, the basic indicators in the most recent months have continued to display mixed movements, with easing-off tendencies dominating the economic scene. In the early part of the fourth quarter, retail sales showed little change, while manufacturers' sales, inventories, and orders were reduced significantly.

Exhibit 1 shows in real terms the quarterly movement of GNP and final purchases over the postwar period. Shifts in inventory policy have contributed importantly to the fluctuations in total GNP. It should be noted that the average annual rate of increase of real GNP and of final purchases has been 3½ percent from 1948 to 1960, based on a regression trend line; the growth rate is somewhat higher if computed using the prerecession year 1957 as a terminal point.

The reduced rate of the increase in final purchases in the third quarter reflects a combination of diverse trends in major demand groups. Exhibit 2 shows the recent changes in the major groups of final purchases in constant dollars or real terms placed in perspective with earlier postwar developments.

CONSUMER PURCHASING SLOWS

Consumer purchasing has usually followed closely the course of income although there have been at times marked exceptions. As exhibit 2 shows, purchases of nondurable goods and services have fluctuated over a narrow range and have been generally upward in the postwar years with the increase averaging 3 percent per year. In contrast, consumer durable goods buying has fluctuated widely around a sharp uptrend showing an average annual rate of growth of 4 percent.

In the third quarter of this year, total consumer purchases declined whereas incomes continued to increase. The decrease was due mainly to a substantial reduction in durable goods purchases, particularly automobiles and home equipment items. Electrical appliance sales have been lagging partly in reflection of the downtrend in sales of houses over the past year. For most appliances, inventories currently are fairly high and some adjustment is being made to bring production more in line with sales.

In the early fall period there appears to have been some small improvement in consumer buying attributable mainly to some rise in automobile sales. The strength of the auto market for the coming year has not yet been tested, since in the early weeks after new models are introduced sales are usually quite brisk. It will be another month or two before a test of the market becomes more definitive. The recent loss of force of consumer purchasing is in sharp contrast to the strength of consumer demand through the recovery period of the past 2 years.

RESIDENTIAL CONSTRUCTION ACTIVITY DOWN

Residential construction is sharply below year-ago volumes and, as exhibit 2 shows, the decline started in the second half of last year. Throughout the entire postwar period residential construction has shown extremely wide swings, although the trend has been sharply upward. Private nonfarm housing starts, which foreshadow the trend of short-term future housing activity, have been trending downward since the middle of last year. In the 3 months August–October, new private housing starts at an annual rate of 1.2 million were one-sixth below the similar period of last year. The continuing downtrend in these starts in the face of somewhat more favorable money markets does not provide encouragement for an early upturn in housing activity.

BUSINESS SPENDING ON PLANT AND EQUIPMENT OFF

Business outlays for plant and equipment have been highly volatile over the postwar period fluctuating around a rather moderately rising trend averaging 1½ percent per year. Following the recovery which began in the fourth quarter of 1958, these outlays have shown a leveling off tendency since the middle of the current year due to slow business sales, generally ample capacity, reduced profits, and other factors. In fact, the survey just completed by the Department of Commerce and the Securities and Exchange Commission shows that businessmen expect to spend a little less in the fourth quarter of this year than in the third, and anticipate a further small reduction in the first quarter of next year—to $1.4 billion less than this year's second quarter high of $36.3 billion, seasonally adjusted at annual rate. The indicated decline early next year, if realized, is relatively moderate. Confirming the results of this survey is the fact that in each of the past 4 months orders received by non-electrical machinery companies have fallen short of sales by a moderate margin.

EXPORTS UP AND IMPORTS DOWN IN THIRD QUARTER

A favorable development in recent months, insofar as it affects GNP, has been the improvement in our net export position on goods and services account. This has resulted from a broad rise in our exports and some reduction in our imports effectuated in part by American industries recapturing some of our domestic markets from foreign competitors. Thus, U.S. net exports of goods and services shifted from an adverse balance of one-half billion dollars, at annual rate, in the fourth quarter of last year, to a favorable balance of about $3½ billion in the third quarter of this year. Because this development is broadly based, the chance of a serious reversal of the favorable balance is now smaller than it was during the previous period of upswing in our net exports. It should be noted from exhibit 2 that the trend of both exports and imports

in real terms has been strongly upward in the postwar years. In contrast to the favorable developments in the exchange of goods and services, our other international transactions have developed adversely, resulting in a sizable and rising deficit in our total balance of international payments this year.

GOVERNMENT EXPENDITURES UP

During the past fiscal year, Federal purchases of goods and services—the government component of GNP—have been declining moderately due to some easing in defense spending. In the September quarter of this year, the trend was reversed and these purchases increased $1 billion from the second quarter annual rate to $52½ billion. As exhibit 3 shows, this total represents 10½ percent of GNP. The rise in the past quarter was in large part, but not completely, due to the pay raise for Federal employees.

Of greater significance than current purchases for measuring the near-term impact on business are contracts placed for future deliveries of goods and services. In this context, in the third quarter just passed, the Defense Department's obligations for procurement, research, and construction were placed at higher rates than is usually the case in this period, reflecting in part expansion of basic programs and a somewhat higher rate of ordering for the 1961 than for the 1960 fiscal year.

On the basis of contracts already placed and the fulfillment of present intentions, it appears that Federal purchases of goods and services will increase moderately in the coming months—by perhaps as much as $3 billion, at annual rate, by mid-1961—and thus this rate of spending will be a positive influence on our economy.

In addition to purchases of goods and services, the Federal Government, in the September quarter this year, incurred other outlays amounting to an annual rate of about $40 billion covering transfer payments (including such items as unemployment compensation payments and old age retirement benefits), interest costs, grants-in-aid, and subsidies. These "other" expenditures are expected to increase on the basis of the budget review by about $1½ billion for this fiscal year as a whole from the September quarter annual rate. The rise will come about mostly because a larger number of persons will become eligible by law to receive various types of Government benefits.

Federal Government receipts on income and product account are projected at $99 billion for the current fiscal year—computed on the basis of the midyear budget review data. The midyear review estimates are predicated on the following income assumptions for calendar year 1960: Personal income of $405 billion, and corporate profits of $47 billion. For the first 10 months of 1960, personal income averaged $403½ billion; for October, the latest month available, the rate was $409½ billion. Corporate profits before taxes in the June quarter were at a seasonally adjusted annual rate of $45½ billion. Indications are that they will be somewhat lower for the September quarter. As exhibit 4 shows, profits are extremely volatile and are sensitive to even small changes in their basic determinants; on the other hand, fluctuations in personal income are relatively small.

Purchases of goods and services by State and local governments have risen steadily in the postwar period and are currently at the annual rate of $48 billion, representing nearly 10 percent of GNP. These purchases are expected to continue upward. During this fiscal year they may rise as much as $3 billion due mostly to larger payrolls for more teachers, increased outlays for additional school buildings, and to some extent expansion of other construction.

Considering goods and services alone, total Government purchases could contribute an additional $5 to $6 billion, at annual rate, to the GNP from the second quarter of this year to the second quarter of next year.

INVENTORIES SHIFT FROM ACCUMULATION TO LIQUIDATION

The value of inventories held by nonfarm business currently is estimated at about $100 billion. In the first quarter of this year, inventories were being accumulated at an annual rate of $11 billion. A marked shift has occurred since then. In the second quarter, the rate of accumulation was reduced to $5 billion. In the third quarter there was little inventory change, and in October business inventories were actually liquidated. This sharp turn in the inventory

picture was concentrated in manufacturing, particularly in the durable goods industries as is seen in exhibit 5. In the past 3 months, factory stocks have been drawn down at an annual rate of $2½ billion.

Exhibit 6 shows that the liquidation was concentrated in purchased materials and goods-in-process, reflecting an adjustment of the large buildup of stocks earlier this year, due partly to the effects of the steel strike and partly to the anticipation of higher sales volume. Last March, manufacturers reported in the Commerce-SEC survey that they expected an 8-percent rise in their sales in 1960 over 1959. Actually, sales in the first 10 months of this year have increased by only 3 percent over the corresponding period of last year.

On the other hand, finished goods inventories have risen in the past several months, offsetting only in part the decline in working stocks. Additions to finished goods stocks probably reflect some involuntary accumulation, due to an easing of sales in certain industries and to an increasing tendency to push back inventory holdings to the suppliers.

In view of the recent inventory changes, the question arises as to their relative position. Although stock-sales ratios are about the same as last year, they do not provide useful guides to the inventory position at this time, particularly because of the effect of the steel strike last year. Apparently stocks of raw materials and goods-in-process are not high relative to current sales, and in the short run, these inventories will probably move in concert with fluctuations in sales and orders. In the case of finished goods inventories, however, some adjustment may occur in the coming months with the pattern of change in these stocks reflecting the usual lag relative to sales.

Changes in inventories held by auto dealers have dominated the movements of total trade inventories. Currently dealers' holdings of new cars may be somewhat on the high side, although the motor vehicle industry is taking steps to adjust production closer to sales rates.

GROSS NATIONAL PRODUCT BY MAJOR TYPE OF PRODUCT, IN CONSTANT DOLLARS Tables 1 and 2
(Billions of 1954 dollars, seasonally adjusted at annual rates)

	Table 1			Table 2						
	Total GNP	Final Purchases	Change in Business Inventories	Consumer Nondurable Goods and Services	Consumer Durable Goods	Plant and Equipment 1/	Government 2/	Residential Nonfarm	Exports	Imports
1948: I	286.4	283.7	2.7	174.2	24.0	33.5	37.9	11.4	15.5	12.6
II	293.3	288.4	4.9	174.2	24.8	33.8	42.0	12.0	14.4	12.7
III	295.6	289.8	5.8	174.2	25.2	34.0	43.5	11.6	14.5	13.0
IV	297.3	293.2	4.1	176.2	24.3	34.9	45.3	10.6	14.5	12.7
1949: I	291.5	292.0	-.4	176.3	23.7	32.2	46.3	10.1	15.7	12.3
II	290.3	296.3	-6.0	177.6	26.0	31.5	47.4	10.3	16.0	12.6
III	295.6	297.6	-2.0	177.7	27.1	30.3	48.2	11.5	15.0	12.2
IV	293.0	299.1	-6.0	180.5	28.5	29.6	46.8	12.8	13.5	12.6
1950: I	302.7	300.0	2.7	181.7	29.0	29.5	44.6	14.0	14.2	12.9
II	312.0	306.6	5.4	184.3	29.8	32.9	43.5	15.5	14.2	13.6
III	325.6	320.4	5.2	188.2	37.3	34.8	44.2	16.5	14.9	15.6
IV	331.6	316.1	15.5	184.8	32.2	35.4	48.3	15.4	14.7	14.9
1951: I	334.0	324.0	10.0	189.2	33.0	34.3	52.5	14.8	15.7	16.1
II	340.0	325.6	14.5	186.8	27.8	35.4	61.1	12.9	16.7	15.2
III	346.3	336.5	9.8	189.5	28.1	35.8	67.6	12.0	18.2	14.4
IV	346.9	342.4	4.5	192.1	27.7	35.4	71.6	12.1	18.5	14.6
1952: I	349.6	345.0	4.6	193.0	27.0	35.8	73.4	12.4	18.3	15.1
II	349.3	352.0	-2.7	194.3	28.4	36.1	77.7	12.6	17.6	14.9
III	352.6	348.9	3.8	196.8	27.0	33.0	79.5	12.8	15.7	15.7
IV	362.3	357.4	4.9	198.6	31.6	34.9	80.0	13.4	16.1	17.1
1953: I	368.9	366.4	2.6	200.9	33.0	36.6	83.0	13.6	16.2	17.0
II	373.2	370.0	3.2	202.8	33.5	36.0	85.1	13.8	16.4	17.5
III	370.2	369.4	.7	202.2	33.7	36.7	84.4	13.5	16.6	17.8
IV	363.9	368.5	-4.6	202.0	32.1	36.5	84.9	13.5	16.5	17.0
1954: I	360.4	362.9	-2.5	202.3	31.2	35.7	80.1	13.7	16.0	16.0
II	359.4	362.3	-2.9	204.2	32.2	35.0	75.2	14.8	17.8	16.9
III	362.1	364.1	-2.0	206.6	32.4	35.1	73.6	15.8	17.3	16.7
IV	370.1	369.2	.8	209.4	33.9	34.5	72.2	16.9	18.8	16.4
1955: I	382.2	377.5	4.7	210.8	37.9	35.5	73.4	18.3	18.6	17.2
II	389.5	383.0	6.5	214.7	39.0	37.2	73.1	18.5	18.5	18.0
III	397.5	391.5	6.0	218.4	41.5	39.7	72.6	18.2	19.9	18.8
IV	401.1	394.0	7.1	221.8	39.9	40.5	73.5	17.6	20.0	19.3
1956: I	398.8	393.0	5.8	224.4	38.9	40.4	71.8	16.6	20.6	19.7
II	398.9	394.8	4.1	225.6	38.0	40.8	71.5	16.5	22.0	19.7
III	400.2	396.2	3.9	226.4	37.1	41.5	72.1	16.0	23.4	20.2
IV	405.5	401.5	4.0	228.7	38.2	41.5	73.5	15.7	23.5	19.7
1957: I	409.6	407.1	2.5	230.0	38.9	41.8	75.8	15.5	25.2	20.2
II	410.0	407.2	2.8	231.9	38.5	41.3	76.0	15.2	24.7	20.5
III	411.0	408.7	2.3	234.5	39.0	41.4	74.8	15.2	24.7	20.8
IV	403.8	404.8	-1.0	234.5	37.7	39.9	75.4	15.3	23.0	20.8
1958: I	391.6	397.9	-6.2	234.1	34.9	36.0	77.2	15.4	21.0	20.7
II	394.6	398.7	-4.1	236.4	34.7	34.0	78.5	15.2	21.3	21.5
III	403.1	404.4	-1.3	239.8	35.0	33.3	79.9	16.1	21.8	21.6
IV	414.3	411.4	2.9	241.8	37.6	34.0	81.5	17.7	21.6	22.7
1959: I	422.9	416.1	6.8	244.6	39.3	34.6	81.1	19.2	20.8	23.5
II	434.2	424.1	10.1	248.4	41.6	36.3	81.2	20.4	21.2	25.0
III	426.3	426.3	-.0	249.6	41.2	37.1	80.5	19.6	23.1	24.8
IV	429.1	425.3	3.8	251.7	41.1	37.2	78.5	18.3	22.5	24.0
1960: I	440.5	430.7	9.8	253.1	41.8	38.1	79.6	18.3	23.8	24.0
II	442.2	437.4	4.8	256.5	41.9	39.8	80.3	18.2	25.2	24.5
III	438.0	437.4	.6	256.7	40.2	40.0	80.3	18.0	25.8	23.6

1/ Producers' durable equipment, private nonresidential construction
2/ Includes Federal, State and local

Source: U. S. Department of Commerce, Office of Business Economics

Table 3

GOVERNMENT PURCHASES OF GOODS AND SERVICES

	Total Government Purchases	Federal Total	National Defense	State and Local	Ratio to GNP: Federal	Ratio to GNP: State and Local
	(Billions of dollars)				(Percent)	
1948	34.5	19.3	11.1	15.2	7.4	5.9
1949	40.2	22.2	13.4	17.9	8.6	6.9
1950	39.0	19.3	14.1	19.7	6.8	6.9
1951	60.5	38.8	33.6	21.7	11.8	6.6
1952	76.0	52.9	46.1	23.2	15.2	6.7
1953	82.8	58.0	49.0	24.9	15.9	6.8
1954	75.3	47.5	40.9	27.7	13.1	7.6
1955	75.6	45.3	38.7	30.3	11.4	7.6
1956	79.0	45.7	40.0	33.2	10.9	7.9
1957	86.5	49.7	44.0	36.8	11.2	8.3
1958	93.5	52.6	44.3	40.8	11.8	9.2
	Seasonally adjusted annual rate					
1959						
I	97.1	53.3	45.4	43.8	11.3	9.3
II	97.7	53.7	45.9	44.0	11.0	9.0
III	98.1	53.6	45.6	44.5	11.1	9.2
IV	96.4	52.5	45.0	43.9	10.8	9.0
1960						
I	97.5	51.8	44.4	45.7	10.3	9.1
II	98.6	51.7	44.1	46.9	10.2	9.3
III	100.7	52.7	44.5	48.0	10.5	9.5

Source: U. S. Department of Commerce
Office of Business Economics

Table 4

PERSONAL INCOME AND CORPORATE PROFITS

(Billions of dollars)

	Personal Income	Wage & Salary Disbursements	Corporate Profits Before Tax
1948	210.4	135.2	33.0
1949	208.3	134.4	26.4
1950	228.5	146.4	40.6
1951	256.7	170.7	42.2
1952	273.1	184.9	36.7
1953	288.3	198.1	38.3
1954	289.8	196.3	34.1
1955	310.2	210.9	44.9
1956	332.9	227.6	44.7
	Seasonally adjusted at annual rate		
1957			
I	345.1	235.9	46.0
II	351.4	238.7	43.7
III	355.6	240.9	43.8
IV	354.1	238.7	39.4
1958			
I	353.2	234.7	32.8
II	355.9	235.6	34.4
III	364.7	242.7	38.8
IV	368.1	245.6	44.9
1959			
I	374.7	251.4	46.4
II	384.5	260.1	51.7
III	384.8	259.7	45.3
IV	389.0	261.5	44.8
1960			
I	396.2	268.7	48.8
II	404.2	273.1	45.7
III	408.0	274.9	n.a.

n.a. - Not available

Source: U. S. Department of Commerce
Office of Business Economics

Table 5

BUSINESS INVENTORIES
(Billions of dollars, seasonally adjusted book value)

	Manufacturing Industries		Retail Stores		Wholesale Establishments	
	Durable Goods	Nondurable Goods	Durable Goods	Nondurable Goods	Durable Goods	Nondurable Goods
1957						
January	30.6	21.8	10.8	13.2	6.5	6.3
February	31.0	22.0	10.8	13.1	6.5	6.3
March	31.2	22.1	10.7	13.0	6.5	6.3
April	31.5	22.2	10.6	13.1	6.5	6.3
May	31.6	22.3	10.7	13.2	6.5	6.2
June	31.4	22.4	10.8	13.3	6.6	6.1
July	31.7	22.4	10.8	13.3	6.7	6.0
August	31.7	22.5	11.0	13.2	6.7	6.1
September	31.8	22.3	11.1	13.2	6.7	6.1
October	31.8	22.3	10.9	13.3	6.7	6.1
November	31.5	22.4	11.2	13.1	6.7	6.1
December	31.1	22.4	11.4	13.1	6.6	6.1
1958						
January	30.6	22.3	11.3	13.1	6.6	6.0
February	30.3	22.2	11.2	13.1	6.5	6.0
March	29.9	22.1	11.0	13.1	6.4	6.0
April	29.4	22.1	10.8	13.2	6.3	5.9
May	29.0	21.9	10.8	13.1	6.2	5.9
June	28.5	21.7	10.8	13.3	6.2	5.9
July	28.3	21.5	10.7	13.3	6.2	5.9
August	28.1	21.4	10.7	13.2	6.2	5.9
September	28.0	21.2	10.5	13.2	6.2	5.9
October	27.9	21.4	10.3	13.2	6.2	5.9
November	27.9	21.4	10.5	13.1	6.3	5.8
December	27.8	21.4	10.8	13.2	6.3	5.7
1959						
January	28.1	21.4	11.0	13.2	6.3	5.6
February	28.4	21.5	11.0	13.2	6.3	5.6
March	28.9	21.5	11.1	13.0	6.3	5.6
April	29.4	21.7	11.3	13.2	6.4	5.7
May	29.7	21.9	11.5	13.1	6.5	5.7
June	30.2	21.9	11.7	13.1	6.6	5.8
July	30.3	21.9	11.9	13.2	6.7	5.9
August	30.1	22.0	11.6	13.2	6.6	5.9
September	29.8	22.1	11.5	13.3	6.5	6.0
October	29.2	22.3	11.6	13.1	6.5	6.1
November	29.3	22.3	11.0	13.2	6.5	6.1
December	30.1	22.3	11.0	13.3	6.6	6.1
1960						
January	30.8	22.5	11.3	13.2	6.6	6.1
February	31.3	22.6	11.6	13.2	6.7	6.1
March	31.8	22.6	11.6	13.5	6.8	6.1
April	31.9	22.7	11.6	13.3	6.8	6.1
May	32.1	22.9	11.8	13.4	6.9	6.2
June	32.2	22.9	11.8	13.5	6.9	6.1
July	32.0	22.9	11.9	13.5	7.0	6.1
August	32.1	22.9	11.7	13.6	7.0	6.1
September	31.8	22.9	11.7	13.6	6.9	6.2
October	31.4	22.9	11.8	13.4	6.9	6.3

Source: U. S. Department of Commerce, Office of Business Economics

Table 6

MONTHLY CHANGES IN MANUFACTURERS' INVENTORIES

BY STAGES OF FABRICATION

(Billions of dollars, seasonally adjusted book value)

	Durable Goods Industries			Nondurable Goods Industries		
	Purchased Materials	Goods-in-Process	Finished Goods	Purchased Materials	Goods-in-Process	Finished Goods
1959						
January	.2	.1	*	*	*	*
February	.1	*	.2	.1	*	*
March	.3	.1	.1	*	*	*
April	.2	.2	*	.1	*	.1
May	.2	.1	.1	.2	*	*
June	.3	.1	.1	.2	*	-.1
July	*	*	.1	*	.1	-.1
August	-.2	*	*	-.1	*	.2
September	-.4	*	*	*	*	.2
October	-.3	-.2	-.1	*	*	.1
November	.1	*	*	*	*	.1
December	.2	.3	.3	*	*	.1
1960						
January	.3	.2	.2	.1	*	.1
February	.1	.2	.2	.1	*	*
March	.1	.2	.2	*	*	*
April	.1	*	.1	*	.1	.1
May	*	.1	.1	*	*	.1
June	-.1	.1	.2	*	*	*
July	-.1	-.2	.1	-.1	*	*
August	-.1	*	.1	*	*	.1
September	-.1	-.2	.1	-.1	-.1	.2
October	-.2	-.2	*	-.1	*	.1

*Less than $50 million.

Source: U. S. Department of Commerce
Office of Business Economics

USCOMM—DC—

Exhibit I

GROSS NATIONAL PRODUCT

Final Purchases and Changes in Business Inventories

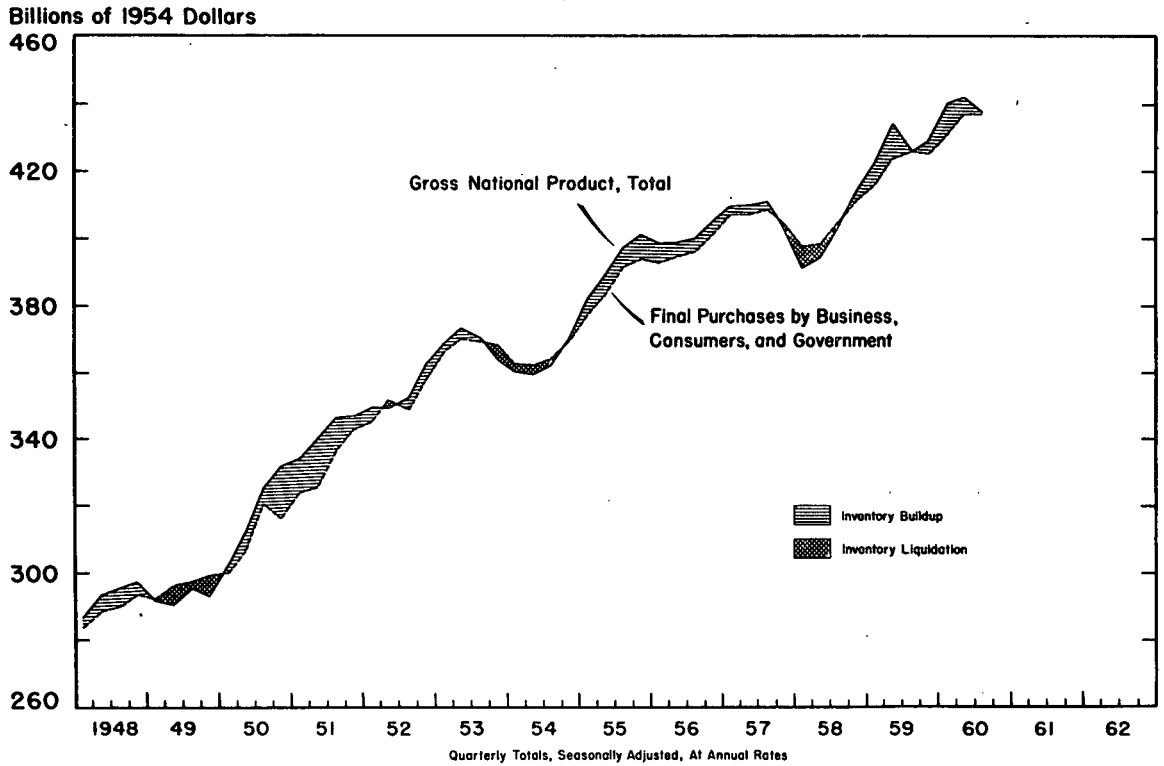
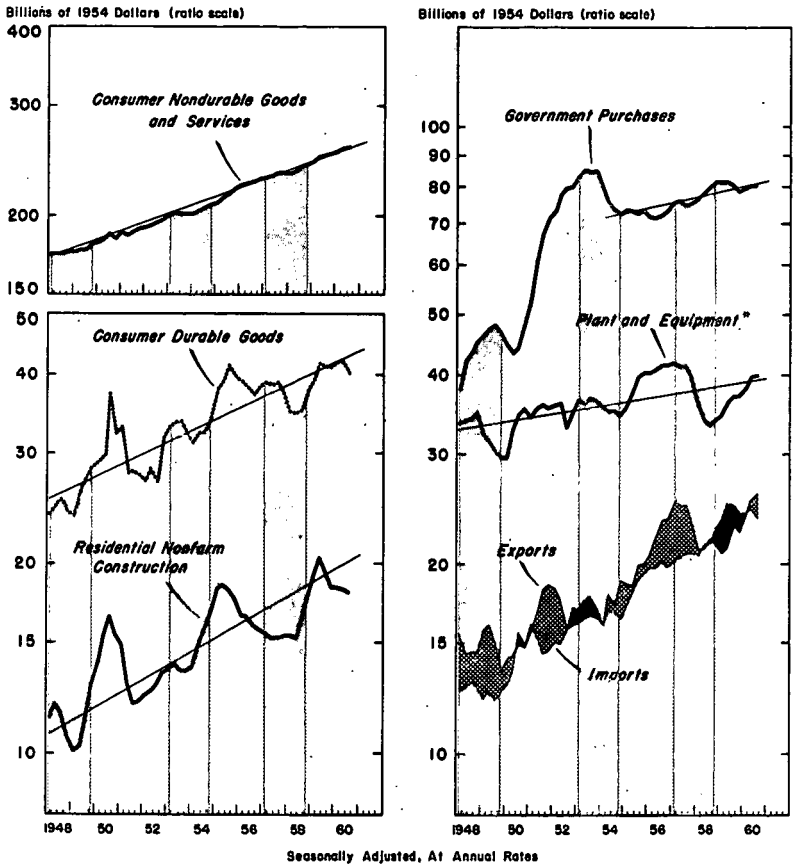


Exhibit 2

POSTWAR PATTERN OF FINAL PURCHASES OF GOODS AND SERVICES



Seasonally Adjusted, At Annual Rates

* Producers durable equipment and private nonresidential construction.

Exhibit 3

GOVERNMENT PURCHASES OF GOODS AND SERVICES

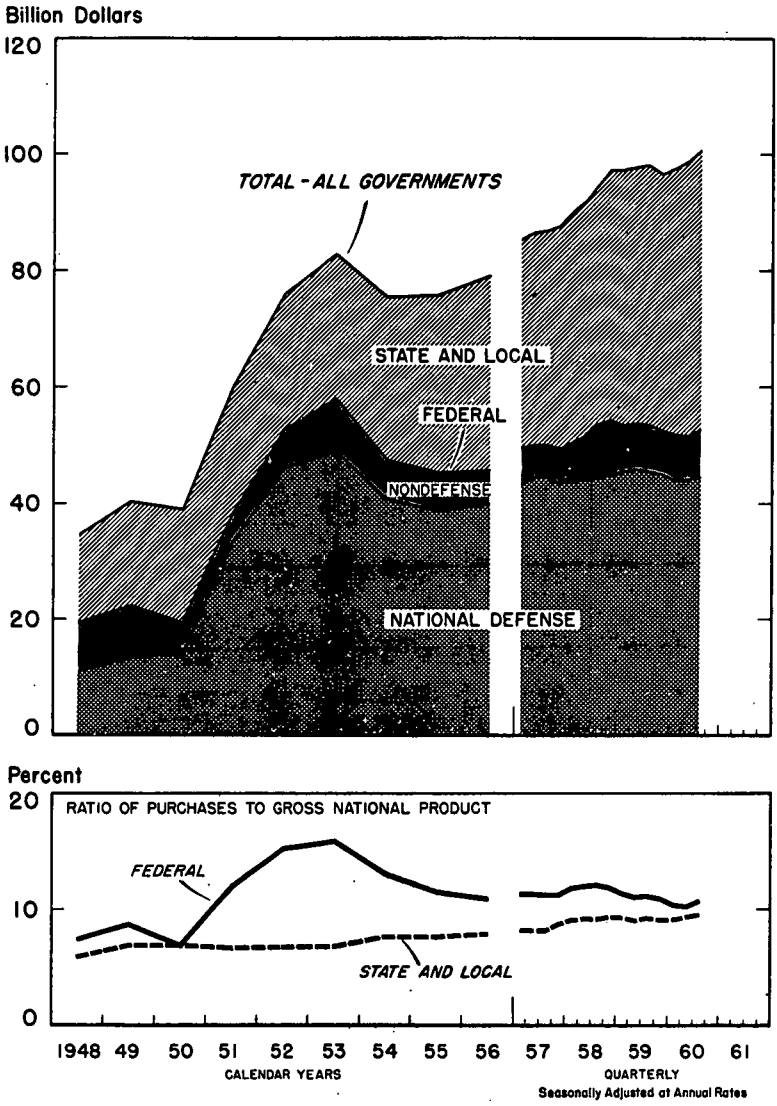


Exhibit 4

PERSONAL INCOME AND CORPORATE PROFITS

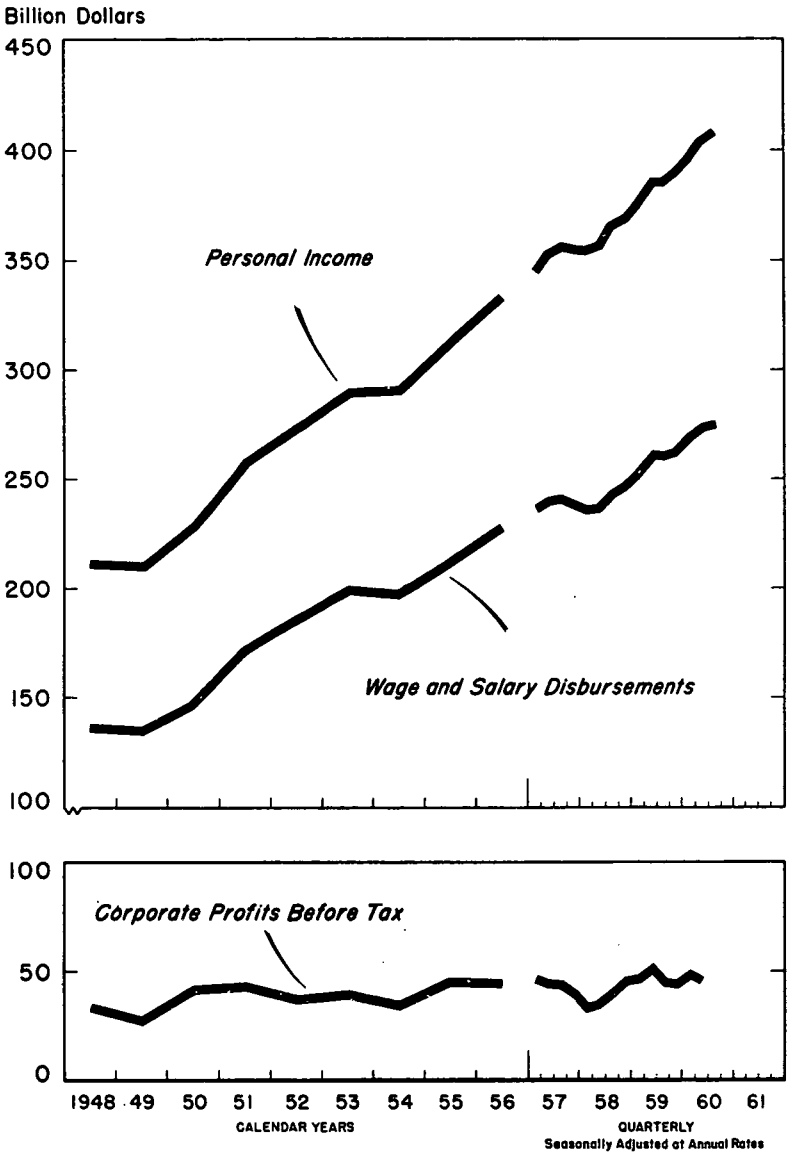
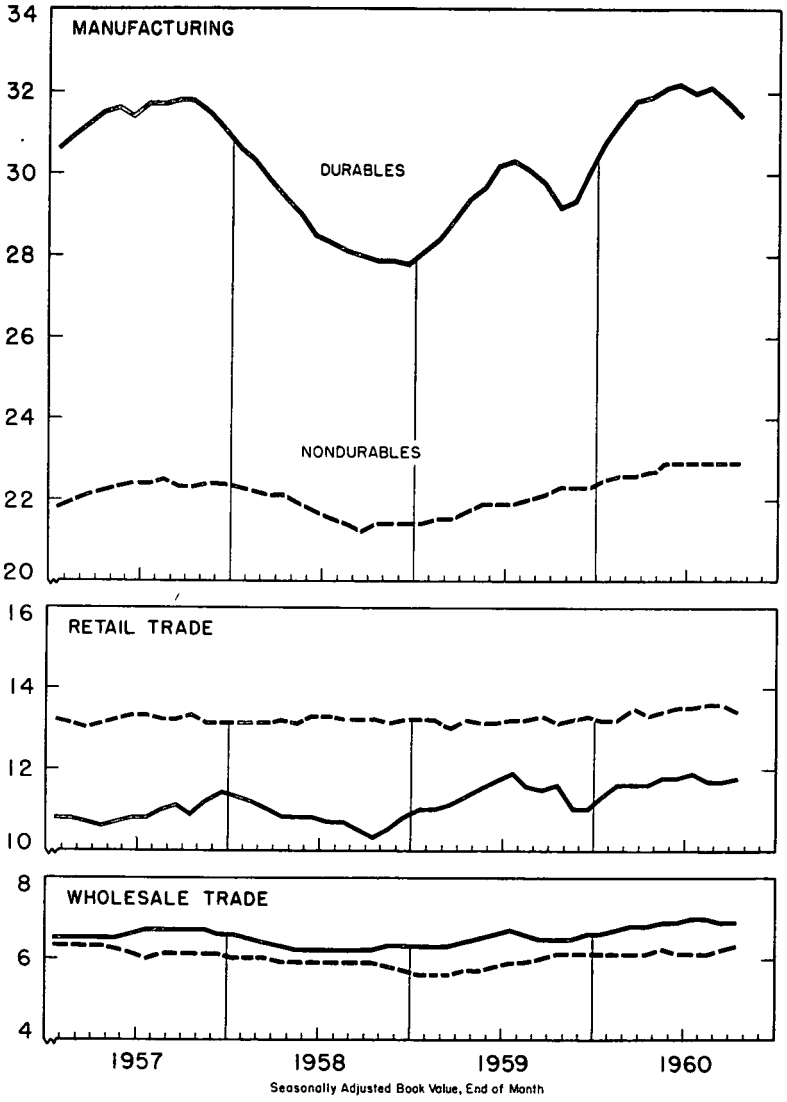


Exhibit 5

BUSINESS INVENTORIES – MAJOR GROUPS

Fluctuations Concentrated in Durable Goods Manufacturing

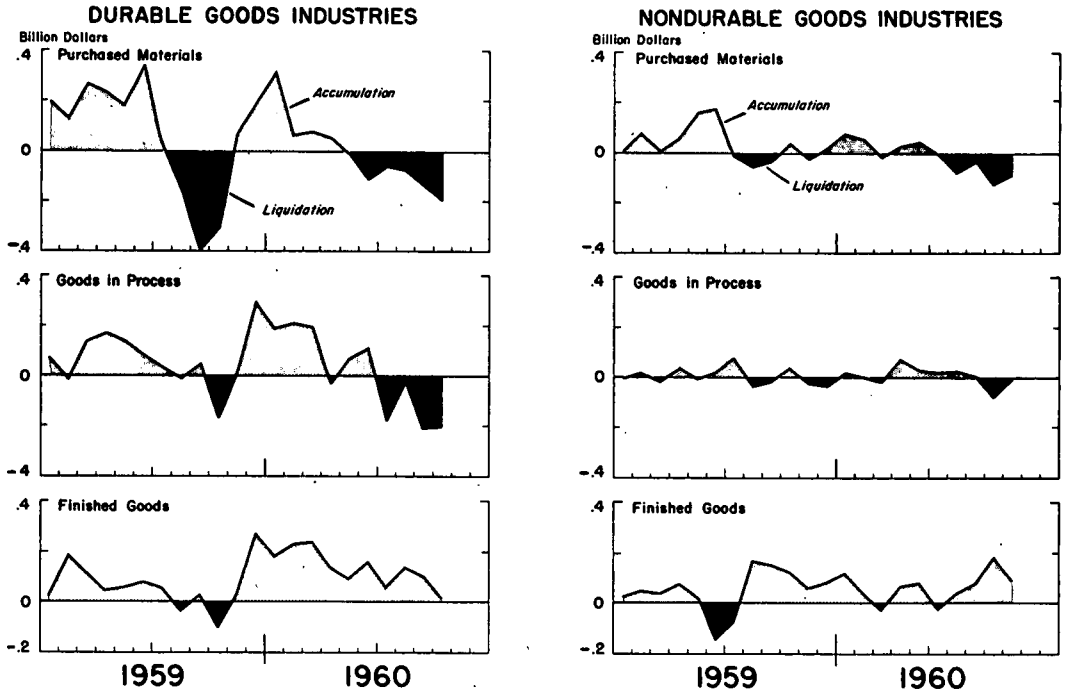
Billion Dollars



Seasonally Adjusted Book Value, End of Month

Exhibit 6

MONTHLY CHANGES IN INVENTORIES HELD BY MANUFACTURING COMPANIES IN VARIOUS STAGES OF FABRICATION



Monthly Changes, Seasonally Adjusted

The CHAIRMAN. Mr. Moore, will you comment?

STATEMENT OF GEOFFREY H. MOORE, ASSOCIATE DIRECTOR OF RESEARCH, NATIONAL BUREAU OF ECONOMIC RESEARCH, INC., NEW YORK, N.Y.

Mr. MOORE. This is a personal statement of my own views and should not be attributed to the National Bureau of Economic Research, which does not issue reports on the current economic situation and has neither approved nor disapproved of this one.

I wish to address myself to three questions:

First, is the economy experiencing a business cycle contraction comparable to those that occurred in 1948–49, 1953–54, and 1957–58, as well as in earlier periods?

Second, are there reliable indications that this contraction, if it be such, is near its end?

Third, if not, is there any evidence that this contraction will be more severe or less severe than the others?

Perhaps it will be helpful to state my answers to these questions at the outset.

First, I think that a peak in business activity was reached in or around May 1960 and that a contraction has been underway since then.

Second, there have been a few preliminary developments of the sort that usually precede an upturn, but they are not yet decisive enough to suggest that the upturn is in sight.

Third, there are some tentative indications that this contraction will be relatively mild.

These answers require explanation and qualification, especially the latter, and I should like now to explain and to qualify.

In doing so I shall bear in mind the chairman's request that I deal particularly with "diffusion indexes and other NBER series."

I use the term business cycle contraction, rather than recession, or adjustment, or depression, because the National Bureau has tired to define and identify business cycle contractions with some precision from historical records.

The U.S. economy, like others, has had a long experience with business cycle contractions. Twenty-five have occurred during the past hundred years. They have lasted 19 months, on the average, while the intervening expansions have averaged 30 months.

During the past 12 years we have experienced three contractions, and no decisive development, in my judgment, has occurred to lead one to expect that they will not recur about this frequently in the future, although I think there are reasons to expect them to become shorter and less severe.

The CHAIRMAN. When you say we have had three contractions, in the last 12 years, do you include the present contraction or are you excluding it?

Mr. MOORE. I am referring to the earlier ones, beginning in 1948.

The CHAIRMAN. If thisone is included it would be the fourth?

Mr. MOORE. That is correct. The beginning of each contraction is marked by what we call a business cycle peak, and the end by a business cycle trough.

The peak month is a month in which aggregate economic activity—production, employment, income, trade—is at a maximum, after allowance for seasonal factors. Naturally, the various available statistical measures of aggregate activity do not necessarily all reach their peaks in the same month. Usually, however, the peaks cluster fairly closely around each other, and we select a month that is representative of the cluster.

In 1948 that month was November. In 1953, July, and in 1957, July. Surely, the business cycle trough month is one in which aggregate activity reaches its lowest ebb.

October 1949, August 1954, and April 1958 have been the most recent trough months. Hence the 1948–49 contraction lasted 11 months; 1953–54, 13 months; 1957–58, 9 months. Each of these intervals was substantially shorter than the historical average, 19 months.

My first question, therefore, comes to this: Has the business cycle expansion that began at the trough in April 1958 come to an end and, if so, when?

In my judgment the way to obtain the most reliable answer is to look systematically at economic indicators that typically lead, as well as those that coincide with, and those that lag at business cycle peaks.

The National Bureau's studies have produced lists of indicators classified according to these characteristics. The first such list was issued in 1938, the second in 1950, and the third is being released today.

Illustrations of the sequences shown by various indicators are given in chart 1. Let me explain them briefly.

Panel A demonstrates the tendency for changes in the average workweek to precede those in employment and in labor income.

Historical evidence for this relationship goes back to World War I, and it appears systematically in a wide variety of industries.

Turns in the workweek precede those in employment or income by about 4 months, on the average, though sometimes the lead is much longer and sometimes it is shorter.

The reason for the lead is, basically, that a shift in the workweek is a flexible and economical way for business management to adjust to changes in demand, and it is therefore a step they initially take, following it up later, if necessary, with a change in the number of workers employed.

Panel B illustrates, in the top two lines, the fact that commitments to invest in plant and equipment, as expressed in new orders for equipment and new contracts for plant construction, precede the actual production or construction activity and the outlay of funds therefor.

The interval averages something like 6 or 8 months, and the relationship is attested by a wide variety of statistical evidence covering many years.

The third line in panel B shows that investment in inventories follows a different, and earlier, course than outlays for plant and equipment. Inventory investments is one of the most volatile components of gross national product and, at least in the postwar period has usually reached its highs and lows before those in gross national product itself.

The bottom line on the chart suggests that when business firms are actively adding to their inventories there is likely to be upward pressure on the prices of industrial raw materials, and vice versa.

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Hence, this price index extends to move early in the business cycle too.

Panel C shows the importance of considering not only leading but also lagging factors in business cycles. The index of manufactured goods prices is labeled "coincident" on the basis of historical evidence, although in 1953–54 and 1957–58, it merely leveled off instead of declining.

The index of wage and salary cost per unit of output, obtained by dividing the Department of Commerce estimate of total wages and salaries in manufacturing by the Federal Reserve index of manufacturing output, has turned down only after a business contraction has been underway for some months, and turned up only after a business expansion has proceeded for some time.

I must point out that this index is a rather crude approximation to the cost figures one would like to have.

Nevertheless, what I have said about its cyclical behavior is supported by better evidence for a considerable number of individual industries.

Now when we examine the relation between prices and labor costs by means of the ratio shown in the third line on the chart, we find that the ratio declines during the latter part of a business expansion and the initial stages of a business contraction, whereas it rises during the later months of a contraction and the early months of an expansion. That is to say, it usually leads.

This relationship is one of the factors, it may even be the dominant factor, causing the similar behavior of profit margins per dollar of sales, shown in the fourth line. Indeed, the relation between prices and labor costs appears to be a crucial factor affecting the timing of cyclical movements in aggregate profits, shown at the bottom of the chart.

That profits and their prospective trends are a vital element in the workings of a private enterprise economy hardly needs to be stressed. Their functioning in the business cycle, however, is sometimes overlooked.

I should, therefore, like to call attention to the similarity of the movements of profits and profit margins in panel C to those of investment commitments in panel B, and also to those of that sensitive indicator of demand for labor, the average workweek, in panel A.

Chart 1, then, illustrates the assistance one can get, in determining whether a business cycle contraction has begun, from knowledge of the sequence in which different economic processes typically move.

Each of the leading series illustrated—the average workweek, new orders and contracts for plant and equipment, change in business inventories, spot market prices for industrial materials, profit-labor cost ratio, profits per dollar of sales, and total corporate profits—appears to have entered upon a declining phase.

The declines in most instances began earlier and hence are now clearer and more persistent than those in the two coincident series shown in the chart—nonfarm employment and labor income—or in others I might have shown, such as gross national product, or industrial production, or total personal income.

One of the lagging series illustrated, plant and equipment investment, has now begun to decline while the other, unit labor costs, has not declined at all.

I should be less inclined to characterize the current situation as a business cycle contraction if it were confined to only a few sectors of the economy, or if it were becoming less widespread.

Diffusion indexes help to tell us how widespread it is, and whether it is becoming more so.

Illustrations of these indexes, for some of the same economic processes shown in chart 1, are provided in chart 2.

The workweek index states what percentage of the 21 major manufacturing industries covered by the data reported an increase in the workweek during the past 3 months.

For the latest 3-month span, July to October, this percentage was 31; hence 69 percent reported a decline—some reported no change, but for simplicity these are split evenly between the rising and declining groups.

This was a bit better than the previous figure, June to September, which was 12 percent rising or 88 percent declining. The June to September figures represented the lowest percent rising and the highest percent declining since autumn of 1957.

The nonfarm employment diffusion index measures the percentage of industries, out of the 32 industries covered by the figures, reporting an increase in employment over the preceding month. This was down to 25 percent in October, which is the lowest it has been since March 1958, except for 1 month—October 1959—during the steel strike.

Each of the other diffusion indexes in chart 2 is currently below 50 percent.

In short, more than half of the industries or companies represented in these several indexes have been undergoing contraction in recent months.

In no case is the contraction as widespread as it eventually became in 1948–49, 1953–54, or 1957–58.

Two indexes, the workweek and wholesale manufactured goods prices, hint that it is becoming less widespread, but in view of the fact that they have shown this for only 1 month it would be well to reserve judgment on this point.

In general, one would expect diffusion indexes for leading activities, such as workweek, new orders, and profits, to begin to rise before those for coincident or lagging types.

Moreover, in past business cycle contractions virtually all of them have begun to rise before the contraction reached its end.

Chart 3 depicts diffusion indexes of a somewhat different sort. Here each index includes a variety of kinds of economic process. The top line is based on 12 indicators that have for many years shown a systematic tendency to turn down prior to business cycle peaks and up prior to troughs.

The second curve includes eight indicators that are themselves measures of the general level of economic activity or move closely together with such measures.

The third line contains five indicators that have systematically lagged at business cycle turns.

The fourth curve is based on the same data as the first, but on changes over 3-month instead of 1-month spans. This modification tends to produce a smoother index.

The indexes shown here are based upon the new list of leading, coincident, and lagging indicators that I mentioned earlier. It is obvious that the three groups move in a rough sort of sequence.

Indeed, the difference between the leading and the lagging groups is so great that much of the time they are moving in opposite directions, as one can see by comparing the bottom two curves on the chart.

As in chart 2, the indexes have moved downward in recent months, but have not reached the lowest levels recorded in the three preceding contractions. The leading index has very recently shown a slight, irregular improvement.

The meaning and the uncertainty to be attached to the answer to my first question has, I hope, become clear. The sequence of change that is usually found in the vicinity of business cycle peaks has appeared again during 1960, and the contraction has become fairly general.

Nevertheless, the contraction has not proceeded as far as the three earlier postwar contractions did.

A sustained improvement from here on would make this one negligible by comparison, and my conclusion would have to be revised.

I shall not take time now to justify the selection of May 1960 as a tentative peak date. There is uncertainty about this date also, and revisions of the figures and further study may alter it.

Let me now deal briefly with my second question, that is, the question whether indications of a prospective upturn have appeared.

We might expect to find such evidenec in charts 1, 2, and 3, yet aside from a 1-month rise in the workweek, and in its diffusion index, and a modest rise in the leading series diffusion index, there is virtually none.

Going beyond these charts, it is worth noting some other developments that usually occur during a business contraction and favor a future upturn.

One of these is a decline in interest rates and a rise in the money supply. Both of these have occurred. In fact, the general decline in interest rates, which began at various dates—depending on the type of rate—during the first half of 1960 was so early, relative to our tentative business cycle peak date of May 1960, that the development deserves to be called unprecedented.

The CHAIRMAN. Just a minute, Mr. Moore. Am I correct in my understanding that the yields on 3 months Treasury bills are only approximately half of what they were in February this year?

Mr. MOORE. I don't think the decline was that much.

The CHAIRMAN. The indicators on page 29 give a yield for January of 4.4 percent and for December 3, 2.33 percent on short-term issues. This means that the short-term interest rate was only about one-half of what it was.

On long-term issues it falls from 4.37 percent to 3.98 percent or a fall of approximately one-tenth in the long-term interest rate.

Mr. MOORE. On Government bonds?

The CHAIRMAN. Yes, sir.

Mr. MOORE. Yes; that is correct. That is a relatively sharp fall in short-term rates and more moderate fall in the long term.

Senator BUSH. What did you say the decline was from February?

The CHAIRMAN. Pardon me? January.

Senator BUSH. In January, 4.4?

The CHAIRMAN. That is correct.

Senator BUSH. Down to 2.3.

The CHAIRMAN. That is correct.

Senator BUSH. Whereas the long term declined from 4.37 to 3.98?

The CHAIRMAN. That is correct, or about one-tenth.

Mr. MOORE. My comment referred to the earlierness of this decline rather than its magnitude. That is certainly a relevant observation.

Another development that usually paves the way for an upturn is a decline in manufacturer's inventories of finished goods and a decline in the rate of liquidation of their purchased materials inventories.

As Mr. Paradiso pointed out, these have not yet occurred, according to the latest figures, which are for October, and so we can't point to that as a development favoring an upturn.

A third development that typically begins early in a business contraction is a rise in housing starts or in other activities preparatory to the initiation of new residential construction.

This does not seem to have occurred either. The upshot is that, while there are a few indications of a future resumption of the expansion in aggregate economic activity, they are not sufficiently decisive, I think, to warrant the conclusion that the contraction is now at an end or will be within a month or two.

If we could reach a positive conclusion on this point, the answer to my third question would be obvious. The contraction would have been extraordinarily brief, and the decline in employment, output, and income extraordinarily small.

Lacking such positive assurance, the question remains: Is there any evidence suggesting that the contraction will be relatively mild or that it will be severe?

During both the 1953–54 and 1957–58 contractions, I experimented with a scheme for measuring their severity as they developed. It involved determining the business cycle peak date, computing the percent decline in various indicators from that date to each successive month of the contraction, and comparing these declines with those that occurred during corresponding intervals in earlier business cycle contractions.

At some point, it seemed, one should be able to tell a severe contraction from a mild one, and the object of the experiment was to find out where that point was.

Table 1 and chart 4 show how this experiment is working out for the current contraction, assuming that the peak was reached in May 1960.

The first section of the table and the chart are confined to leading indicators, for the previous results showed that at this early stage of a contraction their rates of decline provide fairly reliable indications of relative severity, whereas the rates of decline in direct measures of aggregate activity are less dependable.

Later on, when figures for the first 6 months or more of contraction become available, the rates of change in the aggregate indicators should be more useful for this purpose.

In the meantime, of course, it is helpful to know what they are, and they are given in the table.

The present indications from this type of analysis are that the current contraction ranks among the least severe of those since 1920.

Compared with the initial declines in the leading indicators during the three most severe contractions—those beginning in 1920, 1927, and 1929—the declines since May 1960 are extremely small.

In most instances, too, they are smaller than the comparable initial declines during the five previous mild or moderate contractions. Only in comparison with the 1926–27 contraction does the present situation appear to have a close parallel, and the 1926–27 contraction was among the least severe of the 25 business cycle contractions in the National Bureau's entire hundred-year record.

Although this result is encouraging and the method has survived a certain amount of testing, I should not like to leave the impression that these preliminary indications can be relied upon indefinitely. They should be reexamined periodically as new data become available and the conclusion revised if that proves necessary.

Moreover, it would be naive to think that what happens during the first few months of a business cycle contraction will inevitably determine what will happen through to the end. The movements of leading indicators may foreshadow, in a rough and approximate way, the changes in business activity a few months ahead, but new policies and events can alter what is presently indicated, especially in the more distant future.

We should, therefore, approach my third question, about the severity of the contraction, from other directions as well.

A business cycle contraction involves, in part, a correction of financial maladjustments. If these maladjustments are serious, the ensuing contraction is apt to be severe. Sometimes the maladjustments are brought about by speculation, as when commodity prices, real estate prices, or stock prices are pushed up rapidly during a buying boom. Abuses in the private use of credit, such as loans made on very easy terms, with inadequate security, or on the basis of inflated valuations, also constitute maladjustments, and in the past have sometimes led to financial crises. Abuses in the handling of Government finances, with a resulting loss of public confidence, can also be considered a maladjustment that is likely to engender a correction.

In my view, however, there is little prospect that the current contraction will become severe by reason of such maladjustments. Although here and there corrections may be required, and the situation needs to be closely watched, in general our financial affairs have been responsibly handled.

Moreover, a substantial portion of our financial structure is backed up by insurance devices that did not exist in earlier times.

There is ground for optimism, too, in the evidence that changes in the structure of the economy and in its responses to cyclical forces have imparted a greater degree of stability to the system.

The increasing importance of the more stable industries, such as those that supply services rather than commodities, and the rising importance of the more stable, white-collar occupations, are examples of shifts that may be expected to have a stabilizing influence on employment.

The so-called automatic stabilizers also have played a far more important role postwar than they did prewar, and the moderate character and brevity of the postwar contractions may be credited, in some degree, to them.

The CHAIRMAN. What do you mean by "automatic stabilizers"?

Mr. MOORE. I mean the fact that income taxes, personal income taxes, tend to go down when income goes down, and by more than the percentage drop in income, so that disposable personal income does not decline as much as total income.

The CHAIRMAN. Would you include unemployment compensation payments among the automatic stabilizers?

Mr. MOORE. That would be another one; yes, sir.

For example, disposable personal income, that is, after taxes, scarcely declined at all in 1953–54 or 1957–58, and it has not declined in 1960.

Finally, our recent experiences with business cycles demonstrate that the Federal Government is alert to the problem, is better informed than ever before on current economic developments, and is prepared to take appropriate action.

The concern shown by this committee, both now and in past years, and its search for ways to improve the choices we make as to the appropriate type, magnitude, and timing of economic policies, is one example of this assumption of responsibility.

It augers well, and I am fortunate in being able to include it in the list of factors supporting my optimistic conclusion.

That completes my written statement, Mr. Chairman, and I have here the charts and exhibits.

Thank you very much.

(The charts and exhibits attached to the formal statement of Mr. Moore follow:)

TABLE 1.—*Percentage changes in selected indicators during business cycle contractions*

	Interval (months)	Percent change from May 1960 to most recent month and during corresponding periods of earlier contractions									
		Severe contractions from—			Mild or moderate contractions from—					Current contraction from May 1960	
		August 1929	May 1937	January 1920	July 1957	May 1923	November 1948	July 1953	October 1926	Percent change	Rank [1]
Leading indicators:											
Average workweek, manufacturing	5	−6.1	−8.2	[2]	−2.3	−2.8	−1.9	−2.2	−1.3	−1.3	1
Accession rate, manufacturing [3]	4	−2.3	−1.0	−2.2	−.5	−3.2	−.6	−1.0	−.6	−.3	1
Layoff rate, manufacturing [3]	4	+.7	*+1.7*	*−.02*	*+.8*	*+.8*	*+1.1*	*+.9*	*+.3*	*+.8*	2
New orders, durable goods	5	−15.2	−24.6	−16.7	−13.2	+3.3	−16.9	−19.8	+.5	−4.4	3
Housing starts [4]	5	−40.5	−30.1	−53.2	−2.2	+22.3	+10.5	+.1	+.2	−8.5	6
Commercial and industrial construction contracts	5	−39.7	−37.3	−43.1	−8.7	−27.4	−7.6	−34.5	+4.9	+4.0	2
New incorporations, number	5	−9.8	−12.8	−9.2	−7.6	−13.1	−1.7	−.8	+5.7	−.8	2
Business failures, liabilities	5	*+2.7*	*+17.9*	*+435.9*	*−10.5*	*+105.8*	*+16.1*	*+19.6*	*+32.3*	*+.6*	2
Corporate profits after taxes (Q)	3	−17.6	−16.3	−10.0	−10.2	−26.9	−15.3	−4.6	−5.7	−5.0	2
Index of stock prices	6	−23.7	−29.2	−8.2	−13.1	−5.0	−5.0	+5.2	+7.8	−1.1	3
Spot prices, industrial raw materials	6	−10.6	−22.7	−5.7	−10.6	−12.9	−24.0	−4.0	−2.3	−5.4	3
Indicators of aggregate economic activity:											
Nonagricultural employment, established survey	5	−3.9	−.7	[2]	−1.8	[2]	−2.5	−1.4	[2]	−.5	1
Unemployment rate [3]	5	*+1.6*	*+.7*	[2]	*+.8*	[2]	*+1.2*	*+1.9*	[2]	*+1.3*	4
Industrial production	5	−11.0	−10.8	−.9	−7.3	−5.3	−5.5	−8.0	+1.0	−2.4	3
Gross national product—											
In current dollars (Q)	3	−2.5	+5.1	[2]	−1.3	+.2	−2.3	−.5	+3.6	−.3	3
In constant dollars (Q)	3	[2]	[2]	[2]	−1.8	[2]	−2.0	−.8	[2]	−.9	2
Personal income	5	−5.8	−3.5	[2]	−.7	[2]	−1.9	−.3	[4]	+1.3	1
Retail sales [3]	5	−3.5	+.3	+6.5	−.6	+1.9	+.4	−2.7	0	−.8	7

	Percent change during entire contraction							
	Severe contractions			Mild or moderate contractions				
	August 1929 to March 1933	May 1937 to June 1938	January 1920 to July 1921	July 1957 to April 1958	May 1923 to July 1924	November 1948 to October 1949	July 1953 to August 1954	October 1926 to November 1927
Indicators of aggregate economic activity:								
Nonagricultural employment, established survey	−30.7	−10.0	[2]	−4.4	[2]	−4.1	−3.4	[2]
Unemployment rate	*+24.4*	*+8.2*	[3] *+7.9*	*+2.8*	[3] *+2.3*	*+3.0*	*+3.3*	[3] *+2.2*
Industrial production	−49.4	−30.4	−28.1	−13.4	−15.5	−6.8	−8.4	−5.7
Gross national product—								
In current dollars (Q)	−49.6	−11.9	[2]	−2.6	−2.3	−3.3	−1.8	+.3
In constant dollars (Q)	[2]	[2]	[2]	−4.0	[2]	−1.4	−3.0	[4]
Personal income	−49.7	−11.2	[2]	−.2	+.1	−3.2	−.1	+.8
Retail sales	−43.5	−14.1	−4.3	−3.4	−1.9	−.3	−.8	0
Interval (in months)	43	13	18	9	14	11	13	13

[1] A rank of 1 indicates that the decline since May 1960 is the smallest among the nine contractions; a rank of 2 that it is next to the smallest, etc. Percentage changes were computed to additional decimal places to break tied ranks.

[2] Not available.

[3] Change in the rate, rather than percent change. E.g., the average unemployment rate, seasonally adjusted, for April, May, and June 1960 was 5.1 percent; for October 1960, 6.4 percent; hence the increase entered in the table is 1.3 percent.

[4] Residential construction contracts before 1948.

[5] Department store sales before 1937.

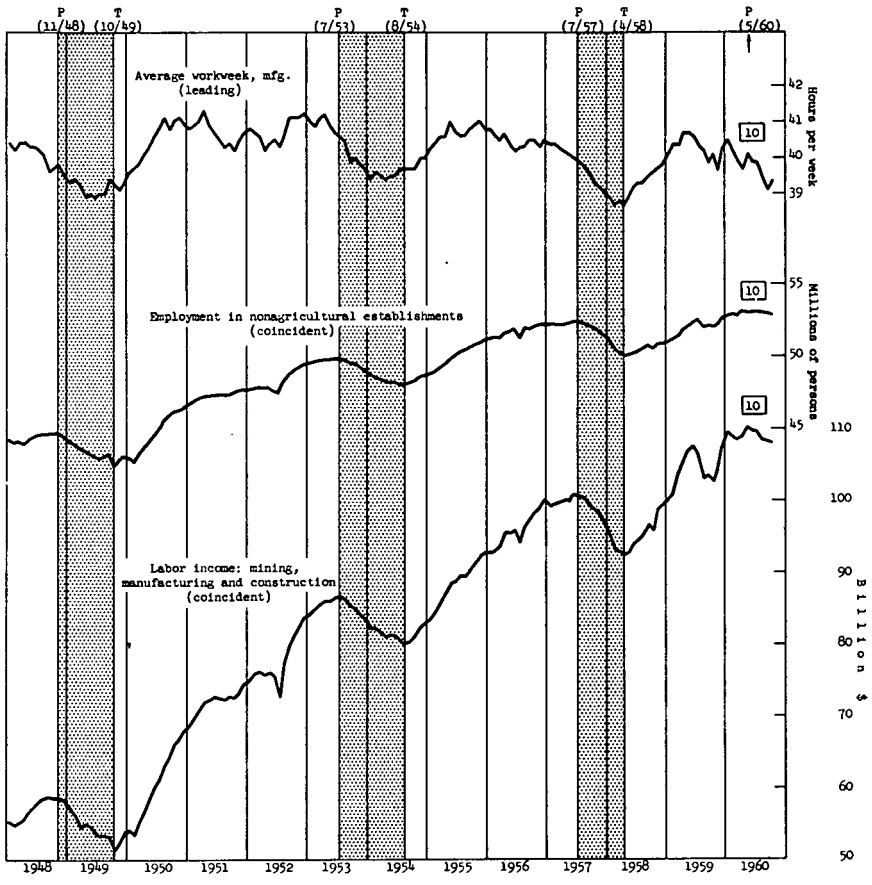
[6] Based on annual data.

NOTE.—Percent changes are computed from 3-month averages of seasonally adjusted data centered on the business cycle peak month. The business cycle peak months are shown at the top of the columns. The May 1960 peak is tentative. Italic figures are for series that usually rise during business cycle contractions. Changes in quarterly series (Q) are computed from the business cycle peak quarters; namely, III 1929, II 1937, I 1920, III 1957, II 1923, IV 1948, II 1953, III 1926, and II 1960. The contractions prior to the current one are arrayed from left to right in order of severity, as judged from the percent declines from peak to trough in a number of indicators of aggregate economic activity. For a description and test of this method see the forthcoming NBER report, "Business Cycle Indicators," vol. I, ch. 5, and "Measuring Recessions," 1958.

Chart 1

Examples of Leading, Roughly Coincident and Lagging Indicators

A. Labor Market Indicators



Shaded areas are business cycle contractions. The May 1960 peak is tentative.

Figures enclosed in rectangular boxes indicate the latest data plotted. Arabic numerals represent months; Roman numerals, quarters.

All series except the spot market price index, industrial raw materials, are adjusted for seasonal variation.

Source: National Bureau of Economic Research, Nov. 29, 1960.

Chart 1 (continued)

B. Business Investment Indicators

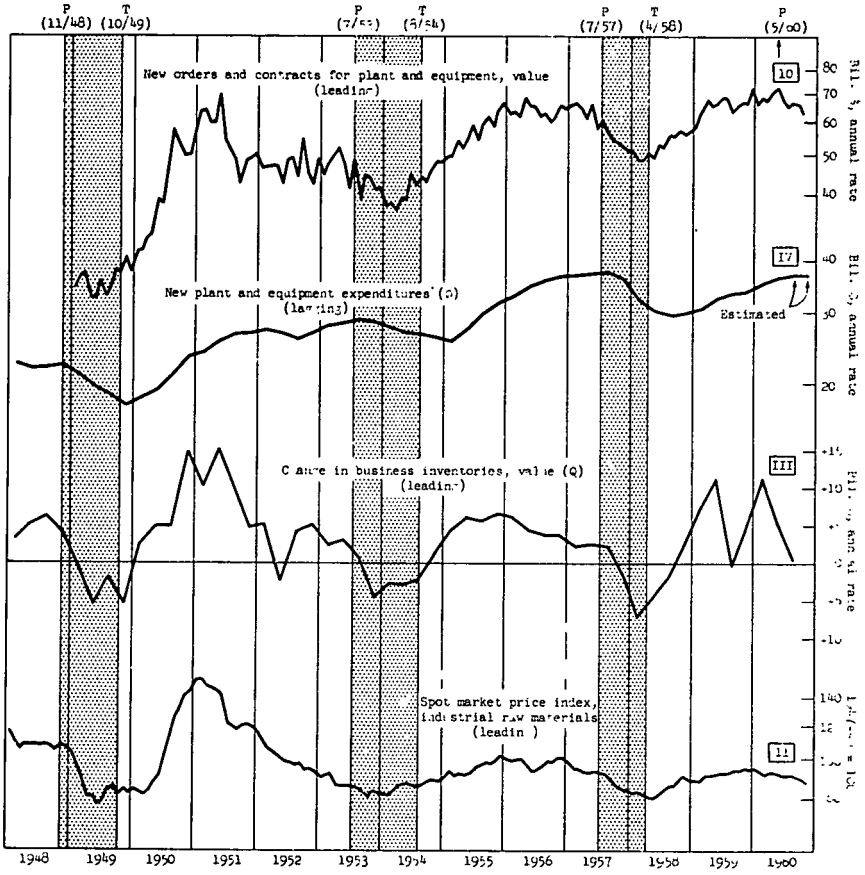


Chart 1 (continued)

C. Price, Cost and Profit Indicators

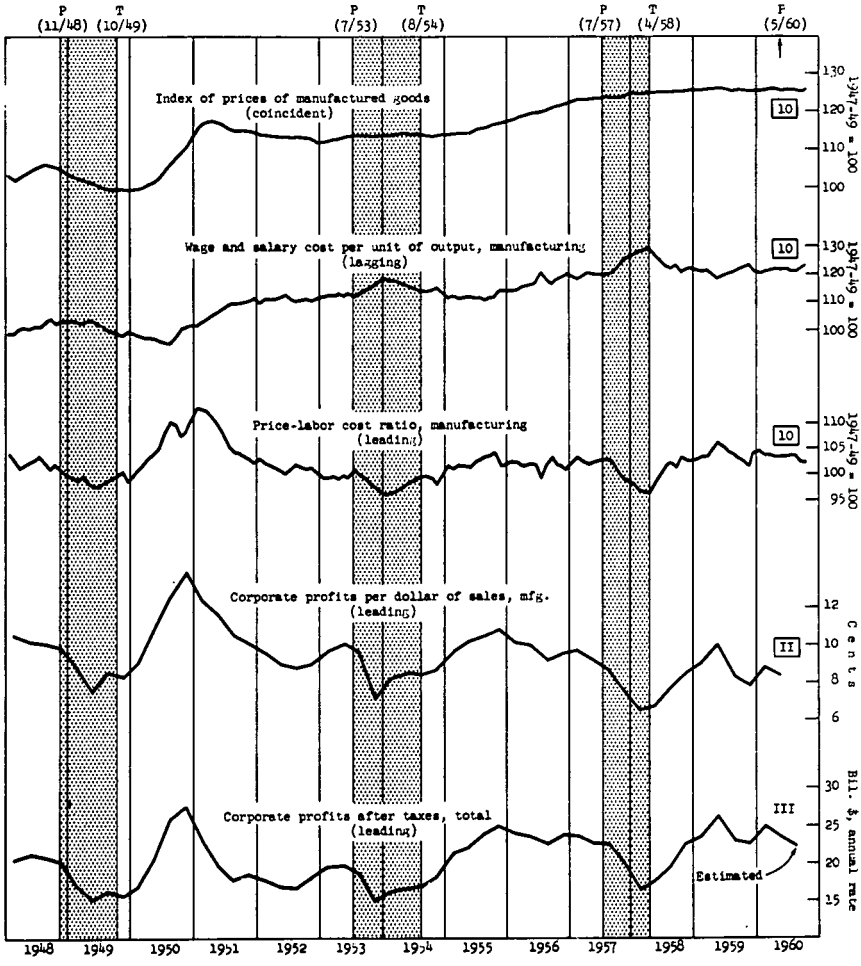
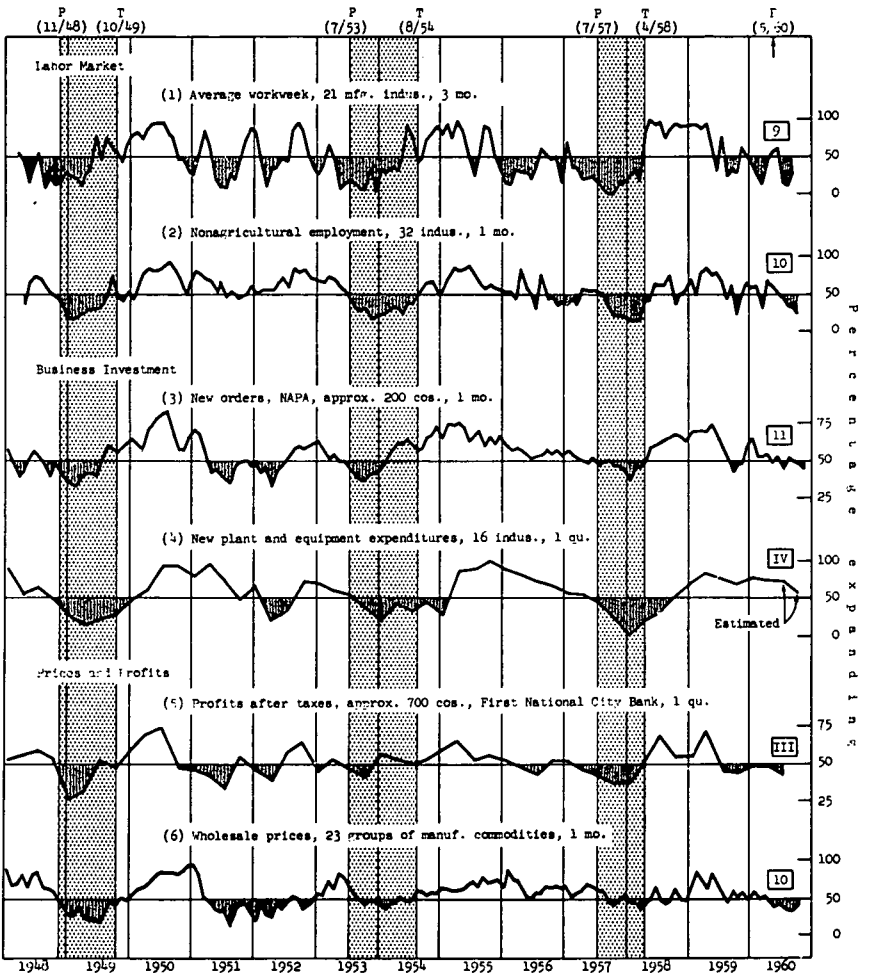


Chart 2

Diffusion Indexes for Selected Economic Processes



Shaded vertical areas are business cycle contractions. May 1960 peak is tentative.

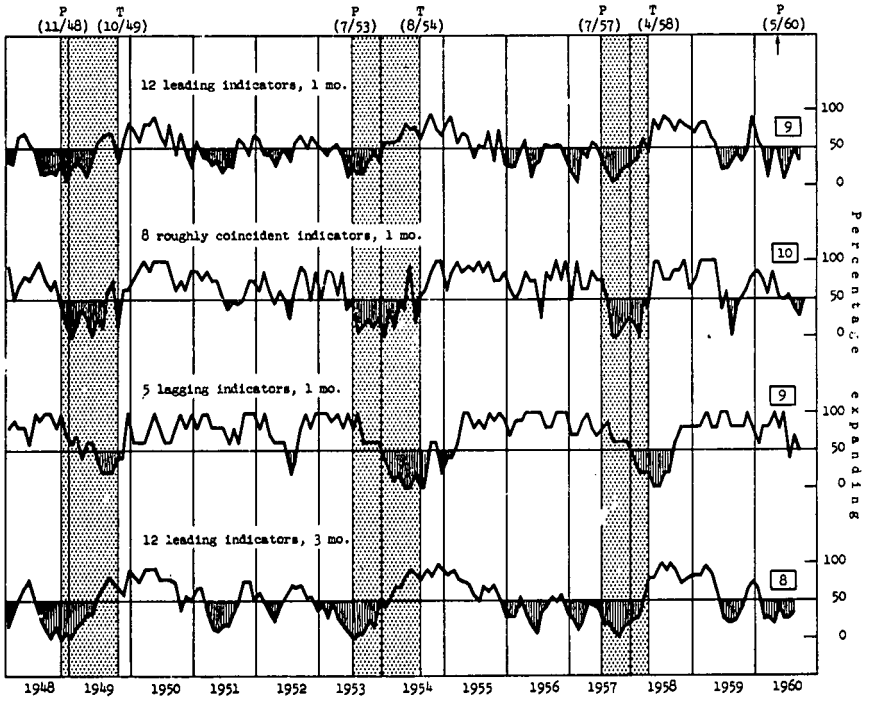
Figures enclosed in rectangular boxes indicate the latest data plotted. Arabic numerals represent months; Roman numerals, quarters.

Index (1) is based on directions of change in the component series over a 3 month span, centered; (2), (3), and (6) on directions of change from preceding month; (4) and (5), from preceding quarter. In indexes (1), (2) and (4) the component series are seasonally adjusted; in (3), (5) and (6) the percentage expanding is seasonally adjusted.

Source: National Bureau of Economic Research, Nov. 29, 1960.

Chart 3

Diffusion Indexes of Business Indicators (1960 List)



Shaded vertical areas are business cycle contractions. May 1960 peak is tentative.

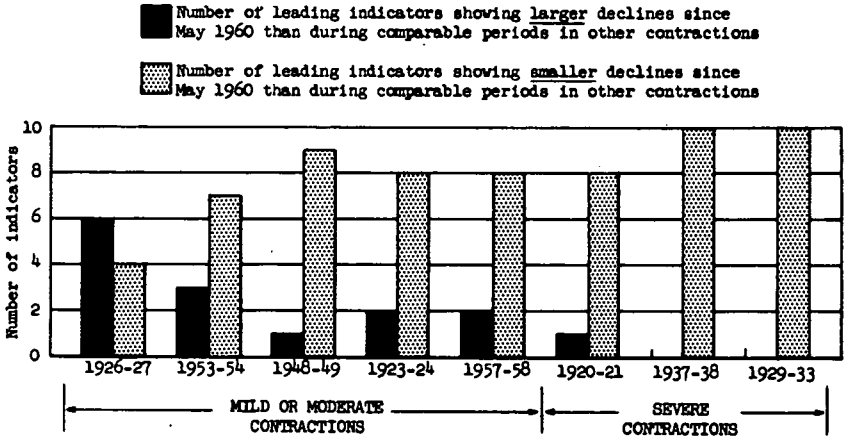
Figures enclosed in rectangular boxes indicate the latest monthly data plotted.

The top three indexes are based on directions of change in each indicator from the preceding month; the bottom index is based on changes over a three-month span, centered. For list of indicators, method of construction, and back data, see the forthcoming NBER report, Business Cycle Indicators, Vol. I, Chapter 3, and The National Bureau's Research on Indicators of Cyclical Revivals and Recessions, December 1960.

Source: National Bureau of Economic Research, Nov. 29, 1960.

Chart 4

Preliminary Indications of the Severity of 1960 Contraction Compared with Other Business Contractions (based on changes during first 4, 5 or 6 months)



Explanation: The ten leading indicators are: av. workweek, mfg. (not available 1920-21); accession rate, mfg.; layoff rate, mfg. (inverted); new orders, durable goods; housing starts; comm. & indus. bldg. contracts; new incorporations; liabilities of bus. failures (inverted); indus. stock price index; spot commodity price index. The per cent changes in each indicator are computed from a three-month average centered on the business cycle peak month. Thus the percentage change in the workweek from its average during April, May (the tentative business cycle peak) and June 1960 to its level in October 1960 (the latest available figure) is compared with its percentage change during the corresponding five-month interval in each of the preceding business cycle contractions. A similar comparison is made for each of the other indicators. Where November 1960 data are available (for stock prices and commodity prices), comparisons based on a six-month interval are made; where the latest figures are for September 1960 (accession rate and layoff rate), comparisons are based on a four-month interval. The contractions are arrayed from left to right in order of their over-all severity, beginning with the mildest. Their peak and trough dates are: Oct. 1926-Nov. 1927, July 1953-Aug. 1954, Nov. 1948-Oct. 1949, May 1923-July 1924, July 1957-Apr. 1958, Jan. 1920-July 1921, May 1937-June 1938, Aug. 1929-Mar. 1933. For a description and test of this method of analyzing contractions, see the forthcoming National Bureau report, Business Cycle Indicators, Vol. I, Chapter 5, and Measuring Recessions, O.P. 61 (1958).

Source: National Bureau of Economic Research, Nov. 29, 1960.

The CHAIRMAN. Mr. Pechman, you may proceed.

STATEMENT OF JOSEPH A. PECHMAN, THE BROOKINGS INSTITUTION

Mr. PECHMAN. Mr. Chairman, the views expressed here are personal and do not necessarily represent those of the trustees, officers, or other staff members of the Brookings Institution.

I have tried to answer briefly the three questions that the committee asked the members of the panel to address themselves to. The questions as I understand them are, first, to characterize the present economic situation in terms of employment trends, rates of use of capacity, demand, and so on; second, to evaluate the strength and weakness of the present situation; and, third, to relate these to longer run trends in the economy.

In answer to the first question, very briefly to summarize my position, we are now in an economic recession.

Senator BUSH. Are you reading from your statement?

Mr. PECHMAN. Not yet, sir.

We are in an economic recession which has been underway for about 6 months. As of the moment it must be regarded as a mild recession but it is still too early to tell how severe it will be.

With respect to the second and third questions, I believe that what is perhaps most disturbing about this recession is that it began at a time when the economy had not yet achieved a full recovery from the previous recession. The problem of policy for the year ahead is therefore not only to halt and reverse the business downturn but also to return as quickly as possible to the level of income and employment which the economy is capable of achieving.

While it is difficult to date the beginning of the contraction with absolute certainty, the available figures suggest that business activity reached a peak in the second quarter of this year. I agree, therefore, with Dr. Moore, that we have reached a peak and that the peak was probably in May. The evidence that this was a true business cycle peak is as follows, and I use only figures adjusted for seasonal variation in the following discussion.

First, the gross national product, which measures the aggregate volume of economic activity, declined between the second and third quarters of 1960 by three-tenths of 1 percent in current dollars and by nine-tenths of 1 percent in constant dollars. There seems to be little question that real GNP has continued to decline at a moderate rate in the current quarter.

Second, the index of industrial production reached a temporary peak in January of this year reflecting the unusually high level of durable goods production following the steel strike. The index declined slightly in the next 3 months and then made another peak, this time somewhat lower than the earlier one, in May. The preliminary estimate for October put industrial production 4 percent below January and 3 percent below May. There has been no sign of a pickup in industrial production since the October estimate was released.

Third, total wage and salary payments in the commodity producing industries have been declining since May.

Fourth, total employment has been declining since June and unemployment has been rising since May, while average hours of work in manufacturing—which generally led the turns of the business cycle—have been falling irregularly since the turn of the year. The unemployment rate exceeded 6 percent in October and this has not occurred in any month since the end of World War II except during business contractions or the early stages of recovery.

Representative CURTIS. Could I ask a question on points Nos. 3 and 4?

Mr. PECHMAN. Yes, sir.

Representative CURTIS. How would you integrate into that this switch that we are seeing from manufacturing to service industries? Is that still an overall factor allowing for, apparently, this change that is coming about?

Mr. PECHMAN. Total wage and salary disbursements, including the payments by Government and private service industries, has actually increased. I am addressing myself here to the evidence of what I regard to be a business contraction.

Representative CURTIS. Yes; I appreciate that. What I am trying to do is get in context, within this whole thing there is a a switch going on apparently between the manufacturing sector and the service sector.

Mr. PECHMAN. I think there is no question that such a switch has occurred.

Representative CURTIS. All I am trying to ask is that with that switch going on whether you have adjusted this thing in the manufacturing sector to reflect something that seems to be a long-term trend and, if so, whether that has any bearing on your point 3 and 4?

I wanted you to expound on that just a minute.

Mr. PECHMAN. It does have a bearing and I think it makes for milder contractions than would otherwise have occurred if manufacturing had been a larger element in the economy. But the fact is that, despite the growth of wage and salary payments in Government and in the service industries, aggregate production of the economy as a whole, as measured by the gross national product, has declined between the second and third quarters of this year.

Representative CURTIS. But it has increased in services?

Mr. PECHMAN. That is correct.

Representative CURTIS. I do not want to interrupt any more other than to give the reason why I asked the question. Take the agriculture sector of our economy in which production certainly can decline in the light of the surplus we are producing. It looks like some of the things we are seeing in 1960 and can expect in the future are reflection of the choice of the demand of the consumer. So the shift from manufacturing to services.

Mr. PECHMAN. There are always long-term adjustments being made in the economy, Mr. Curtis. These have been going on this year, as they have for a long time. I think that we are having a milder recession, as I will indicate later, than we otherwise would in the absence of these funds. Some of the things you mentioned probably moderate the decline in demand that would otherwise have occurred. But I don't think we can say that the factors you mentioned have actually sustained us at a level——

Representative CURTIS. No; I am not arguing that there is not a contraction, whatever you call it. What I am trying to do is to interpret these things, to see where it lies, what might be the causes in this thing. That is the reason I was pointing this up rather than trying to understand what you were explaining. It is not in disagreement with the overall development.

Mr. PECHMAN. My fourth reason for believing that we are in a contraction is that total employment has been declining since June and unemployment has been rising since May, while average hours of work in manufacturing—which generally lead the turns of the business cycle—have been falling irregularly since the turn of the year. The unemployment rate exceeds 6 percent in October. This has not occurred in any month since the end of World War II except during business contractions or the early stages of recovery.

Fifth, expenditures for plant and equipment have certainly reached a peak and may already be declining. As of this morning, before I read the morning newspaper, this was a forecast. I am sorry to say that the forecast turned out to be correct. The figures that were released yesterday by the Department of Commerce show that expenditures for plant and equipment have in fact reached a peak, that the peak occurred in the second quarter of this year, and that since then plant and equipment expenditures have been declining and are expected to decline further at least into the first quarter of 1961.

According to the first survey of prospects for the entire year 1961 by McGraw-Hill, outlays for plant and equipment are now expected to decline 3 percent betwen 1960 and 1961.

Judging from the data now available the current recession seems to be no more severe than the 1953–54 recession, which ranks as one of the mildest on record. In terms of real GNP the decline in the first quarter of the contraction amounted to eight-tenths of 1 percent in 1953–54 and, as already noted, to nine-tenths of 1 percent in the current recession. In both the 1948–49 and 1957–58 recessions, the rate of decline in real GNP at the same stage of the contraction was at least twice as fast. The rate of decline in industrial production has been much slower thus far in the current recession than in the same stage of the three preceding recessions. Personal income from production has been drifting upward since the beginning of the current recession, whereas it declined in each of the earlier recessions and I regard this as a bullish factor.

As Dr. Geoffrey Moore of the National Bureau has shown, and he again repeats it in the very fine paper he has just presented, most broad indicators of aggregate economic activity show relatively small declines during the earlier stages of the recession. The real test of the severity of a recession comes in the second 6 months and we are just entering this period in the present cycle. It may be noted that the most recent data on manufacturers' shipments and orders, department store sales, and insured unemployment are by no means reassuring.

The major weakness in the economic outlook is the impending decline in private capital formation. Although the reduction between 1960 and 1961 is expected to be only 3 percent, experience suggests that anticipation surveys typically underestimate change. And very, very frequently they cannot spot a change in direction when it occurs,

as the survey data released yesterday indicated. On this basis alone it would be prudent to expect a decline in plant and equipment expenditures of more than 3 percent in 1961. More important, corporate profits are low and seem to be falling rapidly. If the trend continues it will inevitably aggregate the decline in plant and equipment expenditures. Another bearish factor, but only for the very short term, is the continued decline in inventory investment.

On the other hand, State and local expenditures are continuing to rise and Federal expenditures have already shown signs of increasing. Residential construction declined sharply in the last half of 1959 but, on the basis of the data just released for November, the decline seems to have been arrested. On balance the evidence does not suggest any large change in total expenditures in either direction during the months immediately ahead. If I were asked to guess, I would guess that the direction would be slightly downward.

Although the contraction to date has not been large and the prospects for the immediate future are for little change in GNP, there are good reasons for being concerned about the economic situation.

First, unemployment and excess capacity are high and this cannot and should not be lightly dismissed. Even if the GNP remains unchanged, the rate of unemployment of both labor and capital would creep up.

Second, the economy has not been performing well in the past several years. Even a mild recession coming on top of a disappointing recovery could have adverse long-term effects on business incentives.

I would like to repeat this point. I think it is extremely important. When demand is sluggish, corporate profits are low. We do not have firm estimates of corporate profits for the third quarter of this year, but on the basis of the national income accounts that we now have it looks like corporate profits have already declined to a level of about $42 or $43 billion from a peak of $48 billion. Coming on top of the fact that we did not have an adequate recovery, this is a bearish factor. If we were able to sustain demand, profits as well as other incomes would increase. I think the economy would be much better off, and we could grow faster, under such conditions.

Senator BUSH. Do you have the formula for that that you will give us?

Mr. PECHMAN. I give a general prescription later.

The committee may find the few figures I have shown in the accompanying table of some interest in this connection. I must apologize to the committee that I do not have the resources to duplicate some of the fine, detailed statistical work of my colleagues on my left. So I have satisfied myself with just a few summary figures which I hope you will find helpful.

In this table I have broken up the last 12 years into three periods corresponding to the three complete cycles beginning in 1948. For each cycle I show the duration of contractions and expansions, the maximum and average unemployment ratios and average annual rates of growth from peak to peak in real GNP, industrial production, nonfarm employment and real disposable personal income per capita. I have also shown the long-term historical averages where comparable data are available. The following trends in these figures which I hope you can follow from the table are very striking indeed.

Selected data for 3 postwar cycles compared with long-term averages

	1948–53	1953–57	1957–60	Long-term averages
Duration of cycle (in months):				
Total	56	48	34	[1] 46
Contraction	11	13	9	[1] 20
Expansion	45	35	25	[1] 26
Maximum unemployment ratio during cycle	[2] 6.8	6.2	7.5	
Average unemployment ratio during cycle	4.2	4.5	5.8	
Average annual rates of growth during cycle (peak to peak):				
Real gross national product	5.2	2.3	2.7	[3] 2.9
Industrial production	7.0	2.1	2.9	[4] 3.7
Employment in nonagricultural establishments	2.5	1.2	.5	[5] 1.7
Real disposable personal income per capita	2.2	1.7	1.4	[5] 1.6

[1] Average of 20 peacetime expansions and 24 contractions between 1854 and 1957.
[2] Excludes 1 month in which the rate was exaggerated due to misclassification of workers.
[3] Average for period 1909–59.
[4] Average for period 1919–59.
[5] Average for period 1929–59.

NOTE.—Cyclical peaks are the 4th quarter of 1948, 2d quarter of 1953, 3d quarter of 1957, and 2d quarter of 1960.

Sources: National Bureau of Economic Research, Departments of Commerce and Labor, and Federal Reserve Board.

First, although there is no discernible trend in the length of the business contractions since 1948, the expansions have become progressively shorter. The expansion from the 1948–49 recession lasted 45 months; the expansion from the 1953–54 recession, 35 months; and the most recent expansion from the 1957–58 recession, only 25 months. The last expansion was about the same length as the average peacetime expansion between 1954 and 1957.

Second, unemployment was substantially higher in 1957–60 than in 1948–53 and 1953–57. I take here averages for cycles from peak to peak and, consequently, I think these numbers are comparable.

In the last cycle, unemployment reached a maximum of 7½ percent of the labor force but it never reached as high as 7 percent in the two previous cycles. Again we are talking about seasonally adjusted figures. For the 1957–60 cycle as a whole, unemployment averaged 5.8 percent and this compares with 4.2 percent and 4.5 percent in the two earlier cycles.

Representative WIDNALL. Mr. Pechman, in making those comparisons do you take into consideration the change in 1957 in the computation of unemployment?

Mr. PECHMAN. Yes, sir; these are comparable figures. I have used the official figures which have corrected for the changes in the definitions of the labor force and unemployment figure.

Representative WIDNALL. Today there are about 360,000 more classified as unemployed than there would have been prior to 1957.

Mr. PECHMAN. With respect to that one factor, I think these figures are comparable.

Representative CURTIS. One other thing on these things. The Korean war, which is so often forgotten, occurred and probably affected both the 4.2 and 4.5.

Mr. PECHMAN. I don't see how they affected the 4.5, which is 1957–60.

Representative CURTIS. When did you take your cycles?

Mr. PECHMAN. The cycles, as the table indicates, begin with the fourth quarter of 1948, the second quarter of 1953 and the third quarter of 1957. The first column of this table is affected by the Korean war and I indicate that later in my statement.

Representative CURTIS. The second would be true because the Korean war actually tapered on through most of 1953 if you include the year 1953.

Mr. PECHMAN. But there was a contraction beginning in the middle of 1953.

Representative CURTIS. Indeed, yes, but I think it is very important that we distinguish between a war economy and peace economy to try to get at the meat of this thing.

Mr. PECHMAN. I don't think you can characterize 1953–57 as remotely resembling a wartime economy.

Representative CURTIS. I am directing my attention to only one thing, your unemployment figures.

Mr. PECHMAN. I doubt whether this factor is of any importance at all.

Representative CURTIS. All you have to look at is the number of people who were let out of the military service after 1953, which was around 800,000, aside from the occupations that were going on that were directly related to a hot war. All I am directing attention to is 1 year in here. I don't think it is a big item but I just think it needs to be borne in mind if we are going to use comparisons and get some understanding out of it. The only reason I emphasize it is that for several years now in discussing these things the economists who come before us seem to ignore the existence of the Korean war and I just want to get their attention directed to the fact that it did occur and it had an economic impact.

Mr. PECHMAN. I certainly don't want to be accused of ignoring the Korean war and its economic impact. I do think, however, that on the basis of the facts one would have to say that the unemployment ratios in the expansion of the 1957–60 cycle are terribly high by past standards.

Representative CURTIS. I agree with your conclusions, don't misunderstand me.

Mr. PECHMAN. That is the major point I am making.

Third, growth rates of output, incomes, and employment from peak to peak were substantially lower in the last two cycles than in 1948–53. This fact alone is not very significant because the 1948–53 growth rates reflect the recovery in the productivity of the economy from the depressed wartime levels and the stimulus of the Korean war. I mention the Korean war, Mr. Curtis.

The CHAIRMAN. I want to point out in justice to, Mr. Pechman, this was written before the gentleman from Missouri asked his questions.

Mr. PECHMAN. Thus, for the reasons I have already mentioned, the growth rates for 1948–53 were unusually high and probably unsustainable over long periods. But it is a significant fact that the growth rates in the last two cycles were generally lower than the long-term historical growth rates, not only substantially lower than the 1948–53 growth rates, which we would expect, but they were lower in most cases than the long-term growth rates.

While GNP grew at an annual rate of 2.9 percent from 1909 to 1959, it grew at average rates of 2.3 and 2.7 percent in the last two cycles. Actually the rate of growth of real GNP between the 1953 peak and the last quarter of 1955 was exactly equal to the long-term average rate of 2.9 percent. However, from the fourth quarter of 1955 to the second quarter of 1960, and I stop there because it is unfair to go beyond a business peak, the growth rate averaged only 2.2 percent per year.

Fourth, nonfarm employment grew at an annual rate of only one-half of 1 percent per year in the last cycle. This is a particularly disturbing development. With the labor force rising by more than 1 percent per year and the continued migration from the farms to the cities, nonfarm employment opportunities must rise at a much faster rate if we are to avoid a secular rise in the unemployment ratio.

The CHAIRMAN. These figures of nonfarm employment include employment in the service industries as well?

Mr. PECHMAN. That is right, including Government, Mr. Chairman.

I am sure that the committee is aware that small differences in annual rates of growth turn out to be significant amounts when compounded over a period of years. Thus, if the economy had grown at the historical rate of 2.9 percent per year since the end of 1955, gross national product would be about $30 billion higher than it actually is at present.

It would be very difficult, if not impossible, as I have indicated, to duplicate the growth rates of the 1948–53 period unless a national decision were made to devote a much larger proportion of our total output on growth promoting activities, in the public as well as in the private sector of the economy. But it should not be difficult to do at least as well as we have done over very long periods in the past.

In my view the major impediment to economic growth during the past 5 years has been a combined monetary and fiscal policy which placed excessive restraints on the growth of aggregate demand. If these restraints were relaxed I have little doubt that the economy would grow faster and that this growth would be interrupted less frequently by periodic recessions.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Mr. Pechman.

Mr. Schultze, we are very glad to have you back with us.

STATEMENT OF CHARLES L. SCHULTZE, ASSOCIATE PROFESSOR OF ECONOMICS, INDIANA UNIVERSITY, BLOOMINGTON, IND.

Mr. SCHULTZE. I am grateful for the opportunity to appear before the Joint Economic Committee to discuss with you the current economic situation. The basic proposition I should like to lay before you can be fairly easily stated, although it may be a bit difficult to explain clearly the reasoning behind it. The problem with which we are confronted at the present time—high and rising levels of unemployment, falling production and income—arises out of circumstances which are somewhat unique for the postwar period. In particular, the Nation has been faced for some time with what might be called "high-level creeping stagnation." I wish to emphasize both adjectives—

"high-level" and "creeping"—to distinguish the current situation from the fundamental malaise of deep stagnation about which so much was heard in the late 1930's. There is nothing so fundamentally wrong with the current economic structure that it could not be corrected with relatively modest changes in public policy.

At this time I would like to emphasize the point Mr. Pechman just made; even if Mr. Moore is correct that we have a relatively mild and shallow recession, our basic economic problem is not over.

At the present time, I believe, we are suffering the consequences of the failure of the economy to recover fully from the last recession. All three of the earlier postwar recessions were more or less straightforward in nature, in the sense that the decline in economic activity followed a period of relatively full employment. After the 1958 recession, however, the economy never reached a reasonably full employment level of activity. Unemployment was never reduced significantly below 5 percent of the labor force; the utilization of plant capacity did not rise much above 80 percent and, in recent months there has been a fairly significant worsening in both unemployment and capacity utilization rates.

In order to understand the reasons for the recent behavior of the economy, I wish first to pose, and then to suggest answers to several questions:

(1) Did we fail to reach full employment because the post-1958 recovery was a weak one, or because the labor force rose so rapidly that even a good recovery was not sufficient?

(2) After each postwar recession, there was a period of rapid recovery, then, as full employment was approached, a slower growth up to the next business cycle peak. How does the recent period compare with earlier postwar recoveries, and particularly with the 1954–57 experience?

(3) What has been the structure—the composition—of demand since 1958, compared to earlier recoveries, and does this throw any light on our failure to achieve full employment?

The relevant data for examining these questions are presented in tables 1 through 3.

(The tables referred to follow:)

TABLE 1.—*Changes in the labor force, employment and unemployment during recent business cycles*

[Change, in thousands [1]]

Change between [2]—	1953 to 1957			1957 to 1960		
	Labor force	Employment	Unemployment	Labor force	Employment	Unemployment
Peak to trough	615	−1,437	2,052	884	−1,328	2,212
Trough to recovery	1,907	2,871	−964	648	2,136	−1,488
Peak to recovery	2,522	1,434	1,088	1,532	808	724
Recovery to new peak	1,610	1,680	−70	1,403	961	442
At annual rate	(805)	(840)	(−35)	(1,122)	(769)	(354)
Old peak to new peak	4,132	3,114	1,018	2,935	1,769	1,166
At annual rate	(1,033)	(779)	254	(903)	(544)	(359)

[1] All data are seasonally adjusted. The unemployment data derived by subtracting seasonally adjusted employment from seasonally adjusted labor force.

[2] The dates used for peak, trough, etc., are:

	1953–57	1957–60
Peak	2d quarter 1953	3d quarter 1957.
Trough	2d quarter 1954	1st quarter 1958.
Recovery	3d quarter 1955	2d quarter 1959.
New peak	3d quarter 1957	3d quarter 1960.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 2.—*Change in nonagricultural employment by broad industry groups*

[Average annual changes, in thousands [1]]

Industry group	1947 to 2d quarter 1953	2d quarter 1953 to 2d quarter 1957	2d quarter 1957 to 2d quarter 1960	2d quarter 1960 to October 1960
1. Mining, manufacturing, construction, transportation	441	−108	−271	−609
2. Trade, communications, public utilities, financial and insurance, service and miscellaneous	433	492	251	69
3. Government (Federal, State and local)	191	247	281	157
Total nonagricultural	1,065	620	260	−387

[1] All data seasonally adjusted. Includes only wage and salary employees.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 3.—*Changes in real gross national product and its major components during recent business cycles*

[Percent change [1] (based on deflated data)]

Gross national product component	Change between—	1953 to 1957	1957 to 1960
Total gross national product	Trough to recovery	10.6	10.9
	Prior peak to recovery	6.5	5.6
	Recovery to new peak	3.4	1.4
	Prior peak to new peak	9.9	7.1
Final sales	Trough to recovery	8.0	6.6
	Prior peak to recovery	5.8	3.8
	Recovery to new peak	4.4	5.0
	Prior peak to new peak	10.2	8.9
Final sales less Federal purchases	Trough to recovery	10.7	7.1
	Prior peak to recovery	12.5	3.8
	Recovery to new peak	5.0	6.9
	Prior peak to new peak	18.0	11.1
Consumption	Trough to recovery	9.9	7.8
	Prior peak to recovery	10.0	6.0
	Recovery to new peak	5.2	3.8
	Prior peak to new peak	15.7	10.0
Fixed business investment	Trough to recovery	13.4	.8
	Prior peak to recovery	10.3	+12.3
	Recovery to new peak	4.3	16.3
	Prior peak to new peak	15.0	2.0
Residential construction	Trough to recovery	22.9	32.5
	Prior peak to recovery	31.9	34.2
	Recovery to new peak	+16.5	+18.9
	Prior peak to new peak	10.1	8.8
State and local purchases	Trough to recovery	+8.0	8.2
	Prior peak to recovery	+18.3	14.6
	Recovery to new peak	+8.1	+10.0
	Prior peak to new peak	+27.9	+26.1
Federal purchases	Trough to recovery	+9.0	2.8
	Prior peak to recovery	+28.5	3.7
	Recovery to new peak	+.2	+11.5
	Prior peak to new peak	+28.7	+8.2

[1] In the 1957 to 1960 cycle the "prior peak—new peak" and the "recovery—new peak" percentage changes have been adjusted upward to reflect the fact that these periods were shorter in the 1957–60 cycle than in the 1953–57 cycle. Thus, the 1957–60 changes in the table show how much change would have occurred if the rate of change had continued for a period of time equal in length to that of the 1953–57 cycle.

Source: U.S. Department of Commerce, Office of Business Economics.

Mr. SCHULTZE. I want to call your attention to figures on the table numbered 1. Before I do so, let me note a terminological problem. You will note on the row stubs on the left the term "recovery." I have attempted, for both in the 1953–57 period and for the 1957–60 period, to break down changes in the labor force and in unemployment during various phases of the business cycle. I have called recovery that period when the economy, after a recession, regains full employment. Then there is usually a period from recovery to the next business cycle peak, during which we have a slower rate of growth.

In 1959 and 1960 we never quite reached full employment so I have little difficulty as to how to date the recovery period after the 1958 recession. What I have done is take a time period from the trough of the recession equal to that which characterized the 1954–55 recovery.

Now notice the third row of figures; the change in the labor force and in unemployment from the 1953 peak to recovery, i.e., the middle of 1955; note the comparable figures between the 1957 peak and the next recovery, i.e., the middle of 1959. In the 1953–55 period the labor force grew by a million more than employment did. Consequently unemployment in the middle of 1955 was roughly a million higher

than at the beginning of the recession. But we started that recession out with only 2 percent unemployment. We could, therefore, afford some increase in unemployment, in the sense that even though it rose by a million, the 4 percent level we reached in the middle of 1955 was not too bad. Even if the growth in the labor force and employment over the 1957–59 period had been the same as in the 1953–55 period we would have ended up with more unemployment; and this time the extra unemployment would have been added on to a 4 percent level, and consequently would be a serious matter.

As a matter of fact, over the 1957–59 period, counting both the decline and the subsequent recovery, unemployment rose by 724,000 on top of a beginning unemployment rate of 4 percent.

If you look back at the second row of figures, you can see one of the reasons why the 724,000 increase was not larger——

Senator BUSH. Table 1?

Mr. SCHULTZE. Table 1. After trying to go through this I realize it is not the best-presented table of the day.

But if you notice, the increase in the labor force during the latest recovery, namely, 1958–59, was rather small, only 650,000. We would have had, in other words, a larger than 724,000 increase in unemployment had the labor force grown normally during this period; this caught up with us in the past year because in that period the labor force has grown by well over a million. Coupled with a small rise in employment, this resulted in a large increase in unemployment.

Finally, if you look down at the very last column of figures, which summarize our experience from the 1953 peak to the 1957 peak, and again from the 1957 peak to date, you find that in that earlier period unemployment grew at a rate of 250,000 a year on the average. As I said before, this raised this from a 2 percent unemployment level, which is abnormally low, to a more normal 4 percent level. In the latest peak-to-peak period unemployment grew at the average annual rate of 60,000 a year. We thus had a larger rate of growth unemployment than in the prior cycle, although we could not afford any increase, because we were already at 4 percent to begin with.

If you turn to table 2, I have attempted to answer a part of the question that Mr. Curtis posed earlier, namely, how were these cyclical developments superimposed on the long-run shift from manufacturing and industrial unemployment to the service sectors of the economy. Again I have attempted to break the period down into relevant and therefore comparable periods; from 1947 to the second quarter 1953 peak, then from the second quarter 1953 peak to the mid-1957 peak, again from mid-57 to mid-60 and finally the last 5 or 6 months. In the first period, with the Korean war, we had a very substantial average annual rate of increase of employment in nonfarm industries—these are average annual figures so they are all comparable—of a million. The increase was particularly heavy in the industrial sectors of the economy, but was also substantial in the nonindustrial sectors.

From second quarter 1953 to second quarter 1957 we had a relatively modest employment decline in the industrial sectors, which is not surprising in view of the fact that this was a readjustment from the very high peak of defense production in 1953. This decline was more than offset by a very substantial increase in employment in the service, distributive and similar industries and in the Government, chiefly, State and local.

The 620,000 average annual increase in employment was fairly healthy. Although it was not enough to keep unemployment from rising, we started with an abnormally low level, so this rise was not too serious.

Now if you look at the next period (1957–60) you find a larger drop in industrial employment. This is before the recent overall decline in economic activity began. The fall in industrial employment was offset, but barely so, by rising service and Government employment, giving us a 260,000 per year overall increase in employment, an increase which was much smaller than during the prior cycle, even though we needed a larger increase.

Finally, of course, in the last 5 months this has been compounded by a large employment decrease in the industrial sectors, with a very small offset in the service sector, leading to an overall employment decrease.

Finally, if we look at table 3 we can examine the composition of sales, of demands, to see if we can get some idea why these developments occurred—I don't promise any answers but this may give us a few insights.

Again I have the same kind of timing between different parts of the business cycle. The table compares the last two cycles. Notice total gross national product, the top bank of figures. From the trough of the recession to the recovery, gross national product in constant dollars increased by the same amount in the last two recoveries. But since GNP had fallen a little bit further in the 1958 recession, when you measure from peak to recovery, it turns out we did a little worse, but not significantly so, in the latest cycle.

If you take the change from peak to peak, we did a little worse in the 1957–60 period. The next bank of figures compares changes in final sales, which is gross national products minus the change in inventories. The recovery of final sales in 1959 compares less favorably with the 1955 recovery than does the recovery of GNP, because part of the latest recovery was the buildup for the steel strike. When that inventory accumulation tapered off, there was less market demand to support the economy, than in the prior recovery where more of the recovery had been supported by increases in final sales and less by inventory accumulation.

Finally, I think the next bank of figures is quite significant, namely, total sales in the economy less those going to the Federal Government.

This gives us some measure of the increase in private sales. Notice there is a very substantial difference here between the two cycles. Taking the whole period from 1953 to 1957, the last row in that bank of figures, private sales rose by 18 percent. In the comparable 1957 to 1960 period, they rose by 11 percent. The numbers have been adjusted for the fact that one period is 4 years and the other period is 3 years. Part of the reason for this divergent experience, of course, is that from 1953 to 1957 defense programs were declining; private sales not only rose rapidly, but rapidly enough to offset the decline in Government purchases.

If you look down at two of the major components of private sales, consumption, and investment, you notice, again taking the last row in the table, in the bank, under consumption, that in the whole period consumption has grown only two-thirds as fast as it did in the prior

period. Even more striking is the fact that fixed business investment in plant and equipment grew by 15 percent from the peak of 1953 to the peak of 1957. It rose only 2 percent from the peak of 1957 to the present.

The major reason for the failure of the economy to regain a full employment growth path after the 1958 recession, lies, I believe, in present Federal budget policies, and to a lesser extent in monetary policy. In order to pursue this point, I want to introduce a concept whose relevance to the problem at hand is, at first, not obvious; namely, what would be the magnitude of the Federal budget surplus if the economy were operating at full employment. My proposition is, that if this "full employment surplus" is too high, it will keep the economy from reaching full employment. Paradoxically enough, it will also prevent itself from being realized.

Let me take an extreme example to make my point. Given existing tax rates, full employment in the economy would mean a level of income which would produce certain revenues. We can roughly calculate what those revenues would be, even though the economy were not actually at full employment. Taken together with expenditure programs, these revenues would yield a given surplus. Suppose that surplus were $30 billion. This would mean that if national income were at a full employment level, the Government would be taking $30 billion more in purchasing power out of the economy by taxation than it was putting back in by expenditures. Unless private demands were extremely high relative to private income, it would be impossible to reach full employment with such a budget surplus.

Under these assumed conditions, tax rates woud be so high, relative to expenditures, that private incomes and demands would not be sufficient to purchase the output of a fully employed economy. And, if income did not reach full employment level, neither would Government tax receipts reach a level sufficient to yield the $30 billion surplus. In other words, an attempt to budget for an overly large surplus at full employment, will prevent the economy from reaching full employment; and since income would then be below full employment levels, tax receipts would not reach the projected level, and the surplus would be disappointingly small, or, in certain circumstances, nonexistent.

Thus the actual level of the budget surplus is not the best measure of the impact of fiscal policy on the economy. We need to know what is the full employment surplus implicit in existing tax rates and expenditures programs, in order to begin to judge whether those tax rates and expenditure programs are consistent with full employment.

Under circumstances of extremely high private demands—as for example in 1947 and 1948—a substantial budget surplus may be consistent with full employment, and would indeed be required to prevent inflation. Conversely in periods of abnormally low private demands, it may be necessary to run a budget deficit even at full employment. Under more normal circumstances, however, the magnitude of the surplus—or deficit—required to have a balanced full employment economy will be relatively modest. Clearly, the level of the surplus consistent with full employment will also depend on the kind of monetary policy which is simultaneously being pursued.

The tighter the monetary policy, the smaller the budget surplus consistent with full employment, and vice versa.

After this lengthy preface, I should like to apply this line of reasoning to the current economic situation. You will recall that in the 1955 recovery, the rate of growth in private demand was quite sharp. By the middle of 1955 the economy had regained a full employment level, with unemployment running about 4 percent of the labor force. At that time the Federal budget surplus—as computed in the national income accounts—was running about $5 to $6 billion. On an administrative budget basis it was somewhat lower—about $2 to $3 billion. At the present time, notwithstanding the fact that the strength of private demands is much lower than in 1955, the surplus in the budget, at full employment levels of income, would be about $11 to $12 billion on the national income account basis and between $8 and $9 billion in the administrative budget.

In other words, existing tax rates are such, that in combination with expenditures, they would yield an $11 to $12 billion surplus if the economy were operating at full employment.

Because of this relationship between tax rates and expenditures, during a period in which private demands have not been particularly vigorous, the economy has not been able to reach full employment. Indeed the long-continued persistence of excess capacity and unemployment is now culminating in a downward movement of output and income. Because we have not attained full employment levels of income, the actual level of tax receipts and the actual budget surplus has not reached this $11 billion level. In the first half of this year the budget surplus on income and product account was about $5 billion; it is currently running at something like $3 billion. On an administrative budget basis the surplus is even lower; in the last midyear Budget Review the fiscal 1961 surplus was projected at $1 billion. It will quite probably be less than this, and may even be a deficit.

The moral of this is that if the Government aims at an overly large full employment surplus, it will achieve neither full employment nor the surplus it aims at. In reality, of course, I doubt if any responsible authority was explicitly "aiming" at an $11 to $12 billion full employment surplus. Rather this is the surplus which is implicit in existing tax rates and expenditure programs. It is precisely this failure to look at the implications of budget policy in a full employment context, which is, in part at least, responsible for the creeping stagnation we are undergoing. To repeat an earlier statement, it is not the actual budget surplus which is the crucial relationship, but the implicit full employment surplus. For this reason I would respectfully, but vigorously, recommend that the annual and midyear budget estimates be accomplished by a full employment budget calculation. It is too easy to look at the current miniscule budget surplus and conclude that it is not large enough to be the source of any depressing influence on the economy—or vice versa in case of inflation.

It is, of course, true that the size of the surplus consistent with full employment will depend on the nature of monetary policy. In fact, one of the chief conclusions of this committee's recent study of employment, growth, and the price level was that economic growth could be fostered by changing the "mix" of stabilization policy toward greater reliance on budget surpluses and less on monetary restraints.

With this general objective I have no quarrel. But I would insist that under current conditions, the $11 to $12 billion budget surplus implicit in existing tax rates and expenditure programs is too large to be consistent with full employment, even if monetary policy had been substantially easier than has actually been the case.

I conclude, therefore, that the current economic situation is not that of the beginning of a typical recession. Rather it reflects the consequences of a high level creeping stagnation. Basically it is not a deep-seated maladjustment in the private sector of the economy which has led to this turn of events. Rather the high marginal rates of Federal taxation, combined with a much slower growth of Federal expenditures, have generated a depressing influence on the economy. This influence is concealed by the fact that the actual Federal budget surplus is quite small. It is only when we calculate the full employment surplus that we appreciate the magnitude of this depressing factor.

The CHAIRMAN. I would like to start off by addressing a question to Mr. Wolfbein and then address two or three questions to the panel as a whole.

The first question I would like to ask is this: Did I understand you correctly when you said that if unemployment remained at the seasonally adjusted figure of 6.4 percent, that we would have had in November total unemployment of approximately 4.1 million?

Mr. WOLFBEIN. Yes, sir.

The CHAIRMAN. And for December about 4¼ million?

Mr. WOLFBEIN. About 4.2

The CHAIRMAN. And for January about 5¼ million?

Mr. WOLFBEIN. Yes, sir.

The CHAIRMAN. Now is it not also true that the increase in the unemployment insurance figures in some 7 weeks since the October figures have been more than seasonal?

Mr. WOLFBEIN. That is correct.

The CHAIRMAN. I have had figures compiled which indicate that in the month from October to November the increase would have given a figure approximately two-tenths of 1 percent higher than it would have been on a purely seasonal basis. Have you had a chance to check that?

Mr. WOLFBEIN. Yes. As I indicated, Senator Douglas, the movement in unemployment insurance between mid-October and mid-November was up 18 percent. The seasonal expectations were 7 percent. So we got a more than seasonal rise.

The CHAIRMAN. This would indicate, therefore, that your unemployment figure for November, when it appears, very probably will be in excess of 4.1 million.

Mr. WOLBEIN. It very well might.

The CHAIRMAN. My rough estimate is that it will be around 4.3 million and that you will have a ratio, therefore, of around 6.6 percent. Would you be surprised at that?

Mr. WOLFBEIN. In view of the unemployment insurance figures; no.

The CHAIRMA.N I understand that you are not quoting from any withheld figures at the present time, but your answer is based purely on the basis of changes in the unemployment insurance figures. My figures also seem to indicate that there has been a further acceleration

in the unemployment insurance figures between November and December.

Mr. WOLFBEIN. We do have some figures past mid-November and they have continued up; yes, sir. That is right.

The CHAIRMAN. So that this would indicate that the percentage for December very likely will be higher than the percentage for November?

Mr. WOLFBEIN. If the unemployment insurance figures are a tipoff on this, this would be true.

The CHAIRMAN. And if the unemployment figures for November turn out to be around 6.6 percent, then the unemployment figures for December will turn out to be above 6.6, possibly 6.7 percent?

Mr. WOLFBEIN. Are we talikng about a seasonally adjusted figure?

The CHAIRMAN. Yes.

Mr. WOLFBEIN. That is right if what you indicate about unemployment insurance prevails.

The CHAIRMAN. I know it is always dangerous for a politician to be a prognosticator but this would seem to indicate an unemployment figure of somewhere between 4½ million and 4,600,000 as of the present time. Is this a wild guess?

Mr. WOLFBEIN. On the basis of the seasonally adjusted unemployment rate of 6.4 percent we have said that there would be around 4.1 and 4.2 in December.

The CHAIRMAN. That is right.

I am saying it would be around 4.4 million in November, probably around 4.5 or 4.6 million in December.

Mr. WOLFBEIN. If what you say is developing in your employment insurance or will develop, I suspect that will be true.

The CHAIRMAN. This would mean if there is no improvement between December and January you will have a figure of something in excess of 5½ million unemployed; is that not true?

Mr. WOLFBEIN. That is right. As we said if we get no change at all in the seasonally adjusted percentage rate, you would get about 5¼. If you assume a further deterioration of the economy then you will certainly go above 5¼ million unemployed.

The CHAIRMAN. Of course, even if there is no further deterioration than has already occurred, it will be 5½ million.

If there is additional deterioration it will move toward 6 million; is that true? I did not say it would reach six. I said it would move toward six.

Mr. WOLFBEIN. Did you say 6 million unemployed?

The CHAIRMAN. Move toward 6 million unemployed, or move above 5.5 million.

Mr. WOLFBEIN. I would like to say this, which I think would be responsive to your question:

We are saying that given no change, at about 5¼——

The CHAIRMAN. Given the change which has already occurred, the figure would be about 5.5 or 5.6 million unemployed, with a further deterioration, there would be an increase in unemployment which would at least raise it above 5.5 or 5.6 and would move toward—I did not say it would reach—move toward a figure of 6 million.

Mr. WOLFBEIN. I was going to say one more thing, Mr. Chairman: If you postulate a further deterioration then you might even want to

go one step further, Senator. A lot depends when you look ahead, on what season of the year you are in. We are now in the winter season and look forward to declines in agriculture and construction which always happens.

The CHAIRMAN. You have taken account of that in your total figure?

Mr. WOLFBEIN. That is correct.

Now what we are saying is if we don't get much improvement this winter, or get further deterioration as you pointed out, then it makes all the more critical I would say, what happens this spring in terms of an upturn. Because if we were sitting here, let us say, in February or March, then we would say that the usual movement would be an upturn in the spring, when agriculture begins to move up, construction starts to move up, and you get your Easter trade.

This is why in response to your question I would say as we try to look ahead for the immediate months, in my opinion one of the critical things to watch will be the early spring upturn.

Do we get it or don't we? And if we don't, then it will be no surprise at all if we move toward 6 million.

The CHAIRMAN. In accordance with your earlier statements the rate of new entrants in the working force is increasing appreciably; is that right?

Mr. WOLFBEIN. That is right.

The CHAIRMAN. So this is an added factor?

Mr. WOLFBEIN. Yes, sir.

The CHAIRMAN. Now, if the panel will permit me, I would like to poll them on this question.

There is always a semantic tendency to replace emotion-charged words with more neutral words. Mr. Moore will forgive me if I recall the fact that in 1929, the summer of 1929, the National Bureau proposed to replace the word "depression" with the word "recession."

I will not comment on the accuracy of that timing, but now I notice that you have replaced "recession" with "contraction."

I take it, however, that the meaning of "contraction" is substantially similar to the meaning of the former term "recession." Is that not true, Mr. Moore?

Mr. MOORE. Well, my direct knowledge of history of the National Bureau dates from about 1939 rather than 1929——

The CHAIRMAN. I merely threw this in as an indication that you had introduced the word "recession" to replace "depression" and did it on the evidence of the greatest depression in history.

This is perhaps a little malicious sideplay of mine which is unworthy of a U.S. Senator, but discarding history, coming down to the present, may I ask if the term "contraction" which you now introduce is substantially identical with the term "recession"?

Mr. MOORE. In common expression, you mean, or in National Bureau terminology?

The CHAIRMAN. In common expression.

Mr. MOORE. I think what we term as a "contraction"—that is a decline in aggregate activity—is commonly described as a "recession" by most everybody else.

The CHAIRMAN. Good.

With my understanding that these two words are substantially identical, I would like to poll the panel. How many think we are now in a recession, or contraction? There will be no record of how you vote on this, so that this will not impair your future.

If necessary, we can have written votes. How many of you think we are now in a recession? Raise your hands. Recession or contraction.

I notice that the three nongovernmental witnesses think we are in a recession, or contraction. I would like to ask the two governmental witnesses if they think we are in a period of expansion.

Mr. PARADISO. No.

Mr. WOLFBEIN. No.

I would like a chance to comment though.

The CHAIRMAN. Do you think we are in a period of high level stabilization?

Mr. PARADISO. That is my view. I think if you are going to talk about the national position of the economy, you talk about national aggregates. When you look at the national aggregates, personal income is one of the broadest aggregates.

Personal income has not declined. Personal income has risen. Gross national product has taken a little dip, very little.

Industrial production has dropped some more, but industrial production is not the national economy.

So my position is that at all time you get some parts of the economy that recess or contract and somes parts of the economy that proceed ahead.

So if you are going to take the position now that because plant and equipment expenditures are down, or industrial production is down, or see a little bit of a slipoff in consumer spending, in the third quarter, that these indicate a general contraction for the economy, I think this is one view you can take.

But I like to look at broad aggregates, and if you still find a mixed picture among these broad aggregates, I say we are in a period of sluggishness or high stability in the economy.

Mr. WOLFBEIN. May I say a word?

The CHAIRMAN. Surely.

Mr. WOLFBEIN. As you know, we tend to stay away from what we think are color words—they may not be, but maybe this is a natural tendency of a bureaucrat not to go for words like recession or contraction. I think what Mr. Paradiso said is very, very important, and what your commitee does this morning is very important. We are really getting away from the overall color words and saying "Look what is really happening."

I want to commend one item which I think is very important to your attention. We have, all of us, including myself, this morning, as Mr. Paradiso pointed out, been talking about the aggregates. We talk about gross national product, total employment, total unemployment, and all the rest of the global figures that we produce.

But I think in terms of really probing where we are now, Senator, and where we think we are going over the next several months, I would like to commend to your attention what I call technically the disaggregate approach and in plain English to look at some of the anatomy of this picture.

For example, I commend to your attention the answers to the inquiries, who are the unemployed? Where are they? I think you will agree with this.

There is where you begin to put your finger on the sectors and the people, where you can decide on program policy, and when you start looking at the anatomy of this thing then I think it becomes very, very revealing.

Just one example and then I will stop.

We all talk about what has happened to the durable goods sector, especially the metalworking, steel and machinery. There is no question that it has gone down in employment in the past 5 or 6 months.

Incidentally, it was very interesting that we all did this independently, but apparently we have all come up with the month, May 1960, as the beginning of the downturn.

The CHAIRMAN. You think there has been a downturn?

Mr. WOLFBEIN. Yes, sir.

The CHAIRMAN. But that is not a contraction.

Mr. WOLFBEIN. Let me finish one point and I will respond. Let us look at the downturn, Senator Douglas, we had in metalworking.

Everybody agrees it has gone down. Our own figures show 150,000 people off the payrolls in the steel industry alone, February to October.

Then we ask ourselves who are these folks? This is in the paper. I will summarize in 15 seconds.

Our Bureau of Employment Security gets the information on the characteristics of the people who draw unemployment insurance and we look at the metalworking sector.

Now, of course, we found a real big increase in the number of people drawing unemployment insurance. We classify them into the three groups, the skilled person, the semiskilled folks, and the unskilled.

You know the answer. There was a 93-percent increase among the unskilled drawing unemployment insurance, a 44-percent increase among the semiskilled, and only an 8-percent increase of the skilled.

The CHAIRMAN. Now, I am going to turn the questioning over temporarily to Mr. Curtis.

Before I do, I want to say that these specific things that you mentioned, lack of skill, youth, minority status, and so forth, may determine the incidence of unemployment, but certainly they do not determine the total volume of unemployment. What I have been trying to do is to get at the total volume.

Now, Mr. Curtis.

Senator BUSH. May I ask a procedural question?

What is your time schedule?

The CHAIRMAN. I thought we should break up a little after 1 o'clock.

Senator BUSH. Had you contemplated an afternoon session?

The CHAIRMAN. No; I had not thought we would have an afternoon session.

Mr. Curtis.

Representative CURTIS. I guess it is time for Pollyana to take over instead of a prophet of gloom and doom.

The CHAIRMAN. I reject the appellation.

Mr. CURTIS. I reject the Pollyanna, too, so we are running on an even keel.

It seems to me that a lot of this discussion here, and going on in the country, is almost in the nature of putting new wine in the old bottles.

Most of our economic books are predicated on an economy of scarcity and I have been thinking for a number of years now that we have been moving into a new economic era where the economic laws of scarcity do not fit this picture.

Instead of the Old Testament we are now in the New Testament where in many, many areas it is an economy of plenty, certainly in the agricultural sector of our economy.

I believe Mr. Schultze, you referred to a period of creeping stagnation at high level. Yet this seems to be occurring in a period when we have had probably the greatest technological advancement in our society as well as others.

So it almost comes back to what we are talking about in terms of growth.

Is economic growth measured in these terms of aggregates or gross national product, a shift from manufacturing to services?

This economic growth, I suggest, or, at least, as far as our society is concerned, and yet the shift may not show up in gross national product.

One other point: It seems to me the more rapid the growth, and this is almost axiomatic, the greater the incidence of frictional or technological unemployment and likewise the greater the lack of utilization of capital capacity, of plant; because, as we learn new ways of doing things, our plant becomes obsolete just as skills become obsolete.

If we want economic growth, and I think we all do, I think we had better begin to get better measuring sticks for how we tell what it is.

Gross national product does not measure very well things like research and development, money in education. Yet it will measure to an extreme extent the rebuilding of plant like the destruction that World War II wrought on the industrial countries of Western Europe, Russia included, and Japan. And the shift won't show up very well from manufacturing to services.

Th advancement in the field of health, which is to a large degree technological, does not show up.

I always think of when I first came to Washington 10 years ago, it took 5½ hours to fly down here and now it is usually under 3 hours.

I do not know that that change will show up in these aggregates we are talking about.

Yet it seems to me there is the thing that we have got to start paying attention to, as we do advance technologically we make skills obsolete.

We certainly have done it in the rural areas. One man can produce what three used to produce.

There is no demand for their skills any more. So it is a retraining process.

Yet if we spend the money in retraining and in education, it is not going to show up very large in the gross national product indicator.

So in relating it to unemployment, I think it is very important to break it down. I believe the figures that are presented here, the figures that are discussed here, but the reasons for them I do not believe have been adequately brought out.

Why is there this increase in unemployment if we have had increased growth as I describe growth? We are bound to have added problems in the field of retraining and if we do not have the retraining, we are going to have this incidence of unemployment.

One thing we might measure is these areas of underemployment. Every time I look at the New York Times want ads there is a long list of advertisements for skills in engineering, in that area, machinists, and so on, where we do not have the skills available.

In other words, there are jobs that need filling and yet in this process where we have this unemployment, we have this figure.

Now I mention one thing in this field of employment that needs to be measured more. Our people are going to school longer. The average number that go to high school today has increased tremendously, not just in numbers, but percentagewise of the numbers that could go to high school.

This continues on into college, on into graduate school, and I think we want to continue that process.

But that relates, I think, to this labor market if we want to continue this process.

Breaking this thing down, one question I have always asked is what is the draft law? What effect has it had on the employment of this big group of unemployed people which is in the teenage and draft age group?

I suspect it has had a considerable impact and, if so, that might be an area to pay attention to.

Certainly the area of unskilled and semiskilled people is the area of unemployment.

I wonder if I can ask the panel to comment on whether or not in meeting this problem we do not have to break this down a little more than we have.

The aggregates are all right, but is that where the problem is? Is the problem not really the incidence of growth, the cost of growth, of economic growth?

If it is, let us face up to it. If we want the growth, let us be willing to recognize it is going to create these problems and move ahead to try to correct them rather than go to some other area for a solution and ignore the real area where it occurs.

Mr. PARADISO. May I answer part of this?

Representative CURTIS. Yes.

Mr. PARADISO. In connection with your comment on the gross national product, I would like to show you this chart which I had previously referred to.

I think, Mr. Curtis, you are perfectly right, that if you are looking at the gross national product as a total, while it is revealing in an aggregate way, nevertheless, what is back of it is very important and your point is very well taken.

The purpose of this from this point of view and the others from another point of view is to show that if you are talking about gross national product you must look at the components, you must look at the things that are growing and the things that are not growing and the things that are changing rapidly and those that are not changing rapidly.

Now, let us take a look at this.

Here is a very fast-growing area, steadily growing, nondurable goods and services in physical volume terms. All of the research and development moneys that companies have for putting in and producing these new products are included in the value of these goods.

This, by the way, has a growth rate of 3 percent per year. Here is construction with a growth rate of 5 percent per year.

However, the fluctuations around the trend are terrific.

Here is Government purchases where a lot of money by the Defense Department, billions of dollars, are spent on research and development. These outlays enter into these calculations. They are entered explicitly in the Government sector.

My point is that I think you are absolutely right, the aggregate gross national product does not tell what is happening to the pattern of total purchases, that you have to look at the components.

The purpose of this chart was to indicate to you the differential trend of the components and that the gross national product in the aggregate properly weighs all of these so that the total gross national product does reflect the combined effects of all these different factors.

Representative CURTIS. Thank you, Mr. Paradiso.

Would anyone else care to comment?

Mr. SCHULTZE. I think really what I want to disagree with is a matter of degree. The point you make is essentially correct.

First, the gross national product probably cannot measure fully the growth, for example, in the quality of goods we get. There is a lot of economic growth we get which you don't pick up in the gross national product.

This has always been true, the question is, is it more true than before.

Representative CURTIS. Is it more true, posing the hypothesis of rapid technological advancement.

Is it not true that the more rapid the technological advancement the less it is measured?

Mr. SCHULTZE. If I had to say "Yes" or "No," I would say "Yes," but with qualifications.

The faster the technological develepmont probably the harder it is to measure; but it really depends on the kinds of technological development.

If it is simply technology which lowers costs, very often we can catch that in our measurement. If it is better products, it is more difficult to catch.

I, myself, believe that while we have had, are having, and will have, rapid technological advance I am not necessarily sure it is a lot faster than in the past.

One way of looking at this, although admittedly a very imperfect way, is output per man-hour growing faster than in the past. It isn't.

Now, this is imperfect because we may not be measuring output well.

The second and more important point I think you bring up is the difference between unemployment which is caused by too little overall demand and frictional or structural unemployment.

In other words, we can't sell the products of labor even though overall demand may be fine; demand is shifting around so fast that people can't change jobs fast enough.

Now, we cannot measure that very well.

I do think we can say this: the reason that we define full employment at 4 percent unemployed rather than zero percent unemployed is precisely for this reason:

Four percent or somewhere in that neighborhood, is the number we usually pick. What you are saying is that currently technological advance, but more particularly, shifts in the pattern of the economy have become so rapid that full employment means 6 percent unemployed.

This is the direction you are aiming at. This is what I don't agree with.

I think that if you were correct we would find a growing imbalance in the demand for labor, a substantial imbalance between different industries. There is always imbalance. That is why we have the 4 percent.

But is the extra unemployment we have had in the last cycle matched by an extra excess shortage of labor in other areas?

Representative CURTIS. Have we ever tried to measure the excess? That is what I wonder.

I gave a subjective test. I said I read the New York Times want ads and you see just long lists of demands.

That, of course, is just a straw in the wind. But has there been an attempt to measure any of that and "moonlighting," too?

Mr. SCHULTZE. I may confess my ignorance of some professional reading. I do recall a British article which attempted to measure this. The British have data which give job vacancies, so that you can match job vacancies against unemployment.

You are going to find some industries short of labor in the sense they cannot get the kind of labor they want. This is why the mix of unemployment is so important to know.

My own feeling would be, however, that this has not increased so substantially, that we can now say that we ought to be satisfied with 6 percent unemployment because really from an aggregate standpoint it is no worse than 4 percent.

It simply means there is more dynamism in the economy.

Representative CURTIS. One area I point to where we have very rapid technological advance is agriculture.

That is where we get a great incidence of unemployment.

Mr. SCHULTZE. I am not sure of that. First, historically for the last 150 years there has been a tremendous movement out of agriculture. It has not been fast enough, I agree, but the increase in unemployment we are dealing with is not in agriculture although I realize the pressure of agriculture on the rest of the economy helps to keep unemployment up.

My main point is, Is it worse than in the past? I see no evidence of this.

If you want to take a really dynamic economy, the one in the unemployment rate in Germany in the second quarter of 1960 was eight-tenths of 1 percent.

Lord knows, that is a dynamic economy.

Representative CURTIS. Yes, but they were rebuilding plants to a large degree.

My time has more than expired.

The CHAIRMAN. Senator Sparkman?

Senator SPARKMAN. Mr. Chairman, I shall ask very few questions.

First, I want to say that I think these are very able presentations on the part of all.

I did feel, myself, wondering though, just what the solution might be proposed to this, even taking Mr. Paradiso's statement that we are at a, what was it, a high level stagnation.

Mr. PARADISO. Stability.

The CHAIRMAN. High level stability.

Senator SPARKMAN. He used the term "stagnation" if I recall correctly.

Representative CURTIS. Creeping stagnation.

Senator SPARKMAN. And I believe one of the others used a similar term.

Then the question, it seems to me, is, how are are we going to push off this dead center in order to get some of this growth that we are going to have to have if we absorb the 26 million additional persons that are coming into the labor force.

What are we going to do?

By the way, I am not sure I understand just what you mean in your suggestions about the budget level Mr. Schultze, to produce eleven to twelve billion dollars or six to eight billion dollars or six to eight billion dollars, perhaps, in the administrative budget. How could we plan a program so as to bring that about?

Mr. SCHULTZE. My whole point is that it precisely is what we should not do. We have set tax rates relative to expenditures so high that we are generating this kind of full employment surplus. And that this is precisely what we should not do.

Senator SPARKMAN. Are you suggesting then that perhaps we ought to lower the tax rates?

Mr. SCHULTZE. Well, I will be accused of being simple minded, I realize, but, yes, sir; either cut taxes or raise expenditures.

I would suggest that with the present fiscal policy you cannot have sustained growth, even if we come out of this shallow recession.

We will still have too high a level of unemployment without a combination of either lower tax rates, or increased expenditures of relatively modest amounts.

Senator SPARKMAN. By the way, I want to ask this question, too—this may be very simple, but it is not answered in my own mind.

You said that we had to find out who it was that was unemployed. I think I know what you are driving at, but what difference does it make?

If a person is out of work, he is out of work and his family is out of support, and there is suffering and there is, in addition, this stagnation.

Do you propose certain remedies after we find out who they are?

Mr. WOLFBEIN. That is right. I think it makes a big, big difference in what you do, what you think you want to do, depending on who the people are that are unemployed.

For example, Senator Sparkman, you will find that a very considerable portion as you know of the unemployed people, and this subject was brought out, are teenagers. They have the highest rate of unemployment of any group.

When we ask ourselves why is this and we try to trace it back, you find that you always come inevitably to this group we call dropouts, young people who don't finish high school.

The unemployment rate these days is 6 to 6½ percent. Among young people who have dropped out of school it is as high as 30 and 35 percent.

This is one situation which, if you try to think what you do about unemployment, you really ought to know.

Or, as I pointed out at the very beginning, a report which is out today, shows that there are certain areas which have taken a heavy brunt of the unemployment. That is another pathway or avenue that we want to consider.

For example, too, we find that while the unemployment rate among older workers is not much different from other people, once they do fall out of a job they really have a rough time finding a new one.

All we are saying is that maybe if we get to know some of these facts on who are they and where are they, this might give us some perception on whether we are doing right for them.

Mr. PECHMAN. I would like to put in just a slight demurrer. I think it is important to know who the unemployed are and the special problems in each of these areas. But I also think that, unless we recognize what the situation really is, we are likely to cinvince ourselves not to do enough in some areas and to do more than enough in others.

Now, some of us raised the question of recession or contraction because we believe it is important to identify an economic situation for what it is.

The word "contraction" or "recession" suggests a situation which is likely to be temporary, which can be corrected with a few modest measures of an aggregate variety, and thus restore high employment.

If we convinced ourselves that we are not suffering from a recession, that this is really a structural matter, we might try to go on having budget surpluses. Such surpluses would, of course, not actually materialize because you can't manufacture surpluses with high unemployment.

The present situation is one of economic contraction. It requires the usual fiscal and monetary measures to stimulate demand. The longer term problem of depressed areas must be handled in other ways that have been discussed by this committee. I know much less than the individual members of the committee about the subject of structural unemployment.

I am concerned, however, that if we try to convince ourselves that this is not a recession we won't be taking the steps we need to take.

Now, I agree with Mr. Schultze. I think that it requires a very slight turnaround in the fiscal situation of the Government to get us out of this recession and to get back to high employment fairly quickly. It is not a matter of incurring $10 or $20 billion deficits.

The Government ought to try to increase expenditures in areas where increases are needed. If the situation gets much worse, the committee might well consider the possibility of recommending a temporary tax cut. However, I don't think the situation is bad enough yet for anybody to seriously entertain such action.

But you ought to follow the situation very carefully. If the unemployment ratio gets above 7½ or 8 percent, seasonally adjusted, which it might well do, some action of that sort would be needed.

I don't think the depressed area bill will help that kind of a situation much.

Senator SPARKMAN. Mr. Chairman, I have used my share of the time.

The CHAIRMAN. Senator Bush.

Senator BUSH. I would like to go back to Mr. Schultze again and ask him to expand this statement.

You say there is nothing so fundamentally wrong with the current economic structure that it could not be corrected with relatively modest changes in public policy.

Before you answer that, what troubles me is this:

You speak of a budget surplus as though we had been running large budget surpluses whereas one looks at the record of budget receipts and expenditures the last 5 or 6 years, actually the net is a deficit because of one large $12 billion deficit, and the budget surpluses were small when we had them, 1.6 billion, 1.6 billion. Here is another 1 billion last year, and so forth.

So that I do not quite follow your position when you speak of this heavy budget surplus.

Of course, I presume this is administrative and we have a cash budget somewhat larger than these figures; is that right, but will you explain a little bit more what you mean by modest changes in public policy?

Mr. SCHULTZE. Sir, may I back into this by answering your second question first?

Senator BUSH. Yes.

Mr. SCHULTZE. The whole point I have been trying to make—and I admit it is a very difficult point to make—is that if you look at the actual budget surpluses you will find they have not been large, the last year or so, either the administrative or the cash surplus.

My point, Senator Bush, is that we are running those surpluses in a period of relatively high unemployment. Neither the President nor the Congress legislates or enforces tax revenues. The Congress legislates tax rates. It depends on income levels in the private economy how high tax collections are going to be.

Now, I am suggesting that tax rates are set now at a level which would yield—underline the words "would yield"—at full employment income levels such a large surplus that the attainment of either full employment or a surplus has become progressively more difficult.

I suggest that if you look at this full employment surplus it shows you what this apparently very small actual surplus can really do to the economy because, of course, if the Government legislates tax rates at such a level that they pull substantially more out of the economy than they put back in, you can't get the full employment.

Senator BUSH. May I ask you this question, please:

Back in the period of the twenties which has been once referred to this morning, we had quite a long series of years of increasing activity, economic growth, prosperity, and so forth during which period we reduced the national debt from $24 billion to $16 billion, something of that order.

Is that about right?

Mr. SCHULTZE. We did. I don't remember the numbers.

Senator BUSH. We were reducing it at the rate of $1 to $2 billion a year, but this did not deter the expansion of the economy at all.

On the contrary, it was one of the most prosperous periods we ever had, from 1921 to 1929, I would say, or even through 1930, yes.

Now, certainly, the budget surpluses did not have a deterring effect then. If your theory is right, why did they not break that trend of growth there?

Mr. SCHULTZE. Well, the key reason, sir, although I don't have the numbers at hand on the twenties, is that I am not saying that a budget surplus necessarily breaks the economy.

What I am saying is that the tax rate set high enough to yield too large a surplus when the economy is prosperous prevents the economy from being prosperous.

We didn't have this kind of $11 to $12 billion surplus in the twenties.

Senator BUSH. We did not have this kind of tax rate, either.

Mr. SCHULTZE. Precisely.

Mr. PECHMAN. May I interpose one point.

Senator SPARKMAN. Yes, I was going to come to you on the same subject, so, go ahead.

Mr. PECHMAN. I just want to add that, at the same time in the recovery and expansion after World War I, after a decade of debt reduction, you had the worst depression in history.

It is about 15 years since the end of the World War II. Yet nobody talks depression. I would attribute this to the increasing education of public officials and the Congress on the need for pursuing a high employment fiscal policy.

Long periods of large amounts of debt reduction would probably tend to have a depressing influence on the economy and economic growth. I am not saying that the depression was caused by the reduction in the Federal debt during the 1920's, but I am arguing that the fiscal policies that have been pursued in general since the end of World War II have been an important influence in maintaining employment as high as it has been.

Senator BUSH. Maintaining employment?

Mr. PECHMAN. And incomes. Yet we have had a rising debt.

I think you will agree that if a choice needs to be made, rising debt and rising employment is to be preferred to falling debt and falling employment.

Senator BUSH. Since the Korean war at least the debt increase has been very modest in size, has it not?

Mr. PECHMAN. Yes, sir.

Senator BUSH. And the budget surplus over that period have not existed when you take our net for the period.

I would ask you this, Mr. Pechman, because you mention in your statement a little change in monetary and fiscal policy would be a great thing.

Now, would you expand that? What changes would you suggest would fit this bill.

Mr. PECHMAN. I agree wholeheartedly with what Mr. Schultze said. I think the major problem today is that we are trying to produce a higher surplus than the economy can stand.

For that reason we don't get the surplus. If we set our sights a little lower, instead of trying to produce an $8 or $9 billion surplus, I don't know what the exact figure is, I have not made the calculations——

Senator BUSH. We are forecasting a billion dollars for 1961.

Mr. PECHMAN. That forecast is due to the fact that you are setting your sights not at a billion dollars, but at $8 or $9 billion. But since the economy is not at high employment, you are getting a smaller surplus.

If you were willing to trade your nonexistent surplus so to speak, if you were willing to give it up, you would get higher employment, higher income and a higher surplus as well.

Senator BUSH. Now, where does monetary policy come into your argument?

Mr. PECHMAN. There are two ways of increasing aggregate demand that economists know of other than direct stimulation of individual sectors. That is by monetary and fiscal policies.

Increasing money supply, making more credit available, tends to increase expenditures both because liquid assets are higher and also because interest rates are lower.

Senator BUSH. Do you think at the present time the credit is too tight?

Mr. PECHMAN. I think long-term interest rates, yes. I think long-term interest rates are much too high.

With residential construction what it is, we could certainly stand much lower mortgage rates. The present relatively high level of mortgage rates is partly due to governmental policy respecting long-term rates.

Senator BUSH. Is it not true in the United States we have the lowest interest rates today of any country in the free world?

Mr. PECHMAN. Yes, but it is also true the United States is also the only country in the free world that is undergoing a recession.

I am sorry, Canada, is in the same situation. However, I suspect that, except for the usual differential in short-term rates between Canada and the United States, Canadian short-term rates are also low.

Senator BUSH. Are we undergoing a recession because we have the lowest interest rates in the world or is France and Germany booming because they have high interest rates.

Mr. PECHMAN. Just the reverse. I think high interest rates reflect the fact that there are numerous investment opportunities in the country relative to the supply of funds available. In the United States we don't have that now.

Senator BUSH. I do not mean to be frivolous about this, but does it not seem to be true that the enormous prosperity in Germany in the last few years has not been inhibited at all by high interest rates?

Mr. PECHMAN. I am not arguing that high interest rates——

Senator BUSH. You just spoke about monetary policy.

Mr. PECHMAN. Yes, at the present time.

Senator BUSH. And the interest rate of 4 percent for a long-term bond is too high today?

Mr. PECHMAN. Yes.

Senator BUSH. We know in Germany it is 6 and 7 percent for long-term credit, triple A credit, as a rule.

Mr. PECHMAN. That is correct.

I would not have made the statement I made with respect to long-term rates in some of the very booming periods of business activity, in the United States, earlier in the postwar period. Long-term interest rates were not high, for example, in 1955. They probably were not high in early 1959, but the point is that, in any given situation there is a combination of monetary and fiscal policies that will permit the economy to grow to its potential or will prevent it from doing it.

I am arguing, and so is Mr. Schultze, if I understand him correctly, that in the last year and a half we have pursued too tight a combined monetary and fiscal policy. My prescription would be loosen up a little bit on fiscal policy for the moment. If you succeed, interest rates will finally go up.

Senator BUSH. That might be. I would agree with that, at least I think I would, at the moment, but I can also say I can see if we really have a dependable budget surplus and our tax rates are so high that that would be a modification through the reducing of taxes which might be a constructive move at this kind of period of unemployment and contraction, of whatever you call it. That, in fact, is what you are saying on this side of the argument on fiscal policies; is that right?

Mr. PECHMAN. Yes. I think there is a legitimate difference of opinion on the desirability of reducing taxes or increasing expenditures. You could reduce the surplus either way, or both. It depends on your opinion about the role of Government in the long run.

Senator BUSH. You agree with what he has just said. The only thing I do not understand, frankly, is your feeling that this situation would be improved by further depression in interest rates to liberalizing credit through Federal Reserve and so forth.

I do not see where that is going to stimulate anything. We have unused credit, plenty, right now at very low rates.

As Mr. Douglas has pointed out in the short term money market and long term money market, we have the lowest rates of any active industrial country in the free world.

Well, I guess my time is about up.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Bolling.

Representative BOLLING. Mr. Schultze, you say:

> There is nothing so fundamentally wrong with the current economic structure that it could not be corrected with relative modest changes in public policy—

and then you spell out those changes a bit.

This is the kind of thing that you pointed out by citing a recent report of the committee, what at least some members of the committee have been saying.

I wonder if you would demonstrate if there is in fact an example of a better use of public policy in the current situation with a more effective result in terms of full employment, high level economic activities. From what has already been said, I gather West Germany would be a good example.

Mr. SCHULTZE. Aside from your word "demonstrate," let me try.

First, I hesitate to say too much about the economic policy of any other nation without substantial examination because the data usually are defined differently and there are usually so many special conditions.

However, I would like to point out a few facts about Germany which I don't think are generally known. They don't prove anything, but at least they indicate we ought to think more carefully about some of the easy generalizations on what the Germans have done.

The Germans are piling up substantial foreign exchange reserves. They, of course, are the nation with whom we are dealing in our own gold problem.

Lest anyone think that the Germans have accomplished this big export surplus and this very handsome foreign exchange position by a deflationary policy of having high unemployment and thereby trying to push prices down, let me note, for example, if I can pull the figures out of these statistical workbooks as I go along, that industrial production in Germany in the past year has risen about 13 percent.

I am not going back too far in time because I want to get out of the reconstruction period, which it is not fair to compare. But Germany has, over the past few years, a substantial increase in industrial production. Her unemployment rate, although I admit I don't know how to compare it to the United States because of possibly different definitions, her unemployment rate is far below ours.

The rate of growth in the German money supply is another case in point. We tend to think of Germans as stern, tightfisted, sound money people. In some sense, they are. But it is interesting to note that the money supply in Germany in the last 3 years has increased, if I can calculate from sight, about 30 percent compared to our own 5 percent.

Representative CURTIS. Relate it to the growth, though.

Mr. SCHULTZE. Of course, I agree.

Representative CURTIS. Is the increase in money supply in ratio to the increase in growth rate greater than our increase in money supply in relation to our growth?

Mr. SCHULTZE. My problem is that I would have to sit down and dredge up some of the overall numbers. I am not suggesting that the way you get growth is primarily to have easy money.

What I am suggesting, however, is that the Germans have gotten where they have not by a policy of refusing to permit an increase in money supply.

They have matched it presumably to their economic growth.

I see here some interesting figures which I didn't know before—and I am not suggesting this as a policy measure—the increase in the German national debt in the last 3 years has been about 16 percent, from 71.8 billion to 85 billion marks.

The point that I am trying to get across is that here is a nation which has presumably been very successful in many ways in its economic policy; whatever else that policy has been, it has not been a cautious, conservative, tight policy.

It has been one, if I can use the phrase, of "let 'er rip," and it has paid off for the Germans.

I have great admiration for this. I don't know the secret, frankly. I am suggesting, however, that the secret might lie in being a little

daring and gambling, rather than in holding the economy on a tight rein.

Representative BOLLING. How much inflation have the Germans had?

Mr. SCHULTZE. By the way, Mr. Bolling and I did not dream this up together. I happened to come here fearing that the gold issue would be brought up, so I brought in some international statistics.

The index of producers' prices for industrial goods—let us go back 3 years, that is good enough—was 106 then; it is 105 now.

In other words, it is just about the same. Consumer goods prices about 3 years ago were about 105; now they are 106.

Food prices have gone up, but that is about the only major price index which has.

All the others have been for the last 2 or 3 years fairly stable. I don't know the secret. All I am suggesting is that it apparently does not lie in an attempt to hold down prices by stagnating the economy.

Senator BUSH. Do you have interest rates there?

Mr. SCHULTZE. That is a good question. Let me see. I have the price of 5-percent bonds and we can get a rough idea.

The price of 5-percent bonds, going back to 1957, the price of 5-percent bonds was running about 90; the last figure is 112.

This would mean that, crudely calculated I suspect, that the interest rates went from about 5¼ down to about 4¾, something like that.

These are 5-percent mortgage bonds. This may not be representative. I could only find this one in a hurry.

The CHAIRMAN. May I ask just this. Is not a large part of the export success of Germany due to the fact that they have kept wage rates relatively low in the face of advancing output per manhour so that labor cost per unit of output has fallen very sharply?

Mr. SCHULTZE. I am glad you asked that question, Senator.

Hour earnings in manufacturing and building, Germany money wages in the last 3 years—again I take that period—have risen from an index of 213 to an index of 260, which is roughly 20 some percent, a very high growth in German wage rates.

But the key is that German productivity has risen very rapidly.

In other words, German wage rates have risen during the last 2-, 3-, 4-, 5-year periods much more rapidly than the U.S. wage rate, but the growth in productivity has been even greater so the cost increases have been much less.

The CHAIRMAN. The unit cost per unit of output has fallen?

Mr. SCHULTZE. Either fallen or certainly not risen.

I suggest that part of this is not just, or even primarily, greater technological advance, but a greater utilization of existing technology which, within limits, tends to help to lower cost.

The CHAIRMAN. Mr. Widnall.

Mr. WIDNALL. Mr. Chairman, I have only one question. I missed part of the early testimony and examination of the witnesses.

Has the effect of foreign imports on American unemployment been developed here at all today?

Mr. PARADISO. To some extent.

Mr. WIDNALL. Are there any tables that have been presented that would show job losses here in the United States because of the importation of certain types of foreign merchandise?

I have in mind the situation like that in my own district where 500 zinc workers are out of work because they are closed down completely due to foreign importation. Textile workers are the same.

This is a market which has been lost, lost pricewise.

Is there any development at all as to the cure or the manner in which we can effectively combat that?

Has there been a suggestion along that line?

Do you have any figures that could be furnished to the committee of what you might consider the number of jobs lost here in this country, or men out of work because of foreign importation?

Mr. PARADISO. We have not computed those. I think this would be rather difficult to estimate because of the fact that you have to get an equivalent value per worker and the nature of the product mix or the imported items.

You see, we don't have any direct figures, at least our department does not.

Mr. WIDNALL. Is it not true that 15 percent of the steel used in this country now is being furnished by foreign manufacturers?

Mr. PARADISO. It is much lower now.

There has been a very steep decline in steel imports as you know, quite recently.

As a matter of fact, the comment I would make on imports is that in the third quarter there was actually a reduction in our imports so the American manufacturers have decreased to some extent the losses which they had on account of the foreigners coming in here and capturing some of our markets.

Mr. WIDNALL. I have been thinking about the terrific impact that the unemployment in the steel industry has on the entire economy.

I think that is all.

The CHAIRMAN. Thank you.

I want to thank the members of the panel for coming and for the very excellent papers which they have presented here.

We will recess now until tomorrow morning at 10 o'clock in room G–308, which is this room.

Representative CURTIS. Mr. Chairman, could I join you in this expression of appreciation for the papers and the panel discussions.

The CHAIRMAN. We will have a discussion tomorrow on the main topic which is short-run outlook.

(Thereupon, at 1:20 p.m., the committee was recessed, to reconvene at 10 a.m., Thursday, December 8, 1960.)

CURRENT ECONOMIC SITUATION AND SHORT-RUN OUTLOOK

THURSDAY, DECEMBER 8, 1960

U.S. CONGRESS,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room G-308, New Senate Office Building, Hon. Paul H. Douglas (chairman of the committee) presiding.

Present: Senators Douglas, Bush, Butler, and Javits; Representatives Bolling, Boggs, Coffin, Curtis, and Widnall.

The CHAIRMAN. I wish to apologize to you for being late. After something over a year I am unable to master all the intricacies of this building.

I congratulate you on having a better sense of direction than I have.

I am very happy to have you here. Yesterday the hearing concentrated on our present economic situation, its strength and its weaknesses in relation to the current situation and longer trends in the economy.

Today the members of our panel will discuss the short-run economic outlook and will designate the areas of strength and weaknesses which they see developing during the coming months.

They have been asked to cover the outlook for consumption, business investment, international trade, money markets, gold movements, price movements, and employment.

Each witness has been asked to summarize his views in 10 to 12 minutes. The persons appearing on the panel have also been asked to submit a longer statement and, if they wish, to include charts and tabular materials.

Without objection these materials and full statements will be included in the record.

Mr. Greenwald, who is connected with the Department of Economics of the McGraw-Hill Publishing Co. of New York, is to begin the discussion.

Mr. Greenwald.

STATEMENT OF DOUGLAS GREENWALD, DEPARTMENT OF ECONOMICS, McGRAW-HILL PUBLISHING CO., INC., NEW YORK, N.Y.

Mr. GREENWALD. My assignment as a member of this panel is to discuss the short-run economic outlook with particular reference to prospects for the key area of the economy, private investment.

My contribution will be, for the most part, on the outlook for private investment in new plant and equipment, since I am able to report some recent and important developments about the prospects for this area in 1961 and 1962.

Judgments about the outlook for investment, or for any other sector of the economy, are mine personally and do not represent the judgments of the McGraw-Hill Publishing Co.

In my department of the McGraw-Hill Publishing Co. we have made annual surveys of plans for business spending on new plant and equipment for 13 years.

In addition, we maintain a monthly index of new orders for machinery, which reflects the new incoming business of producers of capital equipment, and a quarterly forecast index of new orders for machinery, which reflects the same producers' expectations for four quarters ahead.

The McGraw-Hill Department of Economics conducted its preliminary wall survey of business plans for new plant and equipment in October, before the presidential election. It covers a broad sample of American business.

Our latest index of new orders is for the month of October. It covers a small number of large manufacturers of machinery. And our latest quarterly forecast of machinery new orders is for the time period through the third quarter of 1961.

I will discuss first the prospects for business investment in new plant and equipment.

According to our preliminary fall survey, business plans, in October, to spend $35.1 billion on new facilities in 1961—3 percent less than in 1960.

I always emphasize the word "plans" because that is what the survey reports. It is not a forecast. We all know plans can change, and usually do change, with the direction of the change corresponding to the direction of business.

Over the past several years, our fall surveys have always provided the correct direction of change, as well as fairly reliable estimates of the degree of change in business capital expenditures for the year immediately ahead.

In the fall of 1955 our survey for 1956 showed a planned increase of 13 percent.

The actual increase as measured by the U.S. Department of Commerce and Securities and Exchange Commission series was 22 percent.

In 1956 our survey for 1957 indicated an 11-percent gain; the actual rise was 5 percent.

In 1957 the survey for 1958, the last recession year prior to the current dip, showed an expected drop of 7 percent; the actual drop was 17 percent.

Our survey taken in 1958 for 1959 showed a less-than-1-percent increase. Actually, investment rose 7 percent in 1959.

Our 1959 survey for 1960 showed a 10-percent increase planned for all business and a 19-percent rise for manufacturing.

It now appears that the actual increase will be exactly 10 percent for all business and 19 percent for manufacturing.

For 1961 the trend of capital investment it down, but only moderately. However, it would not be too surprising, when the record of our fall surveys is taken into account, if the actual drop in capital investment turns out to be somewhat greater, perhaps in the range of 5 to 7 percent.

A decrease in this range would be about one-third the 17-percent drop from 1957 to 1958, on an annual basis, and only one-half of the average decline in capital spending in the previous postwar recessions.

A decline of 3 percent, as now planned by business, or even as much as 6 percent, which seems a more likely figure for forecasting purposes, reduces one of the major concerns in the business outlook.

American business is not going to drastically curtail its expenditures for new plants and equipment in 1961. Therefore, the outlook for general business appears to be brighter than many business forecasters would have thought to be the case before the announcement of our survey results.

Business, at present, plans an additional cut of only 4 percent in 1962. This is a relatively high level of planning and suggests that investment in 1962, still many months away, may run ahead of 1961. Final budgets for plants and equipment have generally turned out higher than the preliminary estimates for 2 years ahead.

The moderate downtrend of business investment generally is confirmed by developments in the major industrial areas. Manufacturing companies plan a reduction of 3 percent.

Mining companies plan to cut their investment by 9 percent.

Railroads plan a sharper cut of 24 percent.

And other transportation industries—airlines, shipping and trucking—are planning substantial decreases, too, for next year.

The utilities, both electric and gas, plan to increase investment in 1961.

Not all manufacturing industries plan to cut investment in 1961, as they did in 1958.

Growth industries, such as electrical machinery, chemicals, and office machinery, and industries where there is a considerable need for modernization such as food, automotive, and petroleum, are planning to increase investment next year.

Confirming the general picture of expected moderate weakness in business investment is the supplementary data gathered in our survey. First and foremost is the fact that manufacturing companies, on the average, were operating at 79 percent of capacity at the end of September, a lower rate than in September 1957, at the beginning of the last recession.

Since manufacturers have indicated they would prefer to operate at well over 90 percent of capacity, there appears to be excess industrial capacity. Thus, a letup in the rate of expansion is clearly likely.

Another factor uncovered in our survey is that although many companies reported that they expected a lower physical volume of sales in 1961 than in 1960, they were outweighed by other companies anticipating increases, with the result that manufacturing sales, on the average, are expected to be 3 percent higher in 1961.

If, as it seems likely, these sales expectations are slightly on the high side, then a further modest cut in investment beyond the original 3 percent may be expected.

Why, with excess capacity, sagging profits, and with perhaps a too optimistic bias built into the anticipated 3-percent increase in sales, shouldn't capital investment drop much more?

There are two reasons why I believe capital investment will hold up relatively well in the coming year. First, there is a tremendous need to modernize obsolete facilities. A survey carried out by my department in August 1958 indicated that the total cost to bring business plant and equipment up to date was $95 billion. This figure is somewhat lower now because business has stressed a modernization program in the last few years.

But still the need to modernize is substantial. And in a very competitive year, as next year will no doubt be, modern machinery and plant will represent a major part of capital budgets.

Second, a large share of capital investment in 1961 will be going for new products. Well over a third of all manufacturing firms are making substantial capital expenditures to bring out new products.

The surge of new products and the capacity to make new products are results of the rapidly increasing pace of research and development expenditures in the mid-1950's.

It is now—several years later—that the economy is beginning to reap some of the benefits of the money spent on research in the period 1953–57.

Companies expect that, on the average, 12 percent of next year's sales will be in new products not produced prior to 1957.

A modest decline in investment in new industrial plant and equipment is also confirmed by the latest McGraw-Hill quarterly forecast index of new orders for industrial machinery.

New machinery orders in the first three quarters of 1961 are expected to average about 5 percent below the first three quarters of this year, with a pickup in new orders anticipated for the second quarter of 1961.

New orders for machinery have been holding up very well in recent months. The latest monthly index—for October—is less than 4 percent below the third quarter average of this index.

From all the statistical evidence now at hand, it seems probable that industry's expenditures on new plants and equipment in 1961 will be within 6 percent of this year's expenditures.

Moreover, as indicated by the McGraw-Mill machinery new orders forecast index, the rate of these expenditures is likely to turn up before the end of 1961.

I now turn to the other three sectors of private investment. These are: Residential construction, the change in business inventories, and, finally, "all other" private investment, which includes investment by farmers, professional men and women, and private nonprofit institutions. In addition, this catchall group covers business outlays for some durable items charged to current account.

Residential construction is likely to be one of the relatively strong areas of private investment in 1961. The U.S. Department of Commerce recently made a forecast that expenditures for private residential building, of all kinds, will be up 3 percent next year.

Easier money is almost certain to result in more homebuilding in 1961 than this year. However, easier money will not provide a very big stimulation to housing. There are two reasons for this notion: First, the current age distribution of our population suggests the continuation of a relatively low rate of new family formation next year; second, the vacancy rate is increasing, so there is more housing available now than in any recent period.

Nevertheless, private nonfarm housing starts are likely to increase by about 40,000 units in 1961 over this year's figure of about 1,250,000.

The CHAIRMAN. Mr. Greenwald, as I remember, we had testimony yesterday that the rate of private residential construction this year would be about one-sixth below that of last year.

Would you agree with that?

Mr. GREENWALD. That would be about right.

The CHAIRMAN. So that an increase of approximately 3 percent this year would still leave housing construction in 1961 approximately 13 or 14 percent, or one-seventh, below 1959; is that correct?

Mr. GREENWALD. About that; that is right.

The CHAIRMAN. So that as compared with 1959 we still have a much lower rate of housing construction?

Mr. GREENWALD. Yes, sir.

As I remember, the total in 1959 was about a million and a half. Next year it will be somewhere just under 1.3 million units.

Inventories continue to swing widely. The use of electronic computers in inventory control, the excess capacity of industry, and the reduction in inflationary pressures this year, in combination, were not able to halt business' buildup of inventories in the first quarter.

But the buildup has abated or reversed.

From an annual rate of more than $11 billion in the first quarter, inventory accumulation dropped to a little more than $5 billion rate in the second quarter and to about $600 million in the third quarter.

We are probably seeing a decumulation of business inventories of more than $2 billion now.

Despite the downswing in inventory rate through the last three quarters, the business community increased inventories by an average of $4 billion this year.

It seems likely that the inventory collection will not end with the close of 1960. Usually the inventory rate drops for at least four consecutive quarters.

Thus, we may expect a drop in the first quarter of 1961, and it probably will be substantial. This will contribute to making inventories a negative factor for the year.

For 1961 as a whole, inventories will probably be minus, but on the order of only $1 billion. Thus, the net year-to-year decline in inventories, in private investment terms, will be about $5 billion.

With regard to "all other" private investment, there will be a little change next year. This segment will probably run slightly higher in 1961 than this year's total of approximately $12.3 billion.

Some small improvement is likely in farmers' investment in farm equipment, vehicles, and buildings.

The contract award data of both Engineering News-Record, and F. W. Dodge, indicate a rise of about 6 percent in private institutional building may be expected. This would merely continue the uptrend in this type of construction which has been going on since 1958.

Capital outlays by professional men and expenditures by business firms for items charged to current account are not likely to change significantly in 1961.

In summary, I expect that 1961 will be a year of contraction in private capital investment, as a whole, but clearly not a year of considerable decline.

Total private investment may drop to $67.2 billion next year, compared with $73.5 billion this year, a decline of less than 9 percent.

The CHAIRMAN. If my arithmetic is correct, it could be a decline of about 8.6 percent; is that correct?

Mr. GREENWALD. Yes, I said less than nine.

And if the change in inventories is omitted from this calculation, the decline is less than 2 percent.

Here is a table which shows my forecasts from this sector of the economy; the full report of the McGraw-Hill fall survey is attached to this paper:

[Dollar amounts in billions]

	1960	1961	Percent change 1960 to 1961
Plant and equipment	$36.1	$33.9	−6
Residential construction	21.1	21.7	+3
Business inventories	4.0	−1.0	
All other investment	12.3	12.6	+2
Total	73.5	67.2	−9

(The McGraw-Hill survey referred to is as follows:)

McGRAW-HILL

FALL SURVEY

PRELIMINARY PLANS FOR CAPITAL SPENDING IN

1961-1962

Prepared by McGraw-Hill Department of Economics

Plans for Capital Spending

(Billions of Dollars)

INDUSTRY	1959 *Actual**	1960 *Estimated**	1961 *Planned*	1960-61 *% Change*	1962 *Planned*
All Manufacturing	$12.07	$14.33	$13.93	−3%	$13.35
Mining	.99	.99	.90	−9	.89
Railroads	.92	1.04	.79	−24	.83
Other Transportation & Communications	4.69	5.20	4.61	−11	4.18
Electric and Gas Utilities	5.67	5.89	6.14	+4	6.01
Commercial(1)	8.21	8.61	8.70	+1	8.54
ALL BUSINESS	**32.55**	**36.06**	**35.07**	**−3**	**33.80**

**U.S. Department of Commerce, Securities and Exchange Commission, McGraw-Hill Department of Economics.*

(1) Figure based on large chain, mail order and department stores, insurance companies, banks and other commercial businesses.

(1) American business now plans to spend $35.1 billion on new plants and equipment in the continental U.S. next year—3% less than will be spent this year. And preliminary plans for 1962 are very close to those for next year.

Capital expenditures for 1960 are significantly lower than the plans indicated in the McGraw-Hill survey last spring. Many firms have stretched out this year's spending plans into next.

(2) Manufacturing companies now plan to spend $14 billion for new plants and equipment next year—3% less than this year's investment. And these companies already have plans to spend an almost equal amount in 1962.

HIGHLIGHTS:

(3) Manufacturers, on the average, were operating 79% of capacity in September. This is significantly below the rate at which companies have previously indicated they would prefer to operate, and is also substantially below the rate at which companies were operating at the end of last year.

(4) Companies in every major manufacturing industry, except transportation equipment, expect higher sales in 1961. The average increase expected is 3% in physical volume.

These are the highlights of the fall survey of Business' Plans for New Plants and Equipment conducted in the month of October by the McGraw-Hill Department of Economics. Present tentative plans will be re-checked and the later plans reported in more detail in the regular annual McGraw-Hill survey of capital spending plans to be made next spring. It is important to remember that the fall survey indicates business' preliminary thinking at the beginning of the budget season. And this year, such plans, in some cases, are quite tentative because of uncertainties in the general economy.

Capital Spending

American business now plans to spend $35.1 billion on new plants and equipment next year – only 3% less than will be spent this year. And preliminary plans for 1962 are very close to those for next year. These are the most important results of McGraw-Hill's checkup on preliminary plans for capital spending in 1961 and 1962.

CAPITAL SPENDING PLANS OF MANUFACTURING COMPANIES

(Billions of Dollars)

INDUSTRY	1959 Actual*	1960 Estimated*	1961 Planned	1960-61 % Change	1962 Planned
Iron and Steel	$1.04	$1.52	$1.37	–10%	$1.18
Nonferrous Metals	.31	.34	.34	0	.32
Machinery	.91	1.15	1.11	–3	1.11
Electrical Machinery	.52	.62	.68	+10	.63
Autos, Trucks & Parts	.64	.89	.95	+7	1.02
Transportation Equipment (Aircraft, Ships, R.R. eqpt.)	.39	.41	.37	–10	.35
Other Metalworking	.88	.97	.85	–12	.87
Chemicals	1.24	1.61	1.64	+2	1.59
Paper and Pulp	.63	.75	.69	–8	.53
Rubber	.19	.24	.23	–4	.20
Stone, Clay and Glass	.53	.63	.56	–11	.55
Petroleum & Coal Products	2.49	2.45	2.52	+3	2.50
Food and Beverages	.82	.94	.99	+5	.97
Textiles	.41	.53	.42	–21	.40
Miscellaneous Manufacturing	1.07	1.28	1.21	–5	1.13
ALL MANUFACTURING	12.07	14.33	13.93	–3	13.35

**U.S. Department of Commerce, Securities and Exchange Commission, McGraw-Hill Department of Economics.*

This survey is NOT A FORECAST, but a report of what companies NOW PLAN to spend. The actual course of expenditures will depend importantly on the course of the general economy, profits and government policy. But the high level of capital investment now planned by business in a period of declining profit margins and declining industrial activity indicates a strong prop for the general economy in the year ahead. Companies hoping to prosper in the period of intensive competition ahead are continuing to modernize and reduce costs and add capacity to produce new products.

American business has not spent as much for new producing facilities this year as had been planned. McGraw-Hill's checkup revealed that since the spring well over $1 billion has been trimmed from this year's capital expenditures. But apparently some plans have been shifted to 1961 and 1962, rather than actually cut out of budgets. The level of planned expenditures for business as a whole for the next two years is now higher than indicated last spring.

Most major industries – with the exception of the utilities and commercial companies – are now planning to spend less in 1961 than this year. The individual cooperating companies are about equally divided between those planning increases and decreases. The same holds true for both large and small companies.

Capital Spending in Manufacturing

According to present plans, manufacturing industries as a whole will spend $14 billion on new plants and equipment next year. This is about 3% less than will be spent this year. The current lower level of business activity has apparently caused some changes in manufacturers' capital spending plans. Manufacturers' plans for 1961 are now slightly below those indicated earlier this year.

Machinery, autos, paper and pulp, food and beverages and those industries included in "miscellaneous manufacturing" have raised their sights for 1961 since last spring, while all other manufacturing industries now indicate a lower level of spending plans.

Electrical machinery companies are planning the largest increase (10%) next year. However, the electrical machinery industry will spend considerably less this year than it had planned and is apparently pushing these deferred plans into 1961. The auto industry plans to increase spending 7%.

The largest decline (12%) in the metalworking industries is planned by the "other metalworking" industries – fabricated metals and instruments. The transportation equipment industry is planning a 9% reduction in expenditures next year. And the machinery industry is cutting capital investment 3%.

In the chemical process industries, the petroleum industry, although operating well below the pre-

ferred level, plans to spend 8% more next year. The chemical industry, which has spent well over $1 billion every year since 1951, is continuing its long-term growth. Chemical firms plan to increase investment 2% next year. The chemical industry, one of the largest research and development spenders, will emphasize both modernization and capacity to produce new products. Among the other process industries the stone, clay and glass, paper and rubber industries, all operating considerably below preferred rates, now indicate a lower level of investment next year.

The food and beverage industry plans to increase expenditures 6% next year. On the other hand, textile companies indicate a 21% reduction.

The steel industry plans to spend nearly $1.4 billion next year. It will be the third highest year on record although 10% below this year's investment – emphasizing the industry's need to continue modernization of obsolete facilities and reduce costs. The nonferrous metals industries plan to spend approximately the same amount next year as this.

Manufacturers' plans for capital spending in 1962 are already close to plans for next year. About half the manufacturing industries indicate they now plan to spend more in 1962 than they had planned earlier this year. Manufacturers as a whole have added almost $500 million to their 1962 plans since last spring.

Nonmanufacturing Capital Spending

As a group, the nonmanufacturing industries indicate a slightly lower level of spending next year. However, boosting the total are electric and gas utilities, which plan to spend 4% more next year. Gas utilities, particularly pipelines, have deferred some of this year's expenditures until next year. Commercial businesses, reflecting continued office building as well as purchases of electronic computers, business autos and trucks, also report that they plan to increase spending slightly next year. (The commercial area in this survey includes only large banks, insurance companies, large chain, mail order and department stores. Small stores and service establishments not covered in this survey represent a large share of commercial capital spending. But in the past these surveys have been an accurate guide to the commercial establishments' spending plans.)

The railroad industry, which spent over $1 billion this year for new roadways, rolling stock and structures, plans a 25% reduction in expenditures next year. The other transportation industries – airlines, buses, shipping and trucking – having nearly completed most of their modernization programs this year, report plans to reduce expenditures sharply next year. The mining industry has reduced the amount planned for this year and plans a further reduction next year.

SALES

INDUSTRY	Percent Change Expected (Physical Volume) 1960-1961
Iron and Steel	2%
Nonferrous Metals	4
Machinery	5
Electrical Machinery	3
Autos, Trucks and Parts	0
Transportation Equipment (Aircraft, Ships, R.R. eq'pt.)	–4
Other Metalworking	5
Chemicals	3
Paper and Pulp	5
Rubber	3
Stone, Clay and Glass	0
Petroleum & Coal Products	3
Food and Beverages	4
Textiles	1
Miscellaneous Manufacturing	3
ALL MANUFACTURING	3

Sales in Manufacturing

Manufacturers, on the average, expect next year will be better. Manufacturers as a whole anticipate a 3% gain in sales next year – in physical volume. The highest increases expected (5%) are reported by the machinery and paper and pulp producers. Only the transportation equipment industry expects sales to decline next year. The stone, clay and glass industry expects unit sales to approximate this year's level.

This year, the auto industry will probably have its second largest car sales year in auto history, and auto companies now indicate they expect to do just as well next year. Other industries expect sales to be 1% to 4% higher next year.

Capacity and Rates of Operation

Every manufacturing industry – except the rubber industry, which is partially geared to the model changeover in the auto industry – was operating at a lower rate of capacity in September than at the end of last year. Manufacturers, on the average, were utilizing 79% of capacity in September. Except for the end of 1957, this is the lowest operating rate recorded since 1954.

Manufacturers reported the highest operating rate –92%– in December 1955. The average rate dropped considerably lower in the next 3 years. In December 1959 with the steel strike just over, the average rate rose to 85%. Now, manufacturers are operating at 79% of capacity. And this lower rate indicates why some manufacturing industries plan to reduce capital investment next year.

Paper, rubber, petroleum refining, food and beverages, textiles, fabricated metals and instruments and miscellaneous manufacturing were all operating above the average for manufacturing. And auto companies, reporting for October after the model changeover, indicated they were operating 86% of capacity, reflecting the industry's desire to rush the new models into dealers' showrooms.

But several industries were operating below the average for manufacturers as a whole. For example, machinery producers were operating at only 72%, electrical machinery manufacturers at 74%. The steel industry reported the lowest level of operation (52%) indicating the current disinclination of industries to build up steel inventories.

How the Survey Was Made

This survey, made by the McGraw-Hill Department of Economics, is based on industry's replies to a questionnaire received during October and thus represents industry's thinking at that time of year. No provision was made for any changes in industry's thinking which might occur as a result of the presidential election.

Companies that participate in the McGraw-Hill survey are usually the larger companies in their industry. This fact may affect the results of the survey. However, in each successive survey a concerted effort is made to include more medium-sized and smaller companies. More such companies cooperated in this survey than in any previous year.

Companies reporting in the survey employ more than 50% of all workers in the group of industries where capital investment is highest. This group includes oil, utilities, railroads, chemicals, autos and steel. In industries where coverage is not so complete, companies are carefully selected to provide a representative cross-section of their industry. Companies included in the industrial sample employ a total of nearly nine million workers, about 40% of total employment of all industry.

Commercial business – trade, finance and services – is the one major field of capital investment with a lower level of coverage. The commercial sample is made up primarily of large chain stores, mail order and department stores, as well as large insurance companies and banks, and other large commercial businesses.

Statistical Notes

All figures on capital investment plans are now directly comparable with those provided by the U.S. Department of Commerce and the Securities and Exchange Commission. In the past the McGraw-Hill data differed in industry classifications and included a petroleum figure which included some current account expenditures. These differences have now been eliminated.

Correspondents of BUSINESS WEEK personally interviewed many company executives, as did members of the McGraw-Hill Department of Economics. Other McGraw-Hill magazines helped conduct the survey in their own field.

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Capacity-Rates of Operation

INDUSTRY	Actual Operating Rate Sept. 1960	Preferred Rate Dec. 1959	Actual Operating Rate Dec. 1959
Iron and Steel	52%	98%	96%
Nonferrous Metals	75	96	77
Machinery	72	92	76
Electrical Machinery	74	93	79
Autos, Trucks and Parts	86*	94	88
Transportation Equipment (Aircraft, Ships, R.R. eq'pt.)	73	95	75
Other Metalworking	81	91	84
Chemicals	77	93	82
Paper and Pulp	90	100	91
Rubber	85	96	84
Stone, Clay and Glass	76	90	78
Petroleum Refining	83	97	86
Food and Beverages	81	93	83
Textiles	88	97	92
Miscellaneous Manufacturing	84	94	89
ALL MANUFACTURING	**79**	**94**	**85**

**In month subsequent to model changeover.*

The CHAIRMAN. Thank you very much, Mr. Greenwald.

The discussion will be continued by Mr. William W. Tongue, the economist with Jewel Tea Co.

STATEMENT OF WILLIAM W. TONGUE, ECONOMIST, JEWEL TEA CO., MELROSE PARK, ILL.

Mr. TONGUE. Mr. Chairman and members of the committee, it is a privilege to participate once again in the vital work of this committee.

At this time, Mr. Chairman, if I may, I would like to pay tribute to the staff of the committee for the recently revised Economic Indicators which I find probably the handiest tool I have as a general practitioner in this area. It is a very, very fine improvement.

The CHAIRMAN. Thank you very much. We have a fine staff.

Mr. TONGUE. I have been asked to comment on the near term outlook for the economy with particular reference to consumers, whose expenditures currently account for nearly two-thirds of the U.S. gross national product.

The actions of consumers can have a significant impact on the level of overall economic activity, but consumers do not operate in a vacuum. Their spending attitudes are affected by the general economic and political environment and especially by their level of income.

It is, therefore, necessary to consider the specific factors affecting consumer expenditure within the context of probable developments in other sectors of the economy.

GROSS NATIONAL PRODUCT PROJECTIONS THROUGH 1961

To save the time of the committee, I have attached two tables which spell out in detail the course I anticipate the economy will follow through the end of 1961. The tables are readily recognizable as the usual summary of the national gross product tables. The first table is essentially the same as table 1 in Economic Indicators. I will comment on these briefly before turning specifically to the consumer sector.

(The tables referred to follow:)

Gross national product and disposable income—Actual through 3d quarter 1960; forecast thereafter

[Billions of dollars]

	Seasonally adjusted annual rates								Full year	
	1960				1961					
	I	II	III	IV	I	II	III	IV	1960	1961
Gross national product	501.3	505.0	503.5	501.0	502.3	508.6	515.0	525.8	502.7	512.9
Government purchases of goods and services	97.5	98.6	100.7	102.3	104.0	106.1	107.5	108.8	99.8	106.6
Federal	51.8	51.7	52.7	53.5	54.3	55.5	56.0	56.5	52.4	55.6
State and local	45.7	46.9	48.0	48.8	49.7	50.6	51.5	52.3	47.4	51.0
Gross private domestic investment	79.3	75.5	70.8	64.5	63.5	65.0	66.5	71.0	72.5	66.5
Residential construction	21.4	21.3	21.1	21.0	21.0	21.0	22.0	23.0	21.2	21.8
Other construction	19.3	19.4	19.5	19.5	19.5	19.5	19.5	20.0	19.4	19.6
Producers' durable equipment	27.1	29.5	29.7	29.0	28.0	26.5	25.0	26.0	28.8	26.4
Change in business inventories	11.4	5.3	.6	−5.0	−5.0	−2.0	0	2.0	3.1	−1.3
Net exports of goods and services	1.2	2.0	3.7	3.5	3.0	2.5	2.5	2.5	2.6	2.6
Personal consumption expenditures	323.3	329.0	328.3	330.7	331.8	335.0	338.5	343.5	327.8	337.2
Durable goods	44.2	44.5	42.7	43.0	42.0	42.0	43.0	45.0	43.6	43.0
Nondurable goods	150.5	153.5	152.7	153.0	153.5	155.0	156.0	157.0	152.4	155.4
Services	128.6	130.9	132.9	134.7	136.3	138.0	139.5	141.5	131.8	138.8
Disposable personal income	347.0	354.1	357.5	359.0	359.0	362.8	366.3	371.5	354.4	364.9
Personal saving	23.7	25.2	29.2	28.3	27.2	27.8	27.8	28.0	26.6	27.7
Personal saving rate (percent)	6.8	7.1	8.2	7.9	7.6	7.7	7.6	7.5	7.5	7.6
GNP deflator 1959=100	101.1	101.5	102.2	102.6	103.0	103.4	103.8	104.1	101.8	103.6
GNP in 1959 prices	495.9	497.4	492.7	488.3	487.7	491.9	496.1	505.1	493.6	495.2

Relation of gross national product, national income and personal income—Actual through 3d quarter 1960; estimates thereafter

[Billions of dollars]

	Seasonally adjusted annual rates								Full year	
	1960				1961					
	I	II	III	IV	I	II	III	IV	1960	1961
Gross national product	501.3	505.0	503.5	501.0	502.3	508.6	515.0	525.8	502.7	512.9
Less:										
Capital consumption allowances	42.2	43.0	43.6	44.2	44.8	45.4	46.0	46.5	43.2	45.7
Indirect business taxes	44.4	45.3	45.1	45.0	45.0	45.4	45.8	46.5	45.0	45.7
Business transfer payments	1.8	1.8	1.8	1.9	2.0	1.9	1.8	1.8	1.8	1.9
Statistical discrepancy	−1.1	−3.9	−6.6	−6.2	−1.6	−1.1	−1.5	−2.7	−4.4	−1.7
Plus: Government subsidies	.5	.6	.5	.5	.5	.5	.5	.5	.5	.5
National income	414.4	419.4	420.1	416.6	412.6	417.5	423.4	434.2	417.6	421.9
Less:										
Corporate profits and inventory valuation	48.0	45.3	43.0	39.0	37.0	39.0	41.0	46.0	43.8	40.8
Contributions for social insurance	19.9	20.2	20.4	20.2	20.2	20.4	20.6	21.0	20.2	20.6
Plus:										
Government transfer payments	26.1	26.7	27.3	28.5	30.0	31.7	31.7	31.7	27.2	31.3
Government net interest	7.8	8.0	8.2	8.3	8.3	8.3	8.3	8.3	8.1	8.3
Dividends	13.9	13.9	14.0	13.6	14.0	14.0	14.4	15.0	13.8	14.4
Business transfer payments	1.8	1.8	1.8	1.9	2.0	1.9	1.8	1.8	1.8	1.9
Personal income	396.2	404.2	408.0	409.7	409.7	414.0	418.0	424.0	404.5	416.4
Personal taxes	49.2	50.0	50.5	50.7	50.7	51.2	51.7	52.5	50.1	51.5
Disposable personal income	347.0	354.1	357.5	359.0	359.0	362.8	366.3	371.5	354.4	364.9

Mr. TONGUE. Gross national product I expect will show little change through the winter, with an upturn coming next spring and carrying to an annual rate of approximately $525 billion a year from now and with an average of about $513 billion for the year. This is in current dollars and some of the rise in activity reflects the expected continued rise of the general price level, notably for services.

In constant prices, as noted on the last line of the first table, I expect a decline of roughly 2 percent from the second quarter of 1960, to the first quarter next year, followed by a 3½ percent rise to the end of this year.

This is a picture of a mild contraction, followed by a relatively sluggish rise which would leave the economy operating below capacity by the fourth quarter next year.

The figures should be interpreted only as general guides to the probable course of events, which cannot today be seen with any pretense of precision within a billion dollars or so, to say nothing about within a tenth of a billion dollars.

They are based on assumptions which may need to be modified as the situation unfolds:

1. A continuation of recent monetary expansion;
2. Federal expenditures as outlined in the Midyear Budget Review, with the uptrend continuing through the forecast period beyond the end of fiscal year 1961;
3. A drop of 5 percent from 1960 to 1961, in private nonresidential construction plus producers' durable equipment. I would say this is roughly consistent with Mr. Greenwald's 6 percent decline for the plant and equipment expenditure series. He and I had not conferred before this, I assure the members of the committee.
4. A rising trend of consumer expenditures, which I would now like to discuss.

ANALOGY WITH PREVIOUS POSTWAR RECESSIONS

In considering the probable course of consumer expenditures from this point on, probably the most significant fact is that expenditures were at a rate in the third quarter of this year which historically has proved conservative relative to disposable income.

Consumer expenditures declined in that quarter even though disposable income rose. Personal saving reached an annual rate of $29.2 billion, or 8.2 percent of disposable income. This is comparable to the peak saving rates reached in the 1958 and 1954 recessions.

In each of those recessions, as well as in 1949, a drop in spending on goods early in the recession was followed by a stepup in spending which in each case was an important factor in bringing the decline to a halt earlier than most observers expected and in helping to start production back up again.

In 1949 the low point in consumer expenditures came in the first quarter, followed by a low in gross national product in the second quarter.

In the 1953–54 recession, the low in consumer expenditures came in the fourth quarter of 1953, the low in gross national product in the second quarter of 1954.

In 1958, the low in both gross national product and consumer expenditures occurred in the first quarter, but the low in retail sales came in February and March 1958, whereas April is generally taken as the low point for that recession.

These historical facts are important in view of the widely held opinion that consumer expenditures and retail trade are lagging business indicators.

I have shown here in the table the low points in consumer spending and gross national product that I mentioned.

In each case, they are underlined.

(The table referred to follows:)

Consumer expenditures and gross national product in recessions

[Seasonally adjusted annual rates in billions of dollars]

Quarter	1948–49		1953–54		1957–58		1960–61	
	Spending	Gross national product	Spending	Gross national product	Spending	Gross national product	Spending	Gross national product
1	174.7	249.5	230.9	364.5	280.1	438.5	323.3	501.3
2	177.5	257.7	233.3	368.8	283.3	442.1	329.0	505.0
3	180.2	264.0	234.1	367.1	288.7	448.3	328.3	503.5
4	180.8	265.9	232.3	361.0	288.6	442.3	[1] 330.7	[1] 501.0
1	179.0	259.8	233.7	360.0	287.7	432.0	[1] 331.8	[1] 502.3
2	181.1	256.4	236.5	358.9	291.2	436.8	[1] 335.0	[1] 508.6
3	180.5	258.8	238.7	362.0	294.8	447.0	[1] 338.5	[1] 515.0
4	184.0	257.0	243.2	370.8	300.2	461.0	[1] 343.5	[1] 525.8

[1] W. W. Tongue estimate.

Mr. TONGUE. There are grounds other than precedent for believing that the third quarter may have marked the low point in consumer expenditures for this recession, for goods as well as for total expenditures including services.

In the first place, the recently released survey of consumer buying plans by Newsweek magazine and the National Industrial Conference Board indicates that in September-October more consumers planned to buy new cars, furniture, and appliances than in July, when buying plans were at the lowest level since the start of the survey in February 1958.

Some of this improvement may be seasonal, but it is perhaps significant that buying plans, while generally below a year ago except for new automobiles, lagged behind a year ago by a smaller margin than they did in July.

I have not seen the more comprehensive survey of the Board of Governors of the Federal Reserve System on this subject, and do not know whether it corroborates these plans.

However, a supplementary survey by the National Industrial Conference Board in the middle 2 weeks of November is reported to show that American consumers have "dramatically"—this was as reported in the New York Times—"dramatically" increased their buying plans.

The trend of retail sales, itself, is encouraging thus far, with a rise to a seasonal adjusted total of $18.6 billion in October, from a low of $18 billion reported in September.

Incidentally, the drop in retail sales from the April 1960 high of $18.9 billion to the September low amounted to $900 million, exactly

the same as the drop from peak to bottom in 1957–58, and just slightly greater than the comparable decline in 1953–54.

Percentagewise, the decline this time has been somewhat less than in the two previous recessions, but greater than in 1948–49.

It is perhaps significant that the figure of $18.6 billion for October has been exceeded only once before, in April of this year. It should not be a surprise if November results fell back some.

While the improvement in consumer buying since summer has been widespread, the flow of new cars to consumers has been especially encouraging because of the record retail stocks for this time of year.

The CHAIRMAN. Mr. Tongue, do I understand that the unsold retail stocks of new cars amounts to approximately a million units?

Mr. TONGUE. That is my understanding, Senator, yes.

October sales of 540,000 units surpassed the previous October record set in 1955 and November sales equaled November of 1955.

While there is nothing to indicate that we are heading into a bonanza auto year, it is necessary to explain away recent results as due to special factors to avoid interpreting them constructively.

Now, there are such special factors. Among those might be listed the early model changeover, special inducements to dealers to dispose of the large holdover of 1960 models, the fact that fleet orders are filled early and, of course, the impact of compacts on the numbers sold.

Still the results are not discouraging.

Finally, the trend of personal income has continued steadily upward month by month through October, tending to bolster the flow of consumer purchases.

While income shows increasing signs of leveling out around the recent high of $409.6 billion, there seems little reason to anticipate a decline.

The current level of consumer spending thus appears solidly based. However, there is reason to expect that any near term rise in expenditures will be limited and at a slower rate than at comparable stages in previous postwar recessions.

First, as noted above, the level of personal income should level out as we enter a normal cyclical period of actual inventory liquidation and capital expenditures begin to decline.

Second, consumer expenditures on appliances and home furnishings are importantly affected by the trend in residential construction.

At the moment there appears little ground for expecting an upturn in housing expenditures before midyear 1961. The trend of new starts is sideways at best, applications for FHA and VA loans are down, vacancies on rental properties are rising and mortgage interest rates have shown little easing from the highs of last winter, though mortgage money is more readily available.

Finally, the burden of debt consumers are carrying is higher than at comparable stages of previous recessions. For example, mortgage debt on nonfarm one-to-four family properties totaled $136.1 billion at the end of June, or 38½ percent of the disposable income rate for the second quarter of this year.

The comparable figure for 1957 was 34.6 percent and in 1953 it was 26.1 percent.

Similarly, consumer credit amounted to $54.1 billion at the end of September or 15.2 percent of the rate of disposable income.

Comparable figures were 14½ percent and 12.4 percent in 1957 and 1953, respectively.

Moreover, the rate of installment credit repayments has leveled out this year at about 13 percent of disposable income, the same as in 1957, suggesting that consumers themselves consider this a prudent ceiling.

Thus, I am suggesting that once again the consumer appears to be preparing to step into the role of hero in helping to stem the tide of recession and to turn the economy upward again.

This time, however, in the particular circumstances of this recession, the stepup in consumer expenditures may be relatively less vigorous than at comparable stages of previous postwar recoveries, notably for durable goods.

I might add that after midyear 1961 we will likely have falling food prices which will slow the rise in nondurable goods expenditures.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Tongue, I read some years ago a book by Colonel Nasser in which he said that his was a continent in search of a hero. He represented himself as being the hero.

Are you saying we have economic conditions in search of a hero?

Mr. TONGUE. Yes, sir.

The CHAIRMAN. Thank you.

Mr. Henle, Assistant Director of Research for the AFL–CIO.

STATEMENT OF PETER HENLE, ASSISTANT DIRECTOR OF RESEARCH, AFL–CIO, WASHINGTON, D.C.

Mr. HENLE. This committee has already received a comprehensive report on the current employment picture. My task is a try to start from these facts to develop a plausible view of the short-term outlook.

While I do not want to review today's situation in any detail, I think it important for committee members to understand the starting point for my analysis.

I would like to emphasize the following points:

1. The unemployment figures reveal a seriously deteriorating picture during the past few years: For the month of October unemployment reached a level of 6.4 percent of the labor force (seasonally adjusted).

In addition to the 3.6 million persons without a job and seeking work, the October report revealed that an additional 2.5 million individuals were working less than a full workweek although they wanted full-time employment. Many of these workers have regular full-time jobs when they can obtain them, but have to accept part-time work when that is the only type available. In other cases, employees with full-time jobs find their hours cut because their employer has been forced to curtail production. The idle time of these economically part-time workers was the equivalent of an additional 1 million unemployed persons. Taking into account both those totally unemployed and those working part-time for economic reasons, it can be said that 8.5 percent of the labor force is not being fully employed.

In considering these figures, people tend to forget that the unemployment picture has been deteriorating over several years. The best way to illustrate this is to examine the rate of unemployment after

each of the three most recent recessions, graphically illustrated in the attached chart No. 1. In the early 1950's before the 1954 recession, the prevailing unemployment rate was 3 percent or even lower. After the 1954 recession, unemployment never dropped to this level. Instead, it barely fell to the 4-percent mark. After the 1958 recession when the unemployment rate went as high as 7.5 percent, the rate fell only to 4.8 percent and for all but 3 months since January 1, 1959, it has been 5 percent or above. Since May of this year unemployment has risen from 5 to over 6 percent. This illustrates the increasing gravity of the Nation's unemployment problem.

2. Judging by past performance, this country today is experiencing recession rates of unemployment: The trend in unemployment is self-evident. In each of the past 5 months unemployment has been higher than the comparable months of 1959, even though during this time last year the secondary effects of the steel strike temporarily added to the ranks of the unemployed.

The current unemployment rate is highr than that rcorded at any time during the 1954 recession, and a comparable rate was not attained in the 1957–58 recission until February 1958, 8 months after the beginning of the down-slide. Confirmation of the high levels of unemployment comes from the figures listing the number of workers receiving unemployment insurance benefits. The latest available data for the week ending November 19 show about 2 million workers receiving unemployment insurance benefits under State programs, and about 2.2 million under all Government programs. On a seasonally adjusted basis this is higher than that prevailing at any time during the 1954 recession and is roughly equivalent to the levels reached during both the 1949 and 1958 recessions.

Chart No. 2 shows how the course of unemployment insurance benefits in 1960 has been following the pattern of 1957–58. Some observers may say that today's economy does not meet all the technical tests of a full-scale recession, but so far as unemployment is concerned, it is clear that both its level and rate already are roughly comparable to those reached during previous postwar recessions.

3. The recent increase in unemployment has seriously affected those who need jobs the most: There are some who contend that today's unemployment is simply a problem among certain special groups in the labor force, particularly those without skills. They point to the high unemployment rates among Negroes, young people, and in the relatively unskilled occupations, as evidence supporting their point of view. The argument seems to be that these people either are not interested in finding work or are casual workers who normally expect extended periods without jobs and that limited efforts tailored to their specific needs will solve the problem.

It is certainly true that unemployment is high among such groups as young people, Negro workers, and the unskilled. This represents a critically important problem our economy has to face. On the other hand, it is equally clear that a majority of the unemployed and the long-term unemployed do not fall into these categories. Unemployment is general, not restricted to special groups of workers.

Actually those groups in the population most directly affected by the recent increase in unemployment are experienced workers who have others to support.

Examining the composition of the unemployed reveals the following:

Age, color, and sex: The group hardest hit by the increase in unemployment during 1960 are men age 20 and above. The rate for teenagers and for women has increased but slightly. It is the men in the prime working age group that have been most affected. The rate for Negro workers actually declined from October 1959 to October 1960, although it is still almost twice as high as the rate for white workers.

Marital status: Similarly, when unemployed are classified according to marital status the largest increase has occurred among married men. Although the rate for the young single men is still higher than that for older married men, the greatest increase has occurred among those with family responsibilities.

Duration of unemployment: The degree of long-term unemployment is rising. Almost a million workers have been out of work for 15 weeks or more. The proportion of the total unemployed represented by this group is 28 percent, considerably above last year. This is an important figure because it indicates the difficulties that experienced unemployed workers have in finding new jobs.

These figures reinforce the conclusion that unemployment has become a stubborn national problem, demanding national attention.

OUTLOOK FOR THE NEXT FEW MONTHS

With this as background, what can be said about the outlook for the next few months?

Obviously, the employment picture is not an independent phenomena that can be studied in isolation apart from other economic forces. Developments affecting the strength of consumer demand, business investment, and Government purchases all affect the level of employment and unemployment.

Moreover, in assessing future economic developments one has to consider whether the course of economic forces will be affected by positive Government action.

There are, however, a few unique ingredients which a manpower analyst can add to the outlook stew which this panel is cooking this morning.

For one thing, there are seasonal patterns in employment and unemployment reflecting patterns of activity in the economy as a whole. The early months of the year naturally are the peak ones in terms of unemployment, in view of the curtailment of outdoor work in agriculture and construction, and the decline in retail trade employment after the year-end holidays.

In terms of numbers, February is normally the highest month for unemployment and January the lowest month for employment.

For the next few months, therefore, there are some simple projections that can be made based on this seasonal pattern.

If we start from the October figures and utilize normal seasonal trends, the total number of unemployed that can be expected in February would be 5.3 million. This is on the assumption that the seasonally adjusted rate would remain the same as it was in October—6.4 percent of the civilian labor force.

Actually, there is evidence that this seasonally adjusted rate may go even higher.

Although the November monthly figures have not yet been released, the weekly number of workers drawing unemployment insurance benefits has continued to rise in recent weeks, even above the seasonally expected increase.

Recent trends in unemployment insurance benefits—shown in chart No. 2—make it clear how the current trends seem to be following in a remarkably close manner the course of the 1957–58 recession, but with substantially greater number of the unemployed.

There is little indication that the unemployment picture will improve over the next few months. The bimonthly report, Area Labor Market Trends, issued Tuesday by the Labor Department, adds nine additional cities as areas of substantial labor surplus.

The CHAIRMAN. Those are simply the larger industrial areas. We had testimony yesterday that there were 20 smaller labor market areas which were added to those with unemployment over 6 percent. Is that not true?

Mr. HENLE. That is true, yes, and I perhaps should have mentioned that in here. These are only the standard metropolitan areas.

The report states that—

> some further declines—only partly seasonal in nature—appear to be in the offing after the turn of the year.

Almost every day the press reports new layoffs in such industries as aircraft, autos, and appliances.

If these trends continue, I think it is safe to say we can assume that by February the seasonally adjusted rate of unemployment will increase from 6.4 to 7 percent of the labor force. This would mean total unemployment in February of approximately 5.8 million.

The CHAIRMAN. If you add lost time within employment, what is your estimate?

Mr. HENLE. In my earlier section I included some current figures on that. There are 2½ million people who are listed as employed who are today on short time and who would like full-time work.

Now if you convert this to sort of a full-time equivalent, it amounts to just over a million persons. Of course, if that were added to the 5.8 it would be 6.8, or the equivalent of 7 million.

The CHAIRMAN. Or close to 10 percent of the labor force, uncorrected for seasonal fluctuations.

Mr. HENLE. Uncorrected; that is right. It would probably be somewhere in the 8 percent range.

Now I have also tried to look ahead, not for just the next few months, but for a somewhat longer period.

OUTLOOK OVER THE NEXT YEAR

Any attempt to go beyond this 2 or 3 months' outlook involves more speculation and less information. Beyond this period, the employment picture will depend upon developments in other parts of the economy.

It is possible, however, to indicate in a general way what the employment situation would be under varying economic conditions. This can be done by utilizing available projections of labor force growth and by assumptions regarding the increase in productivity.

Information is available indicating the number of individuals who can be expected to be in the labor force.

Chart No. 3 shows the actual increases in the labor force during the past 5 years and projects past trends to show the expected increases during each of the next 5 years.

It tells the familiar story of increasing additions to the labor force as the baby boom of the war and postwar periods come of age. The scheduled increase from 1960 to 1961 is 1½ million persons.

In looking ahead, it is important to keep in mind one fact. These projections are based on labor force trends up to 1959. They are made at that time.

In the past few years, the actual increase in the labor force has not been as large as the projected increase. The result is that the labor force today is considerably below the level which on the basis of past trends it would have reached.

As of 1960, this deficit is about 650,000 to 750,000.

This deficit has to be kept in mind as we look into the future. Many of these persons would now be in the labor force if job prospects were stronger or will enter it in the future if job prospects improve. This has been the record of the past, and we have no reason to doubt that it would apply in the future.

Who are these people who, in effect, have decided to remain out of the labor force rather than to go hunting for jobs? The largest proportion of them are older folks who have decided to call themselves retired, either voluntarily or involuntarily, even though in other circumstances they would have preferred to remain on the job.

Some of these people are youngsters who have decided to stay in school another year or two rather than to go out job hunting. Others are women, particularly in the age group 25 to 34, who evidently have decided to stay at home with their families a while longer before going into the labor market.

Using available information, it is possible to project in an admittedly crude way levels of employment and unemployment for the fourth quarter 1961 under varying economic conditions.

The following assumptions could be made:

1. The gross national product for the fourth quarter 1960 will be $503.5 billion, the same as the third quarter.

Actually, Mr. Tongue estimates it will slip a little bit.

I also estimate that unemployment for the fourth quarter will remain the same as for October.

In other words, I want to be as conservative as possible, take the October rate and assume that will be the average for the fourth quarter.

3. I assume that the labor force will increase by 1.2 million persons from the period from the fourth quarter to the fourth quarter next year.

4. I make the assumption that the productivity increase will be about 2½ percent during this period.

This is based on the assumption that at least the early months of 1961 will be months of recession when increases in productivity would be quite limited.

The 2½ percent rate represents the Nation's experience over a 30–40 year period, but is probably below the 3½ percent rate of the postwar period.

If the Nation's economy should enter into a strong expansionist phase in 1961 a higher rate of productivity would result.

5. I have assumed no change in the average weekly hours although to some extent any improvement in the economy will be reflected in longer hours rather than in higher employment.

6. I assume that the size of the Armed Forces will remain relatively constant.

Under these assumptions the civilian labor force for the fourth quarter of 1961 will total 71.8 million.

Assuming various rates of gross national product the corresponding levels of employment and unemployment will be as follows: I have a little table there in which these admittedly crude projections are set forth.

What I have done, you see, is to say, first of all, that if in the fourth quarter of next year there is no change, roughly no change from the gross national product of this year, then this labor force will be divided into roughly 65 million people employed and 6.8 million unemployed.

This would give you a seasonally adjusted rate of close to 11 percent.

Then if under various assumptions, if the gross national product increases and I have a number of them down here, employment naturally would increase and unemployment would decline and the seasonal rate of unemployment decline.

Now, using this table, as a guide, it is easy to see the prospects for improvement in unemployment—

(The table referred to follows:)

Projected levels of employment and unemployment, 4th quarter 1961

Assumed gross national product (billions of dollars)	Corresponding levels of—		Corresponding unemployment rate (seasonally adjusted)
	Employment (thousands)	Unemployment (thousands)	
$503.5 (no change)	65,000	6,800	10.9
$510 (1.3 percent growth)	65,900	5,900	9.4
$520 (3.3 percent growth)	67,200	4,600	7.3
$530 (5.3 percent growth)	68,500	3,300	5.3
$540 (7.2 percent growth)	69,800	2,000	3.2

Senator BUSH. Could I ask a question there, Mr. Chairman?

The CHAIRMAN. Certainly.

Senator BUSH. Point No. 4, does this indicate that you foresee a definite improvement in the second half of next year because in point 4 you say 2½ percent represents the Nation's experience over an earlier period, but is considerably below the 3 to 3½ percent?

If the Nation's economy should enter into a strong expansionist phase in 1961, a higher rate of productivity would result.

In other words, if the productivity is not going to increase in the first 6 months which I take it is your forecast, or around 6 months, then in order to have a 2½-percent increase during the year which

you say it will increase 2½ percent, it will have to be a much higher rate during the last 6 months.

Do I correctly interpret your thinking on that?

Mr. HENLE. Yes, Senator. That is the assumption on which I am going because it appears to be the assumption of many leading economists throughout the country.

For myself, I have mainly confined my analysis to the problems of the labor force. I do not, myself, have any specific projection of gross national product. I tend to believe, for example, that Mr. Tongue has submitted a reasonable estimate.

I am particularly concerned what would be the resulting employment and unemployment if these relatively reasonable estimates should come true.

Senator BUSH. Then we can assume that you do not anticipate a net decline next year in the gross national product, but, rather, yourself, a small increase; is that right? You are accepting Mr. Tongue's forecast which does indicate over the year a modest increase in the gross national product; is that not right?

Mr. HENLE. Well, I am not so certain, myself, how it will work out. I think there is some real danger that the decline as it has developed, could actually turn into something more serious than these people here are predicting.

Senator BUSH. Therefore, we can only assume you are addressing yourself to the results of changes and all of those changes would be either to stay even or get a little better.

You have not addresed yourself to the possibility of a change where the gross national product went off.

Mr. HENLE. Would actually decline over the entire year.

Senator BUSH. Yes.

Mr. HENLE. That is true.

Senator BUSH. Thank you very much.

Mr. HENLE. The projected unemployment rates range from a high of 11 percent if there is no change in gross national product to a low of about 3 percent if gross national product should rise to about 540.

Now, to keep unemployment from rising above its current rate gross national product would have to increase to about $525 billion.

Only if it should rise to about $535 billion, or more, will unemployment fall to 4 percent or less.

Admittedly, these are very rough projections. They take as their starting point the present state of the economy to which is added the expected 1.2 million increase in the labor force, and the 2½ percent increase in productivity.

Now, in considering these projections I would like to suggest that they may be least accurate at the two extremes; namely, under the assumption of no growth at all or an exceedingly high rate of growth.

The reason for this is that in either of these two cases, the assumptions regarding labor force and productivity are likely to change.

For example, if gross national product should rise by very little or not at all, it is likely that in such a lagging economy the annual increase in the labor force will actually be less than 1.2 million projected and the increase in productivity will be actually less than the 2½ percent.

In that case, the level and rate of unemployment will be somewhat less than the table indicates. The rate will be less on the published figure although at the cost of an even greater degree of unemployment throughout the economy.

Similarly, if the gross national product should rise to $540 billion, it is quite likely that more than 1.2 million persons will be attracted into the labor force and that the increase in productivity will be above 2½ percent.

In that case the rate of unemployment would not fall as low as the 3.2 percent given by the table.

I am trying to explain that there is certain flexibility in this table, and the flexibility appears particularly if you have little change or if you have a great deal of change because in either of those cases the number of people that will come into the labor force is not likely to be the same as the projection.

Despite their admittedly crude character, I do feel that these figures dramatize the importance of a growing economy to keep unemployment at an acceptable level. The projections also point up the vital role that Government policy decisions will play in the next few months. Any Government action to accelerate the economy's growth will help generate more jobs and reduce the number of jobless.

From the viewpoint of those who work for a living, the Nation's economic health is ailing and action is needed to alleviate the distress caused by unemployment and to create more jobs throughout the economy.

Thank you.

The CHAIRMAN. Thank you very much, Mr. Henle.

(The charts attached to the formal statement of Mr. Henle follow:)

CHART 1

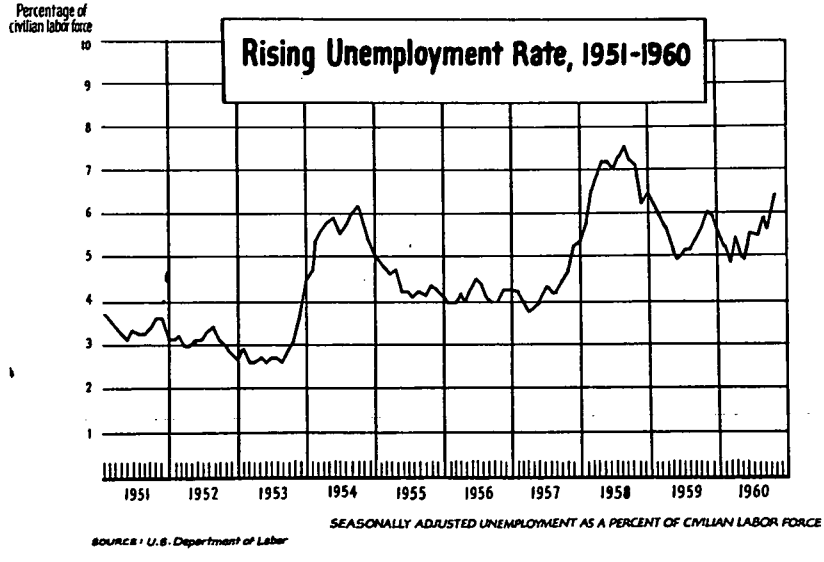


CHART 2

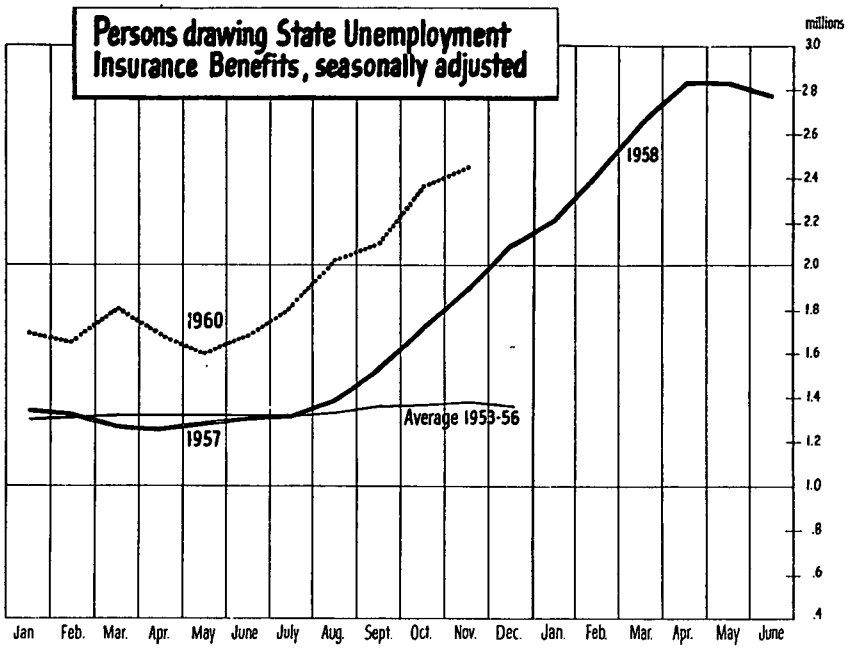


CHART 3

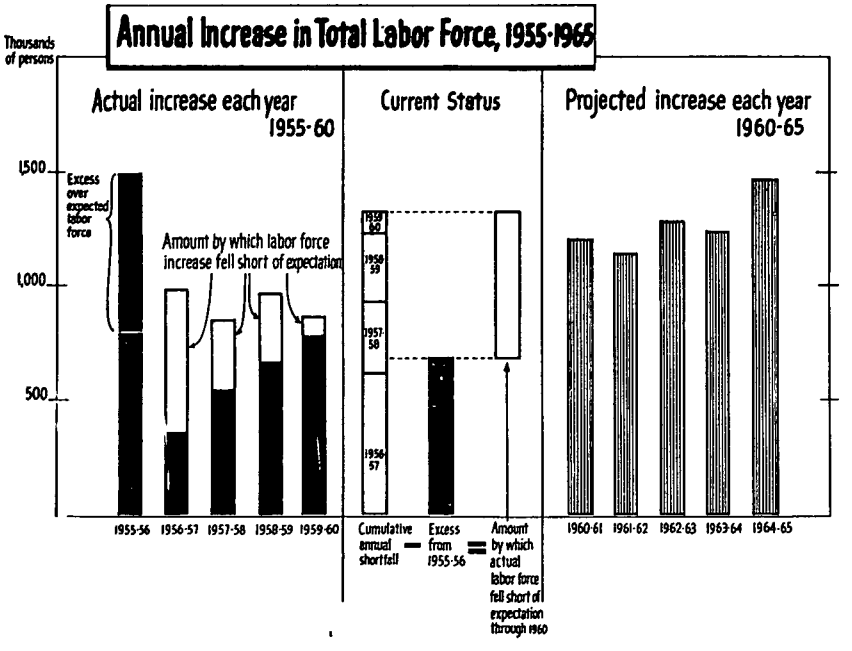
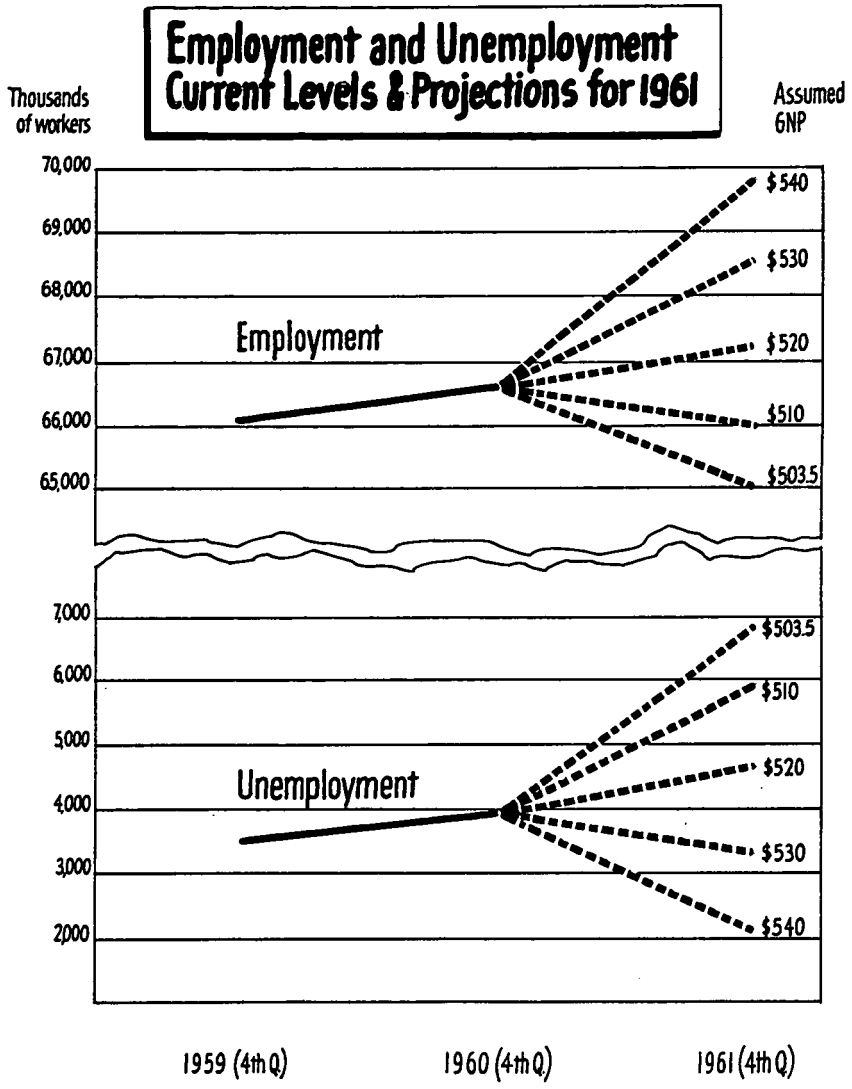


CHART 4



The CHAIRMAN. I guess we are all waiting with great expectation to hear the remarks of the next participant in the panel, the foremost authority in this country, possibly in the world, on gold and gold movements, Prof. Robert Triffin of the Department of Economics, Yale University.

STATEMENT OF ROBERT TRIFFIN, DEPARTMENT OF ECONOMICS, YALE UNIVERSITY, NEW HAVEN, CONN.

Mr. TRIFFIN. Mr. Chairman, I want to thank you for those overly generous words. I shall try to keep my statement very brief. I feel I can do so all the more easily as I testified about a year ago on the very same problem before your committee.

I outlined at that time, at your request, the measures which I regarded as essential to deal with what appeared to be an alarming deterioration in the international position of the U.S. dollar. In concluding my statement, however, I expressed the fear that only a real crisis would shake us into action.

Your committee undoubtedly shared the same concern and decided to transmit the record of the day's proceedings to the President, the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, and the Managing Director of the International Monetary Fund for such comments as they might have.

I was not privileged to see the exact text of the answers which you received from these gentlemen, but I have good reasons to think that they were essentially negative.

The CHAIRMAN. Unless there is objection by members of the committee, I would like to have the replies of these gentlemen included in the proceedings of this hearing.

Senator BUSH. I did not quite understand.

The CHAIRMAN. We had the record of the proceedings when Professor Triffin testified transmitted to the President, the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, Managing Director of the International Monetary Fund, and requested their comments. They made their comments. We have those comments in our files, but I believe they have not been given publication. I am saying that unless there is objection on the part of members of the committee, I would like to have them included in the transcript of this day's proceedings.

Senator BUSH. The committee officially asked them for comments?

The CHAIRMAN. Yes; that is correct.

Senator BUSH. I so move.

The CHAIRMAN. Thank you.

Mr. TRIFFIN. Thank you very much, Mr. Chairman.

As I said, I have not had the privilege of seeing the answers so far, but I believe from whatever rumors I heard about it that they were negative: there was no reason for concern, no crisis was in view, and if one unexpectedly developed these people were prepared to handle it.

Even as late as last September, official optimism and reassurances were generously poured upon the delegates who attended the annual meetings of the International Monetary Fund and Bank. More recently wide distribution was given by the International Monetary Fund to a paper issued on October 17 by its Research and Statistics Department on "Professor Triffin's Diagnosis of International Liquidity and Proposals for Expanding the Role of the IMF." Detailed and scathing criticisms are leveled in this paper against the views which I had presented to you a year ago.

As I told you at that time, I fully expected such a reaction and I would very much welcome today the opportunity to put in the record

the rather technical paper which I have prepared in answer to the criticisms of the Fund.

Senator BUSH. I so move.

The CHAIRMAN. Do you not think you should include the reply of Mr. Altman to your paper as well as your reply to Altman?

Mr. TRIFFIN. I would welcome it very much, but of course I cannot put that in the record myself since this paper was not for public use.

Senator BUTLER. Mr. Chairman, are these answers available now for the committee for inspection?

The CHAIRMAN. Yes.

And do you wish to include also your letter to the New York Times on October 30?

Mr. TRIFFIN. If you wish to, Mr. Chairman.

The CHAIRMAN. That will be included also.

(The material referred to follows:)

The PRESIDENT,
The White House.

DEAR MR. PRESIDENT: The Joint Economic Committee wishes to bring to your attention a most interesting and stimulating suggestion presented to the committee in its public hearings Wednesday afternoon by Prof. Robert Triffin, of Yale University. Professor Triffin, an internationally known authority on international monetary problems, has suggested the revision of the International Monetary Fund or the creation of a new organization to replace the present one which, if successful, would solve problems both of the United States and of other countries maintaining liquidity reserves required by international financial transactions. The committee, of course, has not had an opportunity to consider Professor Triffin's suggestion and as a committee is not prepared to endorse his recommendations. We do believe, however, that his suggestion is of sufficient merit and originality that it deserves the most serious and intensive study on the part of responsible officials.

In view of these facts, the committee is taking the somewhat unusual course of transmitting to you for your consideration and, we hope, your comments, a copy of Mr. Triffin's statement and the transcript of the day's hearing.

Faithfully yours,

PAUL H. DOUGLAS, *Chairman.*

Professor Triffin's statement and transcript of hearings was sent to the following:

The President, Dwight D. Eisenhower.
The Secretary of the Treasury, Robert B. Anderson.
Chairman of the Board of Governors of the Federal Reserve System, William McChesney Martin, Jr.
Managing Director of the International Monetary Fund, Per Jacobsson.
Senate Banking and Currency Committee, A. Willis Robertson, chairman.
Senate Finance Committee, Harry Flood Byrd, chairman.
Senate Foreign Relations Committee, J. W. Fulbright, chairman.
House Banking and Currency Committee, Brent Spence, chairman.
House Foreign Affairs Committee, Thomas E. Morgan, chairman.
House Ways and Means Committee, Wilbur D. Mills, chairman.

AUGUSTA, GA., *November 14, 1959.*

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee, Congress of the United States, Washington, D.C.

DEAR SENATOR DOUGLAS: Thank you for sending me, in advance of their publication date, a transcript of hearings before the Joint Economic Committee and certain related papers concerning foreign exchange reserves.

I assure you that these will be carefully studied by the various departments and agencies directly concerned, including the Departments of State and Treasury, and the Council of Economic Advisers.

Sincerely,

DWIGHT D. EISENHOWER.

INTERNATIONAL MONETARY FUND,
Washington, November 6, 1959.

Hon. PAUL DOUGLAS,
Chairman, Joint Economic Committee, Congress of the United States,
Washington, D.C.

DEAR SENATOR DOUGLAS: Thank you so much for your letter of the 30th of October, and for the enclosures relating to the suggestion presented to your committee by Prof. Robert Triffin of Yale University. It is of interest for us to have these documents, together with the restatement of Dr. Triffin's scheme. You ask me for my own personal comments on this, and having again refreshed my mind about his scheme, I think I may as well state clearly as I can what my personal opinion is on it.

I must tell you frankly that personally I cannot see any value in Dr. Triffin's scheme as such; on the contrary, I believe that it may even be positively harmful. I use these words deliberately, firstly because they do represent my considered opinion, and secondly because I think that attention may be diverted harmfully to an impractical scheme which, in any case, I am sure will never be adopted.

As you know, the resources of the fund have recently been enlarged. All around the world this increase was approved by the responsible bodies practically without disagreement, and in the United States itself it was approved by an almost unanimous vote of Congress. This enlargement of resources should make it possible for the Fund to play its part in overcoming monetary disequilibriums in cooperation with member countries, under any foreseeable conditions, by granting assistance within the framework of the Fund's policies and practices. I should add that at the last annual meeting of the Governors of the Fund there was a greater unanimity on monetary principles than has been experienced before at any previous meeting. As far as international liquidity is concerned, I can detect no overall problem, although some individual countries have still to achieve balance in their international accounts. Such balance cannot, in my opinion, be attained or even facilitated by the introduction of any new expedients, but only by the appropriate measures being taken by the countries concerned, together with such international assistance as may be needed in individual cases.

If you would like to hear in detail my reasons for the opinions I express, I suggest that we have a private dinner or luncheon together, to which I should be glad to invite you, and any of your colleagues that might be interested, and which would give us an opportunity for an exchange of views on this and possibly other monetary subjects.

It would be a pleasure to meet you again, and I remain,
Yours sincerely,

PER JACOBSSON,
Managing Director.

THE SECRETARY OF THE TREASURY,
Washington, November 27, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: We appreciate receiving copies of the paper and testimony offered before your committee by Prof. Robert Triffin. Let me assure you that the problems discussed in his statement are under continued study by the Treasury and other agencies of the U.S. Government. Problems of this nature are also kept under review by the International Monetary Fund, and in this connection I am sending you a copy of the International Monetary Fund study on liquidity in case you have not seen it.

You will recall that last June the Congress amended the Bretton Woods Agreements Act so as to permit an increase in the U.S. quota in the International Monetary Fund, and, under the terms of the resolutions of the Board of Governors of the Fund, this increase in our quota, as well as the quotas of other countries, became effective in September. In the Treasury's view, the increase in the Fund's resources provided for in this way is sufficient to provide the degree of liquidity needed for expanding world trade in the foreseeable future, and will enable the Fund to deal with the problem of temporary imbalance in international accounts which are likely to arise. Moreover, the exchange reserves of

other industrial countries have increased considerably, and the adoption of nonresident convertibility by these countries will make the Fund's holdings of their currencies more available for use in operations.

The Treasury is always interested to examine thoughtful suggestions on how to deal with important questions of international financial policy, and Dr. Triffin's views will be considered in this context.

Let me thank you again for sending us Dr. Triffin's testimony.

Sincerely yours,

(Signed) Bob Anderson,
ROBERT B. ANDERSON,
Secretary of the Treasury.

BOARD OF GOVERNORS
OF THE FEDERAL RESERVE SYSTEM,
Washington, November 12, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
Congress of the United States, Washington, D.C.

DEAR MR. CHAIRMAN: The Board of Governors is grateful to the Joint Economic Committee for transmitting with your letter of October 30 a copy of Prof. Robert Triffin's statement before the committee and the transcript of the hearings for the day when Professor Triffin's suggestion was considered by the committee.

The Board's staff has had under continuous study the problems with which Professor Triffin's suggestion is intended to deal, and of course will continue its studies in this field. We appreciate your making this material available to us so promptly.

Sincerely yours,

(Signed) WM. MCC. MARTIN, Jr.

U.S. SENATE,
COMMITTEE ON FINANCE,
November 4, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
Congress of the United States, Washington, D.C.

DEAR SENATOR DOUGLAS: In the absence of the chairman permit me to thank you for your October 30 letter, transmitting a copy of the transcript of your hearings covering the testimony of Prof. Robert Triffin, of Yale University.

I am forwarding your letter and the attached material to Senator Byrd at his Winchester office. I am sure he will be pleased to review Professor Triffin's statement.

Sincerely yours,

ELIZABETH B. SPRINGER, *Chief Clerk.*

U.S. SENATE,
COMMITTEE ON BANKING AND CURRENCY,
October 31, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
U.S. Senate,
Washington, D.C.

Dear PAUL: Thanks for your letter of the 30th enclosing a transcript of the testimony of Prof. Robert Triffin, of Yale delivered before the Joint Economic Committee on the 28th in which the witness recommended a revision of the laws relating to the International Monetary Fund.

The Reorganization Act of 1946 gave to the Senate Foreign Relations Committee jurisdiction over the International Bank and the International Monetary Fund, previously exercised by the Banking and Currency Committee, but the then chairman of the Foreign Relations Committee did not care to exercise the new jurisdiction and so by his consent the two international agencies stayed under the supervision of the Banking and Currency Committee.

At the last session of the Senate when Fulbright became chairman of the Foreign Relations Committee he wanted jurisdiction over these two international agencies and the Parliamentarian thought that he was entitled to have it. In view of that fact, I am forwarding to Senator Fulbright for appropriate con-

sideration and appropriate action your letter of the 30th, together with all of the enclosures.

With best wishes, I am,

Sincerely yours,

A. WILLIS ROBERTSON.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
November 10, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee, U.S. Senate,
Washington, D.C.

DEAR SENATOR DOUGLAS: Thank you for sending me copies of Professor Triffin's statements and the hearing transcript, under the cover of your letter dated October 30. These documents will receive careful consideration here, and I would hope to give you my comments at an appropriate later time.

It was good of you to bring these interesting papers to my attention.

With kind personal regards,

Very truly yours,

J. W. FULBRIGHT, *Chairman.*

COMMITTEE ON FOREIGN AFFAIRS,
HOUSE OF REPRESENTATIVES,
Washington, November 2, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
Congress of the United States, Washington, D.C.

MY DEAR SENATOR DOUGLAS: I very much appreciate receiving your letter of October 30 with which you enclosed copies of statements prepared by Prof. Robert Triffin on the international monetary position of the United States, together with a transcript of his testimony before the Joint Economic Committee on the same subject.

I shall read these statements with care and attention.

With kindest personal regards and very best wishes, I am

Sincerely yours,

THOMAS E. MORGAN, *Chairman.*

COMMITTEE ON WAYS AND MEANS,
HOUSE OF REPRESENTATIVES,
Washington, D.C., November 10, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
Congress of the United States.

DEAR SENATOR DOUGLAS: In the absence of Chairman Mills, who is presently in his home district in Arkansas, I am taking the liberty of acknowledging your letter of October 30, 1959, relative to the statement of Prof. Robert Triffin of Yale University before the Joint Economic Committee on October 28, 1959.

Your letter and its enclosures will be drawn to the chairman's attention upon his return to Washington this weekend, and I am sure he will appreciate your interest in making this available to him.

Sincerely yours,

JOHN M. MARTIN, Jr., *Assistant Chief Counsel.*

HOUSE OF REPRESENTATIVES,
COMMITTEE ON BANKING AND CURRENCY,
Washington, November 12, 1959.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee, U.S. Congress,
Washington, D.C.

DEAR SENATOR DOUGLAS: Thank you for your recent letter enclosing materials relating to Prof. Robert Triffin's suggestions concerning a central banking system for international financial transactions. This is certainly a very timely suggestion, coming as it does when many people are concerned about the drainage of gold reserves from this country. I shall study it with great interest.

Sincerely,

BRENT SPENCE.

Professor Triffin's Diagnosis of International Liquidity and Proposals for Expanding the Role of the IMF

Prepared by Oscar L. Altman

October 17, 1960

I. Introduction

1. In his recent book, Gold and the Dollar Crisis (1960), Professor Robert Triffin of Yale University drew a bold picture of the dangerous state of, and prospects for, international liquidity, and suggested expanding the role and changing the character of the International Monetary Fund to cope with these problems. The main part of this book (pp. 17-145) reprints with only minor changes two long articles published in 1959 in the Quarterly Review of the Banca Nazionale del Lavoro: "The Return to Convertibility: or Convertibility and the Morning After" and "Tomorrow's Convertibility: Aims and Means of International Policy" (March and June issues, respectively). The book also reprints Professor Triffin's statement to the Joint Economic Committee of the Congress of the United States on October 27, 1959, and the major part of the questions and answers from the Committee's Hearings (pp. 1-17 and 167-91, respectively). The few remaining pages of the book are devoted to comments from other sources, including the Report of the Radcliffe Committee. The Banca Nazionale del Lavoro articles drew upon his previous writings, notably Europe and the Money Muddle (1957) and his Wicksell Lecture for 1958, The Future of the European Payments System (Stockholm, 1958, especially pp. 34-43). The general thesis of these writings was also treated in a paper delivered at the August 1959 meeting of the International Economic Association, The Gold Shortage, the Dollar Glut, and the Future of Convertibility, and an article in The Banker, "Improving World Liquidity" (January 1960).1/

2. Section II of this paper is an expose of Professor Triffin's diagnosis of present and prospective difficulties in the international financial area and of his prescriptions for dealing with these difficulties. Section III is an analysis of three questions that are basic to Professor Triffin's proposals: first, the problems of obtaining a stable structure of international reserves; second, the need for changing the character of the IMF to provide additional international liquidity; and third, the operational and policy problems an expanded IMF would have faced in 1956-59 in assessing the state of international liquidity. Section IV is a short conclusion.

1/ To these should be added "Le Crepuscule de l'Etalon de Change-Or," Problemes Economiques, No. 665, September 27, 1960, which became available after this memorandum was completed.

II. Professor Triffin's Views

3. Triffin's diagnosis is that

> The most fundamental deficiency of the present system and the main danger to its future stability, lies in the fact that it leaves the satisfactory development of world monetary liquidity primarily dependent upon an admittedly insufficient supply of new gold and an admittedly dangerous and haphazard expansion in the short-term indebtedness of the key currency countries.1/

4. The world's normal requirements for increases to monetary reserves appropriate to the growth of trade and the maintenance of convertibility, principally by the major trading countries, will certainly be greater than prospective additions to reserves resulting from gold production. In the ten years 1958-67, the shortfall will be at least $6 billion and it may be as much as $17 billion, depending upon whether trade grows during the period at the rate of 3 or 6 per cent per year, and also upon the following assumptions:2/ (a) the United States, Germany, Switzerland, and Venezuela are assumed not to increase their reserves; (b) requirements for the next decade assume that the United Kingdom and France raise their reserves to 40 per cent of imports as of the end of 1957, or $4.6 billion and $2.5 billion, respectively, and that their requirements for the ensuing decade involve expansion of these base figures in line with the growth of trade;3/ and (c) that sales of gold by the U.S.S.R. will average $200 million per year, that is, approximately its average annual sales in 1956-58. Triffin calculates the reserve deficiency for the next decade, over

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1/ Gold and the Dollar Crisis, p. 100.

2/ Gold and the Dollar Crisis, pp. 49-50.

3/ Reserves of the United Kingdom and France at the end of 1957 were $3.1 billion; reserves equal to 40 per cent of their imports in 1957 would be $7.0 billion, leaving an initial shortfall of $3.9 billion. Reserves of the United Kingdom at the end of 1957 were $2.4 billion. Reserves corresponding to a level of 40 per cent of imports would be $4.6 billion, and assuming growth at the rate of 3 per cent a year, would be $6.1 billion in 1967. Under the same assumptions, French reserves in 1967 would be $3.3 billion.

and above $7 billion of gold additions to reserves, on the basis of four assumed rates of growth of trade, ranging from 3 to 6 per cent per year, but he would probably be inclined to accept a higher rather than a lower figure.1/

5. The gap between required "normal" additions to reserves and prospective additions to reserves in the form of gold cannot be filled by the growth of dollar or sterling balances. The gap cannot--and what is more, it should not--be filled with larger international holdings of these or any other national currencies. It is contrary to the interests of the United States and the United Kingdom to permit much additional growth of dollar and sterling foreign balances, since growth of these balances weakens their net reserve positions. It is not in the interests of the world to create international reserves in the form of exchange balances by unrequited capital exports to wealthy creditor countries, nor is it reasonable to tie the growth of international reserves to the needs of the domestic policies of the creditor countries whose currencies are so used.

6. The balance of payments deficit of the United States in the post-war period has markedly increased the reserves of all other countries, excluding those in the communist bloc. The reserves of many countries are at comfortable levels, while some are large. On the other hand, many underdeveloped countries have inadequate reserves. Triffin is clear that the present reserve situation is unstable and dangerous because of the large amounts of dollars and sterling held as reserves.

7. The use of national currencies as international reserves has had bad results, notably in the late 1920's and early 1930's, and will sooner or later--and sooner rather than later--have dangerous consequences in the future. The "net" reserve position of the United States deteriorated sharply in the 1950's. Gold holdings of the United States decreased from a high of $24.6 billion in 1949 to $19.5 billion at the end of 1959; short-term dollar liabilities to foreign official and private holders (excluding international agencies) increased from $7.6 billion to $16.2 billion. The United States is now exposed to the hazards of gold outflows on a large scale. Its ability to follow a low interest policy for domestic reasons has been sharply limited by the possibility of large capital outflows in response to higher interest rates abroad. This would mean large losses of gold reserves. In October 1959, Triffin stated:

1/ The illustration of the world's reserve deficiency for a decade in the Wicksell Lecture was that "world trade and production are estimated to have increased in volume, over the last ten years, at a pace of about 6 per cent a year. A parallel rate of increase of the world's monetary reserves ($62 billion at the end of last year [1957] would require their expansion by $3.7 billion annually." As for a low rate of growth, he stated that "the 3 per cent assumed by the Fund [in International Reserves and Liquidity] becomes plausible only when 'normal' peacetime experience is diluted with the abnormally low, and in fact predominantly negative, growth rates of wartime years and of the 1930's world depression." Gold and the Dollar Crisis, p. 48.

> Our huge gold losses of last year were due in part to such a repatriation of foreign capital at a time when interest rates had fallen here well below the rates available in Europe. Those gold losses have slowed down this year by an extremely sharp rise of interest rates in this country, prompted by our domestic concern about creeping inflation.
>
> In this case, external and internal interest rate policy criteria happily coincided, but they may diverge tomorrow.
>
> If and when we feel reassured about our internal price and cost trends, we may wish to ease credit and lower interest rates in order to spur our laggard rate of economic growth in comparison not only with Russia, but with Europe as well.1/

8. The present structure of international reserves has grown up haphazardly. The use of gold as a major component of international reserves holdings has a historical but hardly an economic justification. "Nobody could ever have conceived of a more absurd waste of human resources than to dig gold in distant corners of the earth for the sole purpose of transporting it and reburying it immediately afterward in other deep holes, especially excavated to receive it and heavily guarded to protect it."2/ The use of national currencies in international reserves economizes on the use of gold, but this use was "developed haphazardly and under the pressure of circumstances rather than as a rational act of creation."3/ This development created the risk of runs on currencies and of flights to gold. The extension of the gold exchange standard in the 1920's accentuated, if indeed it was not a primary factor in, the deflation that began in 1929; the large balances now outstanding of dollars and sterling are a warning that the present situation is very vulnerable. Yet, since the end of World War II, only the growth of foreign holdings of national currencies has tended to compensate for the inability of gold production to expand international liquidity in relation to the world's requirements. In the next decade, gold production will "admittedly" be insufficient to meet the world's growing demand for reserves. Given the present monetary arrangements, this deficiency can be compensated for only by increased holdings of reserves in the form of national currencies, even though existing foreign holdings of national currencies are already too large for short-run stability. Increased holdings would increase this instability, and they might even upset the apple cart. The world must thus go forward between the Scylla of an inadequate amount of reserves and the Charybdis of a destabilizing composition of reserves.

1/ Hearings, Part 9A, p. 2931.

2/ Hearings, Part 9A, p. 2911. The same statement is in Gold and the Dollar Crisis, p. 89.

3/ Hearings, Part 9A, p. 2911.

9. The world needs an international organization to create a new type of reserve, one with an international character, to replace all exchange reserves held in national currencies. It needs a kind of reserve which can be expanded appropriately in accordance with expanding production and trade and yet not be overexpanded to create inflation. The job of providing this new kind of reserve in the required amounts should be assigned to an expanded and amended IMF. It will take time to negotiate such a charter for the XIMF (to create an abbreviation to simplify the following discussion). The recent increase of IMF quotas by more than 50 per cent is therefore most timely because it makes this time available.

10. The key elements in this new charter would be that members should agree not to keep any of their official reserves in national currencies and to keep all of their exchange reserves in the form of deposits with the XIMF. A fundamental part of this arrangement would thus be the agreement that members would hold reserves in only two forms, gold and XIMF deposits, and that they would discontinue holding reserves in the form of currencies of other nations. Members would agree to accept transfers of these deposits in the settlement of their balance of payments accounts.

11. Members would keep a stated percentage of their gross reserves in the form of deposits with XIMF. Gross reserves would be defined as gold, net creditor claims previously accumulated on the IMF (which would be automatically transformed into XIMF deposits), and "other liquid or semi-liquid foreign exchange holdings, i.e., principally dollar and sterling balances."[1] If, as suggested, each country would initially be required to keep 20 per cent of its gross reserves in the form of deposits, XIMF would have about $11 billion of assets, consisting of $5 billion of gold, $3 billion of dollars, $2 billion of sterling, and $1 billion of other assets, based on reserves data as of the end of 1958. U.S. deposits would be about $4.5 billion (20 per cent of the sum of $20.6 billion of gold plus $2.0 billion of net claims on the IMF); its payment would consist of its $2.0 billion of net claims[2] on the IMF plus $2.6 billion of additional payments in gold.[3] All other members would also pay additional sums calculated as in the case of the United States. Countries would presumably pay the required 20 per cent of their gross reserves (reduced by their net claims on the Fund) in dollars, sterling, or other acceptable currencies to the maximum extent possible, tendering gold only to pay the remainder.[4]

1/ Gold and the Dollar Crisis, pp. 107-9.

2/ This amount reflects, among other things, the gold subscriptions of $1.0 billion already made by the United States in connection with its quota of $4.1 billion.

3/ The U.S. quota was raised in 1958 to $4.1 billion. The minimum deposit requirement of 20 per cent works out to U.S. deposits of $4.5 billion. The fact that these two sums are so close, and that the initial deposit requirement was suggested as 20 per cent, are probably not completely coincidental.

4/ This is the assumption used by Triffin. See, for example, Gold and the Dollar Crisis, pp. 107-11.

12. Deposits with the XIMF would be used alongside of gold and be "fully equivalent" to it in international settlements. They might be considered as good as gold, or even better, since they would carry an exchange guarantee and earn interest.

> They could be drawn upon by their holders to procure any currency needed in such [international] settlements or for stabilization interventions of central banks in the exchange market. The amounts withdrawn would be merely debited to the withdrawer's deposit account and credited to the account of the country whose currency has been bought from the Fund.1/

Deposits would be convertible in the following sense: (a) subject to the limitation that a member could not reduce its deposits below the required percentage level, a member could use all of its deposits to satisfy the claims of other members, or to acquire any national currencies for the same purpose; (b) a member could use its "excess" deposits, i.e., deposits in excess of its calculated deposit requirement, to acquire gold from the XIMF or, alternatively, from other sources. Deposits that were exactly equal to 20 per cent of a country's gross reserves (or whatever other percentage was in force at the time) could neither be used nor withdrawn. For example, a country with gross reserves of 100, of which 80 was gold and 20 was an XIMF deposit, could meet a balance of payments deficit with gold, or with gold and XIMF deposits, provided that deposit funds could not constitute more than 20 per cent of the total payments. This arrangement implies that exchange balances transferred to the XIMF to satisfy deposit requirements are immobilized until they are released by a fall in gross reserves; and, specifically, while they are immobilized, they cannot be converted into gold.

13. Members would have to deposit all official holdings of any national currencies they did not convert into gold.2/ These additional deposits would have the same characteristics as required deposits, and could be freely used to make all international payments. If countries paid in all of their exchange holdings as of the end of 1958, the Fund's deposit liabilities would rise from $11 billion to approximately $21 billion. Its gold assets would remain $5 billion but its holdings of dollars, sterling, and other foreign exchange would rise to $16 billion. Countries would be able to draw out excess deposits, i.e., deposits in excess of 20 per cent of their gross reserves, in the form of gold, although Triffin has described a number of considerations which make this unlikely and outlined various provisions, requirements, and escape clauses which are designed to cope with any large demands for gold.

1/ Hearings, Part 9A, p. 2911.

2/ There is a reservation with respect to "the possible exception of moderate working balances" of the key currencies actively traded on the exchange markets. Gold and the Dollar Crisis, pp. 113-14.

14. XIMF deposits would enjoy an exchange guarantee, and thus possess greater security than reserves kept in the form of dollars, sterling, and other national currencies. They would earn interest depending upon XIMF earnings from loans and investments. Correspondingly, the currency and investment holdings of XIMF would carry an exchange guarantee, in the same way as the Fund's present holdings of national currencies are guaranteed against currency depreciation.

15. These arrangements would eliminate the instability and danger that lurk in a gold exchange system and that permits runs on one currency in favor of another currency or gold. They would provide a stable structure of international reserves.

16. But it is also necessary to assure that the total of international liquidity should grow in accordance with requirements for it. All of Triffin's discussions of future requirements are to the effect that the total of international liquidity may have to increase at the same rate as world trade if contractionary forces and exchange crises are to be avoided. The Fund's lending powers should be limited to the increases necessary to preserve an adequate level of international liquidity.

> The over-all lending capacity of the Fund can properly be limited to the creation of bancor amounts sufficient to preserve an adequate level of international liquidity. Various criteria could be retained for this purpose. The simplest one might be to limit the Fund's net lending, over any twelve months period, to a total amount which would, together with current increases in the world stock of monetary gold, increase total world reserves by, let us say, 3 to 5 per cent a year. The exact figure could not, of course, be determined scientifically and would, in any case, depend in practice upon the compromise between divergent national viewpoints which would emerge from the negotiation of the new Fund Agreement. A reasonably conservative solution would be to retain a 3 per cent figure as definitely noninflationary, and to require qualified votes (two thirds, three fourths, and ultimately four fifths of the total voting power, or even unanimity) to authorize lending in excess of 3, 4, or 5 per cent a year.[1]

There are, of course, other guideposts which might be used. Triffin noted that "alternative criteria, more logical but also more difficult to define correctly, might be derived from the current trend of some international price index reflecting inflationary or deflationary pressures on the world economy."[2]

17. The XIMF would be empowered to create new deposits based on loans to, or investments in, its members. Loans to members would be analogous to drawings from the IMF, but they would be divorced from what is termed the artificial and arbitrary regimentation of Fund quotas.

1/ Gold and the Dollar Crisis, pp. 103-4.

2/ Gold and the Dollar Crisis, p. 104, fn. 1.

> The Fund's lending operations, moreover, should be no more automatic than they are at present, and this discretion should enable it to exercise a considerable influence upon members to restrain internal inflationary abuses. The experience acquired in the 12 years of operation of the Fund is extremely valuable in this respect. Fund advances should continue to require full agreement between the Fund and the member with relation not only to the maturity of the loan, but also to the broad economic and financial policies followed by the member to insure long run equilibrium in its international transactions without excessive recourse to trade and exchange controls.1/

Indeed, "the normal procedures for Fund advances need not differ substantially from those gradually developed by the Fund over its twelve years of existence."2/

18. Stand-by agreements, which have been used extensively by the Fund, would continue to be used by the XIMF, but they might

> be supplemented by overdraft agreements, to be renewed at frequent intervals, and guaranteeing all members in good standing rapid and automatic Fund assistance in case of need, but for modest amounts and with short-term repayment provisions. These overdraft agreements would be primarily designed to give time for full consideration of a request for normal, medium-term, loans or stand-by agreements, and would be guaranteed by the country's minimum deposit obligation.3/

19. The XIMF could also, on its own initiative, but with the consent of the government concerned, make investments, which could take the form of purchase against XIMF deposits, in short-term or long-term government securities. Investments should be made in ways that will facilitate economic development. They should be made in countries that need development capital or to organizations (such as the International Bank for Reconstruction and Development) which make loans for economic development. Triffin also mentions the possibility that loans might be made to private business enterprises engaged in development. All investments would be made subject to an exchange guarantee. Thus, the deposits, and the currency and investment assets, of XIMF would be guaranteed against currency depreciation.

20. Practically all exchange reserves at the present time are held in the form of dollars and sterling. Triffin considers such a pattern of investment economically unjustifiable. Sterling and dollar balances

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1/ Hearings, Part 9A, p. 2912.

2/ Gold and the Dollar Crisis, p. 115.

3/ Gold and the Dollar Crisis, p. 115.

can be built up only by capital exports to the United Kingdom and the United States, which are already creditors and capital exporters. Short-term capital imports by these countries increase the amount of capital which they must export on long term in order to maintain balance of payments equilibrium for themselves and the rest of the world. The present practice increases the capital exporting problems of these creditor countries, and is equivalent, in a phrase which is used again and again, to carrying coals to Newcastle. Triffin proposes that the process of building these balances be first halted, and then reversed, and that international short-term investments in dollars and sterling be liquidated over a period of time at, say, a maximum rate of 5 per cent a year. The proceeds should be invested in countries that really need capital imports.1/

21. In conclusion, Triffin proposes to give XIMF the power to create a new kind of money--an international money and an internationalized money--and to expand the quantity of this money in accordance with international liquidity requirements as determined by its members. Gold would remain a component of international reserves, and the XIMF could create new deposits according to the principle that the rate of new gold additions to monetary reserves plus additional deposits created by the XIMF should not exceed the rate of increase of trade, and "a reasonably conservative solution would be to retain a 3 per cent figure as definitely noninflationary."2/ His proposal would make XIMF a central bank for central banks, with the responsibility and the authority to do for central banks internationally what central banks now do for commercial banks nationally.3/ The net result of his proposals would be to create a system which could be rationally managed to stabilize the structure of international reserves and to expand reserves in accordance with need.

III. Comment

22. Triffin's proposals appear to be designed to provide, at little or no cost, benefits for everybody. It will be useful to summarize these benefits. It will then be necessary to determine whether Triffin's

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1/ The XIMF would begin operations with gold, and with dollar and sterling assets, transferred to it by members in exchange for deposits. "The Fund would have no immediate need to modify the pattern of these investments, but should be empowered to do so, in a smooth and progressive manner, insofar as useful for the conduct of its own operations. This purpose would be served by giving the Fund an option--which it would not necessarily use every year--of liquidating such investments at a maximum pace of, let us say, 5 per cent annually. The resources derived from such liquidation would normally be reemployed in other markets whose need for international capital is greater than in the United States and the United Kingdom. A portion of such investments might even be channeled into relatively long-term investments for economic development through purchases of IBRD bonds or other securities of a similar character." Hearings, Part 9A, p. 2912.

2/ Gold and the Dollar Crisis, p. 103.

3/ Hearings, Part 9A, pp. 2938-39.

proposals realize all of these benefits. It will also be necessary to inquire whether present and prospective dangers are as great as described, and whether existing financial arrangements and institutions are not adequate to cope with conditions as they are likely to develop. Finally, it will be necessary to consider what basic and far-reaching changes are required to set up the proposed international financial mechanism, and what these changes involve in the form of further transfers of authority from countries to international agencies, additional obligations to countries, and assumed operating policies of the expanded International Monetary Fund.

23. The benefits may be stated as follows: (a) The world would benefit by obtaining, at long last, a currency both international and internationalized, described as being beyond question in quality, elastic in quantity, and responsive to the needs of trade. "Hot" money would be cooled off, and runs on currencies eliminated. (b) The United States would benefit because the possibility of converting official dollar balances into gold would be reduced, if not eliminated. The United States would be free to set interest rate policy without fearing repercussions via the outflow of official dollar balances and their conversion into gold or other currencies, and it would know that a payments deficit was no longer needed to increase international liquidity. (c) The United Kingdom would benefit because it would be freed from the specter of a flight from sterling into gold or dollars, and from the necessity of subordinating an interest rate policy appropriate to its domestic needs to the defense of the external position of sterling. (d) Holders of dollar, sterling, and other currency balances would be able to exchange their holdings for Fund deposits, which would be of irreproachable quality because of an exchange guarantee, and which would probably earn interest into the bargain. (e) Underdeveloped countries would benefit because the existence of the expanded Fund would make it unnecessary for them to transfer short-term capital to the United States or the United Kingdom in order to obtain exchange reserves. Instead, the flow could be reversed. A large part of the assets behind XIMF deposits could be invested directly, or through other agencies, to finance economic development, thus moving capital to the countries that need it most. (f) Even gold mining countries and the gold mining industry may be said to benefit in a backhanded way. Though gold as the basis for international reserves is held to be unnecessary, restrictive, and a waste of economic resources, it is nevertheless retained in the system, after its dangers have been neutralized, as a harmless example of cultural lag and as an inexpensive subsidy for the production of something that the world wants but does not need.

A more stable structure of reserves

24. The first claim of the Triffin Plan is that it will result in a more stable structure of reserves.[1] It is proposed, therefore, to determine the extent to which Triffin's proposals do this, to examine the arrangements and principles which are employed to this end, and to compare these results with those obtainable under existing arrangements.

25. We may see how the proposed arrangements would operate by discussing their application to the end of 1958 data used by Triffin.[2] (The use of later data would not materially affect this analysis.) At the end of 1958, the United States had gross reserves of $22.5 billion, consisting of $20.6 billion of gold and $2.0 billion of net claims on IMF; its deposit requirement with the XIMF, at 20 per cent, would be $4.1 billion, and would require an additional payment of $2.6 billion to the XIMF. Since the United States does not include exchange assets in its gross reserves,[3] this deposit requirement would be met by paying gold. All other member countries would have deposit requirements of $6.7 billion. On the reasonable assumption used by Triffin "that all countries would initially prefer to hold onto their gold assets,"[4] they would meet their deposit requirements with $600 million of present claims on the IMF, $800 million of gold, and $5.3 billion of exchange. The exchange payments probably would consist of $2.0 billion of sterling and $3.4 billion of dollars. Dollar balances held officially by all countries would be reduced from $8.7 billion to $5.3 billion. As far as the United States is concerned, these payments of $3.4 billion of dollars would be rendered permanently inconvertible into gold unless the gross reserves of the rest

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1/ This proposition is based upon the transformation of the IMF into a central bank to hold, in the form of deposits, part or all of the reserves of its members. This power is separable from the power to create deposits, a function also proposed for the IMF. The latter is based upon the assumption that the XIMF and the central banks of all member countries constitute a closed banking system, essentially similar to the banking arrangement of the central bank and commercial banks within any one country. The proposed deposit creating function of the XIMF is discussed in the next section.

2/ These data were taken from IFS, October 1959.

3/ Gross reserves are defined to include "liquid or semi-liquid holdings, i.e., primarily dollar and sterling balances." The meaning of the term "semi-liquid" is not spelled out, but it could hardly include the $2.5 billion of foreign currencies obtained in connection with the sale of agricultural surpluses.

4/ Gold and the Dollar Crisis, p. 110.

of the world fell below their total as of the end of 1958, i.e., $33.7 billion. Such a development was very unlikely even as of 1958, and has become even more unlikely with the subsequent increase in reserves.1/

26. But these transactions are only a first step. Under Triffin's proposals, the $5.3 billion of dollar balances left after the required transfer to the XIMF of 20 per cent of gross reserves could not be retained in official hands. These balances, which may be termed "excess" dollar balances, would have to be turned into gold or deposited in the XIMF. Such an outcome follows from the agreement that countries would hold official reserves only in the form of gold or in the form of balances with the XIMF. To the extent that countries chose this opportunity to buy gold which they may be unwilling to acquire under existing arrangements, they would create the pressure on the dollar, and the outflow of gold, so much feared by Triffin. In such circumstances, the XIMF could not provide more help to the United States to relieve the pressure than the present IMF. Still, he is probably right in thinking that XIMF deposits could be given such advantages over present exchange reserves in key currencies, notably an exchange guarantee and the prospect of earning interest, that the conversion would be made smoothly, with little additional demand for gold.

27. The XIMF would, therefore, begin operations, with $21 billion of assets, of which $5 billion was gold. It would have $21 billion of deposit liabilities, of which $10 billion would be in "excess" of deposit requirements and subject to conversion into gold. (It may be noted that this ratio of gold to deposits subject to conversion is lower than the ratio of U.S. gold holdings, whether these are defined as total gold holdings or only those in excess of legal reserve requirements, to balances held officially by foreigners.) Members could at any time use their "excess" deposit balances to buy gold, or convert them into gold through the XIMF. Thus, expanding the functions of the IMF would not necessarily rule out future switches into gold. If members attempted to convert "excess" deposits into gold on a substantial scale, the XIMF would then have to make gold harder to get, call for more gold from its members, or both. It could raise the level of required deposits to 25 or 30 per cent of reserves, or to even higher percentages. The higher deposit requirements would reduce the amount of "excess" deposits subject to conversion and simultaneously make the high gold reserve countries pay in more gold. For example, an increase of 5 per cent in the

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1/ The effect upon the net reserve position of the United States would be the same as if the United States had redeemed $3.4 billion of dollar balances and paid out $2.6 billion of gold. From some points of view this might be regarded as equivalent to strengthening its gold position vis-a-vis dollar balances, while from other points of view, as weakening its position. These differences in views depend upon how the gold reserve position of the United States against dollar liabilities is measured, what the reserve ratio is calculated to be now--and also upon the meaning that can be attributed to these controversial calculations.

deposit requirement would call for $1 billion in gold from the United States. It would even be possible, as Triffin suggests, to make the gold reserve countries finance the XIMF gold position to a larger extent by imposing "higher deposit requirements upon that portion of each member's reserves which exceeds the average ratio of world monetary gold to world imports."[1] Thus, a desire to convert "excess" dollars into gold rather than to deposit them in the XIMF would lead to a large gold drain from the United States; while conversion of the same sums after they had once been deposited in the XIMF could only be countered, to the extent that it was not financed by drawing gold from the United States, by making a larger proportion of XIMF deposit balances inconvertible into gold.

28. There are only two ways to eliminate the threat of a demand for gold. One is to maintain a 100 per cent gold reserve behind deposits. The other, as Keynes recognized, is to establish one-way convertibility, so that gold can be used to buy bancor, but bancor cannot be used to buy gold.[2] A fractional gold reserve system is always subject to disturbances, and both its proximate and its ultimate stability depend upon confidence. Confidence will in turn reflect the opinions of members whether the XIMF will always be able to honor its commitments. The XIMF will, on the most optimistic assumptions, begin operations with gold equal to 25 per cent of total assets, and with one half of its deposits ($10 billion) eligible for conversion. With the passage of time, the amount of "excess" deposits would grow, and gold would become a smaller percentage, while longer term assets would become a larger percentage, of total assets. (These points are merely touched upon here; they are discussed at a later point in this paper.) These trends could be reversed by periodically raising the required deposit ratio--and this would mean that gold reserve countries would have to keep a larger and larger part of their reserves in the form of XIMF deposits. Furthermore, the acceptability of exchange assets (even with a country guarantee) depends upon maintaining balance of payments discipline, which limits the quantity of national currency paid out to foreigners. Gold flows may be disturbing--but they are a rude disciplinarian. Would the XIMF do as effective a disciplinary job? And could it do this without acting in much the same way? There may well be a conflict between the requirements for stability of the exchange structure in the short run and in the long run, and particularly if one raison d'etre for expanding the IMF is to increase the growth of international liquidity.

1/ Gold and the Dollar Crisis, p. 114.

2/ This was the arrangement suggested for the International Clearing Union.

29. If the United States and the United Kingdom wanted to, and could, avoid any threat to the dollar and the pound by a comprehensive exchange guarantee, they could give such a guarantee without the introduction of the Triffin Plan. Such an exchange guarantee would, of course, really cover both official and nonofficial holdings, since the latter would quickly move into official hands in case of a run. Furthermore, the far-reaching exchange guarantee is not the only cost that would be required of the United States and the United Kingdom under Triffin's plan for expanding the IMF. First, the plan proposes the gradual liquidation of dollar and sterling balances at the rate of (say) 5 per cent per year. This requirement would oblige the United States and the United Kingdom to increase their balance of payments surplus on current account, or reduce their long-term capital exports, or both.1/ If the amortization commitment were not met in these ways, it would have to be met by transfers of gold or XIMF deposits. Second, the XIMF would create a new and additional monetary center, which could not stand alone, but would have to transmit its pressures to existing ones. As such, it could well be superfluous in the face of small disturbances and inadequate in the face of large ones. Third, XIMF would spell the end of the sterling area, since almost four fifths of sterling liabilities are held on official account.

30. The present reserve structure and practice involve a different set of advantages, disadvantages, dangers, and costs.

31. United States liquidity is very high in terms of the ratio of gold to official dollar balances. Even a large-scale conversion of official balances would have moderate effects, in view of the size of the balances and the need to maintain at least part of them for working purposes. The problem of liquidity really arises when one takes account of other present or potential liabilities. Banking and all other private dollar balances totaled $6 billion at the end of 1958; a change in leads and lags applied to foreign trade of $35 billion would amount to additional billions; repatriation of foreign funds invested in American securities would amount to many more billions; and speculation against the dollar financed by funds borrowed by both nationals and foreigners would provide additional billions. All of these potentialities have increased since 1958, and banking and all other private balances alone reached $7.5 billion in June 1960.

32. At the end of 1958, short-term dollar liabilities totaled $14.6 billion, of which $8.7 billion was in official hands and $6.0 billion in the hands of banks and other private holders. At the same date, sterling liabilities2/ amounted to $9.4 billion, of which $6.7 billion was in

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1/ It is even conceivable that the process of amortization might be, at least in part, self-defeating because the United States and the United Kingdom might become even more attractive investment areas if official holdings of dollars and sterling received an exchange guarantee by being deposited with XIMF.

2/ At the end of 1956, approximately 40 per cent of sterling liabilities was held in the form of bank deposits and Treasury Bills. The remainder (60 per cent) was held in the form of government securities, and of this, half had maturities longer than five years.

official, and $2.7 billion in nonofficial hands. Nonofficial holdings of dollars and sterling therefore totaled $8.7 billion, while official holdings totaled $15.4 billion.1/ Though Triffin's proposals refer to all official reserves, he recognizes that part of these will have to be held in liquid form. Countries

> have, in any case, to retain some working balances in a form other than gold in order to avoid repeated gold sales or purchases each time they wish to buy or sell foreign currencies in the market to stabilize their own exchange rate. The working balances will have to be held as excess deposits with the Fund, or directly in the key currencies actively traded on the exchange markets. Either of these two alternatives will reduce substantially the danger of an excessive gold drain from the Fund. Working balances equal to only 5 per cent of annual imports, for instance, would absorb as much as $5 billion.2/

Not all of the official holdings of exchange therefore involve the threat of conversion into gold. Private holdings are, however, considerably more mobile than official ones. They are more responsive to interest rate differentials and speculative possibilities. Private dollar holdings cannot be converted into gold in the United States, but they can be used to buy gold abroad, or to buy other key currencies at home or abroad. Either use could result in an outflow of gold. If nonofficial holders of dollars switched to sterling to take advantage of higher interest rates in the United Kingdom, the United States would have to support the dollar-sterling exchange rate by selling gold, unless the United Kingdom was willing to hold these dollars in the form of additional XIMF deposits or working balances. Similar considerations would apply in the case of the United Kingdom and purchases of dollars with external sterling. Even after the IMF was expanded to hold the exchange reserves of its members, private exchange holdings would remain outstanding and sensitive to profit opportunities. Interest rate policies that might be pursued by the United States, the United Kingdom, or any other key currency country, would continue to affect short-term capital movements. To this extent a differentially low interest rate adopted for domestic reasons might still be put under pressure by the outflow of short-term funds and, consequently, of gold. To argue that such developments would in no case result in the outflow of gold would be to assume that countries are willing to accumulate XIMF deposits without limit and that they would abandon their views with respect to maintaining conventional proportions of their official reserves in gold.

33. Under present arrangements, the United States could support the dollar with its gold reserves, and it could also draw on the IMF, consistent with its policy. By drawing other key currencies from the IMF and selling them on the exchange

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1/ Total exchange assets held officially are estimated at $19.2 billion as of the end of 1958. IFS, September 1960.

2/ Gold and the Dollar Crisis, pp. 113-14. It is not clear why the same consideration does not apply to official balances at the present time.

markets, the United States would relieve the pressure on the dollar, whether this stemmed from official or nonofficial sources. The United States would pay dollars to the IMF to draw other key currencies; it would use these other currencies to buy dollars in the foreign exchange markets. This would transfer the ownership of dollars from their present holders to the IMF, and convert spot liabilities into term liabilities. The countries whose currencies were drawn from the Fund would automatically acquire credit balances, assuming that the IMF initially held their currencies to the extent of only 75 per cent of their quotas, or lower debit balances, assuming the IMF held more than these amounts of their currencies. By using drawings to help counter pressure on the dollar, the United States would slow down the fall in its gold holdings. Its gross reserve position would therefore be better than if it met all of the pressure on the dollar by selling gold. The effect upon its net reserve position would depend upon what liabilities were considered as contra items against gold reserves. Very short-term dollar liabilities --dollars being offered in the foreign exchange market--would be changed into dollars that had to be repurchased in three to five years (or, if there were no specific repurchase agreement, as gold reserves increased). The spot net position of the dollar would be improved immediately, while its five-year net position would remain unchanged. Expansion of the IMF along the lines recommended by Triffin would not by itself eliminate the risks of pressure on the dollar and gold outflows from the United States. Foreign central banks acquiring dollars as a result of a balance of payments deficit in the United States might still prefer gold to "excess" XIMF deposits and/or permissible increases in their dollar working balances. But the presumption is that they would not because of the exchange guarantee attached to XIMF deposits.

34. The case for a full and open-end guarantee of dollar and sterling balances, given a realistic appraisal of present and prospective dangers to these currencies, and the resources that could be used to meet these dangers, must be considered as not proved. Perhaps some lesser kind of assurances may be useful, though even this is not clear. But if this is the case, only a few countries need be involved, since dollar and sterling balances, official and private, are highly concentrated.

35. The political problems involved in negotiating an exchange guarantee of the scope proposed by Triffin are probably enormous. The foreign investments of the United States and the United Kingdom are valued at billions of dollars. They are several times as large as foreign holdings of dollars and sterling. Non-dollar foreign investments, and practically all business investments, are exposed to the risks of devaluation, changes in economic policy and taxation, and in some cases to the more than negligible possibilities of expropriation or "intervention." Countries with large foreign investments may well doubt that foreign holdings of their currencies should be guaranteed but that their own investments in foreign countries should not.

36. The price to the key currency countries of stability of the reserve structure under the XIMF is very high. It could be justified only if the risks were calculated to be very great and if there were

no better way of meeting those risks. Both of these propositions are doubtful. In all probability, the risks of exchange instability have been overstated by Triffin, whose fears for the future of the dollar are colored by the large balance of payments deficit of the United States in 1958-59, deficits which must in any event be reduced or eliminated. On the other hand, the ability of the key currency countries to meet these risks has been understated. The resources of the Fund, supplemented by country credits, and supported by appropriate domestic measures, were quite sufficient to halt heavy drains on sterling in 1956 and 1957. With much larger resources and with a larger assortment of convertible currencies, the Fund would be able to help even more in any future crisis. The United States has never drawn on the Fund, but there is no reason why it should not, under conditions and for purposes consistent with its policy. The United States has a net creditor position in the Fund of approximately $2 billion, and it could draw an additional $4.1 billion before Fund holdings of dollars reached 200 per cent of quota. If the Fund needs more resources, it can obtain these by borrowing.1/ It is quite unlikely that sales of foreign currencies against dollars, up to as much as $6 billion, added to U.S. sales of its own gold, coupled with the determined attitude that such actions would proclaim, could fail to halt a run on the dollar.

Is the XIMF needed to expand international liquidity?

37. The other leg of the dilemma described by Triffin is that the prospective growth of reserves will fall short of the requirements associated with the growth of trade. This shortfall over and above additions to gold reserves is calculated for the next decade, and is declared to be far in excess of any safe expansion of dollar and other exchange reserve holdings. This conclusion rests principally upon Triffin's estimate of reserve requirements, since there is general agreement about prospective gold additions to monetary reserves.

38. Triffin's view of the required growth of international reserves is essentially a mechanistic one. It is simply not true that the need for monetary reserves can be read off arithmetically from a table relating reserves to trade. The fact that this ratio--or more accurately, this family of ratios, since both trade and reserves can be thought of in many different ways--has been falling in the postwar period is no proof that reserves were becoming proportionately less adequate. It is questionable that the level of reserves in 1957 or in 1958, the years used by Triffin as beses for reserve calculations, represented the minimum reserves required by the noncommunist world, and that in the future these reserves must grow as fast as world trade.

1/ Under the present Articles of Agreement, the Fund can sell gold, or borrow, to replenish its currency holdings. It may be prudent, as E. M. Bernstein has suggested, to arrange for borrowing in advance of need, by issuing to a small number of countries debentures which could be called for payment to meet large emergencies. Joint Economic Committee Study Paper No. 16, International Effects of U.S. Economic Policy, January 25, 1960, pp. 84-86.

39. There is no reason to believe that in any period, and particularly in the next ten years, the demand for reserves will grow at the same rate as trade. The demand for reserves is a result of the policy decisions by a relatively small number of countries. There was a great, but highly concentrated, demand for reserves in the 1950's. The major part of the increase in reserves in this period was for the account of Germany, Austria, Italy, and Japan, countries which had been stripped of reserves by the war and had a problem of rebuilding them. If these particular demands for reserves had not existed, dollar balances would in all probability not have grown as much as they did. If these countries (and a few others) had not been willing to add to their assets in the form of money rather than goods, even the large and continuing deficits in the U.S. balance of payments in 1950-59 would not have been enough to increase international reserves. The accumulation of reserves for these purposes must sooner or later come to an end, with important consequences for the future demand for reserves. Some of these countries have reserves which will be in excess of their needs for some years to come. In the meantime, they can be sources of reserves to other countries. Many countries, such as India, accumulated large reserves during World War II--only because they could not buy goods. These countries have already spent most or all of these reserves, and show little sign of wishing to recapture reserve levels of ten and fifteen years ago. If appropriate reserves figures were available, some countries would show a negative net reserve position. Gold reserves of the United States have decreased by $6 billion from their all time peak of $24.6 billion at the end of 1949, but even so they are at the level immediately preceding World War II. Reserves of the United Kingdom are now about $3.1 billion, or 6 per cent below their level at the end of 1950; they are 20 per cent below those of mid-1951, their high for the decade.

40. The trend in gross reserves since World War II is the resultant of these and many other factors, and the future is not predictable on a statistical basis related to the growth of trade. Furthermore, the adequacy of the reserve position of any country is influenced not only by its gross reserves, but also by the amount of its outstanding and overdue short-term commercial debt, official short-term borrowings, gold pledges, banking and other private holdings of exchange and the like. Failure to take such factors into account, for example, leads Triffin to classify Argentina in 1953-55 in his group of high reserve countries.1/ Countries that are in debt can, in the future, improve their real reserve position by reducing their obligations rather than by increasing their gross reserves. This would not create any demand for reserves. The same world total of reserves would not need to grow even though it became more effectively adequate. Finally, there is little reason to assume, as Triffin does, that the United Kingdom is actively pursuing policies compatible with a present reserve target of $5 billion.2/

1/ Gold and the Dollar Crisis, p. 43.

2/ The balanced and carefully considered views expressed by the Radcliffe Committee are very suggestive on this point. (Committee on the Working of the Monetary System, Report, Cmnd. 827, HMSO 1959.) The Committee does not come down on the side of increasing reserves unequivocally or as a grave matter of overriding priority. Its views are contained in a number of

41. There are other difficulties in determining reserve requirements by applying a growth of trade factor to a base of present international reserves. For example, in his Wicksell Lecture (1958), Triffin said that

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2/ (cont'd from p. 18) separate observations, of which a few are here indicated. The world total of international reserves is scarce, certainly no more than barely adequate, but it should not be augmented by an increase in the price of gold (pars. 672-75). The resources of the Fund should be augmented and its scale of activities enlarged (pars. 675-78). It is impossible "to disentangle the problem of international liquidity from the problem of international balance . . . . So long as no one country is a large and persistent debtor or creditor, a succession of deficits and surpluses can be handled with remarkably small liquid reserves" (par. 680). These remarks, in addition to those bearing on the responsibilities of the United Kingdom to provide liquidity for, and capital exports to, the sterling area, provide the context for evaluating the following two most important paragraphs bearing on the desirable level of reserves:

> 662. We regard the right course of action as one calculated to add to reserves or reduce liabilities out of a current surplus sufficiently large to leave room also for long-term investment abroad. We do not suggest that the improvement in reserves and liabilities should be brought about precipitately. Repayment of sterling balances, so far as they constitute the central reserves of other countries or the working balances of overseas commercial banks, would tend to reduce the liquidity of overseas monetary systems. If sterling outgoings were restricted in order to force these countries to draw on their sterling resources, some of them might be faced with a sterling shortage and a general contraction of activity would be precipitated in a group of countries which includes some of the United Kingdom's principal export markets. The same kind of situation might arise in other markets if the United Kingdom tried to restrict imports in order to add to the reserves. Quite apart from the fact that such action would be inappropriate in a period of trade recession, efforts by the United Kingdom to improve her own liquidity are bound to reduce the liquidity of other countries and aggravate any shortage of international liquidity. We should therefore refrain from seizing too eagerly on the opportunity of extinguishing short-term debts as a means of strengthening, if only temporarily, the pound sterling.
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> 663. So long as there is no special danger of a general shortage of international liquidity, an increase in reserves should, in our view, have priority. No doubt the United Kingdom has not much freedom of choice as to whether to strengthen her position by increasing reserves or reducing liabilities; the decision is largely governed by the willingness of other countries to hold sterling. An increase in reserves, however, marks more unambiguously than a decline in sterling balances a strengthening of the position of sterling and would be so interpreted by

"world trade and production are estimated to have increased in volume, over the last ten years, at the pace of 6 per cent a year. A parallel rate of increase in the world's monetary reserves ($62 billion at the end of last year) would require their expansion by about $3.7 billion annually."1/ This figure of $62 billion includes all the assets of the IMF (gold, convertible currencies, and inconvertible currencies), as well as country holdings of inconvertible currencies and balances under payments agreements. Would this imply that there is some requirement to expand reserves of inconvertible currencies, or to expand a total of which some components are much less useful than others? If a dollar's worth of inconvertible reserves becomes convertible, does it not become more efficient? A similar kind of question is posed by the treatment of claims on EPU. The $62 billion total of reserves referred to in the Wicksell Lecture included in country and world reserves claims on EPU totaling $1.3 billion. At a compound growth rate of 6 per cent per year, this inclusion created a demand for $1 billion of reserves over the next decade. But, when claims on EPU were funded at the end of 1958, they vanished from the statistics on reserves.2/ Triffin's calculations in 1959 of the required rate of growth of reserves for the next decade were reduced correspondingly. The currency holdings of the IMF present another problem in the calculation of requirements. Reserve requirements in 1958 were calculated by applying trade growth factors to a world total of reserves that included the currency holdings of the IMF. Since then, Fund quotas have been increased by more than 50 per cent, and Fund holdings of currency enlarged by more than $4 billion. How, then, should requirements calculations be made as 1960? Should the procedure be the same as in 1958? Should the requirement for 1960-70 include an element for expanding this additional

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2/ (cont'd from p. 19)

> financial opinion. If the decline were in the balances of sterling countries it would do little to reinforce the liquidity of the sterling area as a whole, although it would improve the position of the United Kingdom. What the United Kingdom can do to add to her reserves depends, however, on the state of international liquidity, and this also has a direct bearing on the reserves which she requires.

1/ P. 34.

2/ When claims on EPU as of the end of 1958 were funded into bilateral claims, they were dropped from the statistics on reserves. Many of these funded claims had terms of a year or two; a few had terms as long as seven or ten years. Germany was the largest net claimant on EPU, and was interested in showing lower rather than higher reserves. Its net bilateral claims of $1.0 billion as of January 1959 had been reduced to $560 million by July 1960.

The reason for excluding these bilateral claims from reserves statistics was presumably that they represented longer term assets. The arbitrary nature of reserves classifications is suggested by the subsequent rate of payoff as well as by a comparison with overseas holdings of sterling. Approximately one third of these holdings had maturities of more than five years as of the end of 1956, yet were included in country reserves.

$4 billion at the assumed rate of growth of trade? At a 3 per cent rate, this involves a reserve requirement of almost $1.5 billion during the decade. Or, should reserve requirements be calculated on the basis of 1960 figures which exclude this $4 billion, which in turn might be treated as a deduction from calculated requirements? As these examples suggest, to calculate future reserve requirements by applying growth of trade figures to published figures on reserves may lead to results that vary considerably from one date to another. Arithmetic calculations of reserve requirements in relation to trade are simple--this would appear to be their outstanding virtue--but they are not necessarily convincing.

42. These comments should not be interpreted to mean that because there is question about Triffin's rate of 3 per cent, or 5 per cent, or 6 per cent, some other rate is necessarily better. On the contrary, the search for any rate is vain. No mechanistic solution will serve. There are many roads to liquidity, many ways of increasing it, and many ways of judging when it is more or less adequate. The activities of the IMF, and the recent increase in its resources, affect the demand for reserves; the contracyclical activities of the industrial countries affect the demand for reserves. An appropriate and expanding volume of world trade can be carried on with many different levels of reserves, total reserves of many different compositions, and many different rates of growth of reserves. Any arbitrary determination that reserves should increase at some given rate may well lead to a lowering of credit standards and to inflation. In the end, stability of the reserve structure can be obtained only if the major countries really want it, and if they have access to credit to preserve it. Bagehot's doctrine that the Bank of England should be prepared always to be the lender of last resort has its counterpart in the international field. Access to Fund drawings and stand-bys has formalized and internationalized the granting of credit. This marks a great advance over the cooperation among central banks that characterized the interwar period, and has made it much more unlikely that a crack in the exchange structure can start or, having started, that it can continue.

43. The rate of growth of trade can be used in three ways: as an ex ante indicator of reserve requirements; as an ex post measure of the adequacy of the growth of reserves; and as a current guide to the operations policy to be followed by an expanded IMF.

44. Triffin clearly uses the rate of growth of trade as an ex ante indicator of future reserve requirements. The conclusion that the prospective rate of growth of reserves in the next decade will be inadequate rests on this base. He uses trade as an ex post measure much less clearly. His judgment that the present level of international liquidity is inadequate because reserves have failed to increase in the postwar period as rapidly as trade is not clear-cut. Such a judgment inevitably must rest on a number of elements, including the baseline from which calculations should start. This difficulty will also be present a decade hence if an attempt is then made to measure the adequacy of reserves solely with respect to growth rates.

45. The use of the rate of growth of trade as a current guide to the operations policy of the XIMF, though perhaps clear at first thought, becomes increasingly cloudy on further reflection. Triffin proposes[1] to expand the IMF into a central bank for central banks, so that it can be concerned with the adequate growth of international reserves and with the stability of the structure of reserves. The adequate growth of reserves is consistently taken to be growth at the same rate as the volume of trade, and all calculations of reserve requirements and shortfalls are based upon this definition. It might therefore be expected that he would set up the growth of trade as the guide to, and the determinant of, the operations policy of the expanded Fund. But this is not the case. Triffin nowhere lays upon the XIMF the responsibility of increasing international liquidity pari passu with trade. In fact, he does not explicitly lay upon the XIMF the responsibility of increasing international liquidity at an adequate rate. On the contrary, the growth of trade is used only as a limit to XIMF lending. Though "a reasonably conservative solution is to retain a 3 per cent figure as definitely noninflationary,"[2] the appropriate rate of expansion of XIMF deposits is left to the judgment of the Executive Directors; rates of expansion greater than 3 per cent per year would require progressively larger majorities. Assuming that monetary gold stocks continue to increase at the rate of $700 million or $800 million per year, the annual increase in XIMF deposits would be about $800 million based upon a 3 per cent rate, $1.4 billion at a 4 per cent rate, and $2 billion at a 5 per cent rate.[3]

46. It is necessary to read Triffin very carefully on this question of using the rate of growth of trade as a guide to, and determinant of, the operations policy of the expanded Fund. The path of his argument through prospective reserve requirements and the imminent reserve deficiency is so straightforward that it is easy to conclude that the operations policy of the XIMF should be directed toward achieving an adequate rate of growth of reserves. Many commentators have done this. For example, The Economist (London) stated that the expanded IMF would "arrange that its net lending in a period of twelve months, together with current increases in the supply of gold, would increase total world reserves by say 3-5 per cent a year. Thus world liquidity would keep up automatically with world trade."[4] An article by Fred Hirsch in a recent issue of The Banker (London) speaks of "the Fund's basic lending, the amount of which would be determined on an arithmetical basis linked to world trade. Thus the

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1/ Hearings, Part 9A, p. 2938.

2/ Gold and the Dollar Crisis, pp. 103-4.

3/ Gold and the Dollar Crisis, p. 104. "These estimates would rise gradually, but slowly, with further increases in world reserves. They could decrease as well as increase, on the other hand, with future fluctuations in the current additions to the world monetary gold stock." Ibid.

4/ January 9, 1960, pp. 133-34.

Fund's basic lending policy might be fixed at such an amount as would, together with current increases in stocks of monetary gold, increase world reserves by 3-5 per cent a year."[1] One highly qualified European observer put the matter this way:

> The Fund shall so handle its lending operations that international monetary reserves can grow at the necessary rate. A growth of total reserves, including gold, of around 3 per cent annually should be regarded as normal. But in case of need the Fund, with a qualified majority, shall be able to bring about a growth of world currency reserves in excess of this rate.

The writer's initial impression, while reading Triffin, was that the expanded Fund would without question direct its lending and investment operations to assure an adequate rate of growth of the world's reserves, and that a 3 per cent rate was almost a self-evident policy target. But this is not the case. The expanded Fund is nowhere clearly directed to provide an adequate rate of growth of reserves, the prospective inadequacy of which is responsible for its being, nor is it told what an adequate rate of growth would be. The reader has to conclude that Triffin proposes to expand the functions of the IMF and give it a full armory of central bank instruments, but that he is unwilling to provide it with a statement of policy objective, let alone any specific guides to operations policy.

47. How are annual net increases of deposits of $800 million (based upon a 3 per cent growth factor) or $2 billion (based upon a 5 per cent factor) to be achieved by the expanded Fund? It is unlikely that they could be significantly achieved by increasing loans to member countries, for there is no suggestion that the lending policy of the IMF should be changed. Indeed, "the normal procedures for Fund advances need not differ substantially from those gradually developed by the Fund over its twelve years of existence."[2] It is not clear why unchanged lending procedures should result in a larger net volume of lending after the functions of the IMF are expanded. Therefore, the criteria for XIMF loans and investments must change, and must be related to the increase of international liquidity. In the past, the gold exchange standard has rested upon the willingness of key currency countries to permit currency holdings in the hands of foreigners to grow as a consequence of balance of payments deficits. In the future, the XIMF would increase international liquidity by progressively increasing its deposits. These increases would rest on balance of payments deficits of, and medium- and long-term investments in, underdeveloped countries. This would not rule out, of course, short- and medium-term loans to developed and creditor countries to meet temporary balance of payments difficulties. But it is doubtful whether the net increases in deposits, calculated as being required, can be achieved to any significant

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1/ "Development Aid and World Reserves," issue of March 1960, p. 148.

2/ Gold and the Dollar Crisis, p. 115.

extent by self-liquidating loans to meet balance of payments difficulties. The major part of the net increases in deposits would necessarily depend upon investments by the XIMF, and these would have to be for medium- and long-term. These investments could not be made in creditor countries that were net exporters of capital. Sending capital to them would merely increase the size of their capital exporting activities--carry coals to Newcastle. On the contrary, these investments would have to be made in countries that were net importers of capital, that is, underdeveloped countries. This prospect would obviously have great political appeal for underdeveloped countries.

48. The lending and investment activities of the XIMF would necessarily be reflected in its balance sheet. The XIMF would begin operations, based on the data at the end of 1958, with $21 billion of deposits, of which $11 billion was required, in accordance with the 20 per cent deposit ratio, while the remaining $10 billion was "excess" in the sense that it was over and above the deposit requirement. The assets corresponding to these deposit liabilities would be $5 billion of gold and $16 billion of exchange; the latter would consist of roughly $9 billion of dollars, $6 billion of sterling, and $1 billion of other exchange assets.

49. During the next decade, it is assumed that monetary stocks of gold in the hands of countries would increase by about $8 billion, leaving a gap to be made up by the Fund. "The Fund's annual lending quota based on a 3 per cent rate could be roughly estimated today at about $800 million to $900 million."[1] Accordingly, Fund deposits would increase by some $8 billion in the next decade, raising total assets to $29 billion. Under the assumptions already discussed, gold holdings of the XIMF would increase little, if at all, since exchange would be deposited to the maximum extent possible to satisfy deposit requirements. The $8 billion increase of Fund assets would consist of foreign exchange and securities: loans to members, direct investments in member countries, and investments in the securities of organizations such as the IBRD. It would be expected, in accordance with the preceding discussion, that this $8 billion in loans and investments would be largely, if not exclusively, directed to underdeveloped countries. The XIMF holdings of dollar and sterling assets would not be expected to increase. On the contrary, the plan contemplates their gradual liquidation, at the option of the XIMF, at a maximum (noncumulative) rate of 5 per cent a year, and the reinvestment of the proceeds in countries in greater need of these funds.[2] If this policy were carried out at a 5 per cent rate, the $15 billion of dollars and sterling held by the XIMF at the end of 1958 could decrease perhaps $8 billion in ten years. Loans and investments to underdeveloped countries would increase correspondingly, as follows:

1/ Gold and the Dollar Crisis, p. 104. "A 4 per cent rate would raise this to about $1.4 billion, and 5 per cent to about $2 billion a year." Ibid.

2/ The Economist (London) had stated on January 9, 1960, that Triffin's scheme "is bound to involve three major questions. The first involves the treatment of existing balances in dollars and sterling that will come into

Deposits and Assets of XIMF, 1958 and 1967

(In billions of U.S. dollars)

	As of End of 1958	As of End of 1967, Assuming Growth of Reserves at 3 Per Cent Per Year	
		Assuming no liquidation of dollar and sterling balances	Assuming reduction of dollar and sterling balances by 5 per cent per year
Deposits = Assets	21	29	29
Gold	5	5	5
Exchange and securities	16	24	24
Dollars and sterling	15	15	8
Other	1	9	16

Thus, in a decade, gold holdings would be reduced from one fourth to one sixth of total assets. Obligations of underdeveloped countries would equal more than half of the total assets of the XIMF. A substantial part of these obligations would necessarily be direct, and on medium and long term to the countries themselves; some would be obligations of international agencies.

2/ (cont'd from p. 24) the hands of the Fund. Professor Triffin proposes an orderly liquidation of such balances, say by 5 per cent a year . . . ." (pp. 133-34). To this he commented in a letter (January 23, 1960, pp. 304-5) that "the IMF would merely have an 'option' to liquidate at a 'maximum' pace of 5 per cent a year the sterling and dollar balances initially absorbed by it, but should exercise it only 'in so far as useful for the conduct of its own operations.' The proposed expansion in the Fund's resources derived from its acceptance of reserve deposits would be so large as to rule out very probably, for a considerable period of time to come, any justification for any extensive use of this option. I would indeed expect the Fund to accumulate instead additional sterling and dollar balances in the initial years, so as to help smooth out the transition from the present system where international liquidity has come to depend increasingly on a continuous increase of such balances." It is a fair comment that only an extraordinary reader will share this expectation. Indeed, there are a great many statements to the contrary in the writings listed at the beginning of this paper.

50. All of the assets of the XIMF would, of course, be subject to an exchange guarantee. IBRD bonds and notes would be guaranteed by creditor countries. There might well be question, however, whether a Fund with this asset structure would have sufficient maneuverability and liquidity. Of the $29 billion of deposits, perhaps $15 billion would represent required deposits, based upon a 20 per cent factor, while the remaining $14 billion would constitute "excess" deposits, with respect to which convertibility into gold might be requested. The quality of Fund deposits, and the liquidity of the Fund, could of course be increased by raising reserve requirements. This would result in a substantial increase of the Fund's gold holdings, while at the same time reducing the legal convertibility potentialities represented by Fund deposits.

51. The change in the character of the structure of international reserves to be accomplished by the XIMF is outlined by this numerical illustration. The present structure consists of gold and the short-term obligations of net creditor countries. The proposed structure will consist of gold and XIMF deposits; and the deposits will increasingly rest upon the guaranteed medium- and long-term obligations of the net debtor countries.

52. There is no doubt that the calculated net increases in deposits could be obtained by a Fund whose objective was to expand international liquidity (the money supply) even if it had to acquire large amounts of long-term obligations to do so. Adherence to a lending policy based upon self-liquidating short-term borrowings will not necessarily expand the money supply at any predetermined rate; adherence to a policy of expanding money at a predetermined rate can hardly be based upon short-run borrowings. Central banks have never been willing to adopt a policy of consistently and automatically expanding domestic money supply in line with production or national income; they have invariably used a combination of criteria; and they have sometimes considered that increases in money supply are not required for high levels of economic activity. An expanded IMF with responsibilities toward adequate levels of international liquidity implied by Triffin would be put in the position of attempting to do internationally what no central bank has been willing to attempt nationally.

International liquidity since 1956

53. To put Triffin's proposals in better perspective, and to see what they could imply for the international management of financial operations, a few comments may be in order on the course of international liquidity and on the use of the Fund's resources since 1956. It would not be unreasonable to expect, as a first hypothesis, that an inadequate rate of growth of international liquidity would be accompanied (with perhaps some lag) by one or more of the following: increased use of the Fund's resources, pressures upon world prices and trade, deflationary policies to gain reserves, and increased resort to impediments to trade. On the other hand, it would be difficult to conclude that international

liquidity was growing at an inadequate rate if most of these indications were not present. The three-year period beginning with 1957 has been chosen for analysis partly because Triffin suggested a version of his present proposals in 1957, in his Europe and the Money Muddle, and partly because 1957 and 1959 appear to represent periods in the business cycle which are not too dissimilar; but there is no question that a longer period would doubtless have advantages. It may be noted, in commenting upon international liquidity and the effect of Fund operations, that Fund drawings are statistically equivalent to increases in international liquidity, and repayments, to decreases; however, liabilities (repurchase obligations) resulting from Fund drawings are not deducted from statistics on country reserves.

54. In 1956-59, the volume of world trade expanded at the average rate of 4 per cent per year. The trade of Continental Western Europe grew at more than twice this rate and that of nonindustrial countries at this rate, while that of the United States decreased. The trend of U.S. trade was greatly distorted, however, by the extremely high levels of trade in 1956 and 1957 that resulted from the events at Suez; and adjustment for these distortions would undoubtedly show that this trade also trended upward.

Index of Volume of Trade, 1955, 1956, and 1959

(1953 = 100)

Area	1955	1956	1959	Increase 1956-59 1/ (In %)
World	114	124	139	3.9
Industrial Countries	115	128	141	3.3
North America	100	116	107	-2.8
Continental Western Europe	129	138	175	8.2
Nonindustrial Countries	111	118	135	4.0

Source: United Nations, Monthly Bulletin of Statistics, April 1960, Special Table A.

1/ Rates of increase are calculated on a compound basis.

The increase of world trade at the rate of 4 per cent per year was accompanied by some price reductions. World export prices decreased by 3 per cent from 1956 to 1959; export prices of industrial countries decreased

1 per cent, while those of nonindustrial countries decreased 8 per cent. There is no index of wholesale prices for the world, but those in the United States increased about 4 per cent.

55. The total and the ownership of international reserves were affected by many events during 1956-59. Fund quotas were increased from $8.9 billion to $13.8 billion, with one quarter of this increase payable in gold. The major countries of Europe took far-reaching convertibility decisions at the end of 1958. More than $1 billion of reserves vanished from reserve statistics overnight at the end of 1958 when short-term multilateral EPU credit balances were converted into longer term bilateral balances. There was a substantial redistribution of reserves. The United States had a large decrease in its gold holdings, but a number of other countries, notably India, Venezuela, and Egypt, had reserve decreases which, though very much smaller, were very significant for them; the countries of Western Europe were the beneficiaries of practically all of the gross increase in reserves and of the redistribution of reserves. A number of technical difficulties developed in statistics on reserves, including some double-counting of gold. To measure the useful increase in reserves therefore presents some difficulties, while to evaluate the increased effectiveness of reserves presents even greater ones. The following table sets forth a number of separate indicators of the movement of world reserves:

Growth of International Reserves, 1956-59

(In billions of U.S. dollars)

	1956	1959	Increase
Reserves of All Countries			
Gold	36.1	37.9	1.8
Exchange	19.2	19.0	-0.2
Total	55.3	56.9	1.6
Reserves of All Countries excluding the United States			
Gold	14.1	18.4	4.3
Exchange	19.2	19.0	-0.2
Total	33.3	37.4	4.1
International Institutions			
Gold	2.0	2.3	0.3
Exchange	6.4	11.3	4.9
Total	8.5	13.6	5.1
World			
Gold	38.1	40.2	2.1
Exchange	25.6	30.4	4.8
Total	63.8	70.5	6.7

Source: IFS, September 1960.

The stock of monetary gold held by countries and international institutions increased by 5.5 per cent during the three-year period, or at the rate of 1.8 per cent per year. Countries, because of payments to the International Monetary Fund in connection with increased quotas, increased their gold reserves at a lower rate. Aggregate exchange reserves of all countries decreased by $200 million during the period, and totaled $19.0 billion at the end of 1959; and it should be noted that the amount of Fund drawings included in exchange reserves was $450 million larger at the end of 1959 than it had been three years earlier. According to one measure of over-all reserves, namely, world holdings of gold plus country holdings of foreign exchange, reserves increased by $3.3 billion from 1956 to 1959, or by 1.1 per cent per year.

56. From 1956 to 1959 there was substantial easing in the international financial situation. Reserves of the countries in Continental Western Europe increased to adequate and, in some cases, admittedly high levels. The major European currencies were made externally convertible at the end of 1958 and have been further liberalized since that date. Exchange restrictions in the world at large were reduced. A number of countries, including France, notably improved their reserve positions.

57. The Fund approved $3.4 billion of drawings from the beginning of operations through the end of 1959, of which $1.3 billion was outstanding at the end of the period. In addition, it approved $2.2 billion of stand-bys, under which $200 million remained available for drawing at the end of 1959. The years 1956 and 1957 were particularly active ones, accounting for one half of all the drawings, and three fifths of all the stand-bys, agreed by the Fund since the beginning of operations. In contrast, drawings and stand-bys in 1958 and 1959 were at a much lower level, while repurchases and expirations of stand-bys were substantial.

Fund Drawings, Repurchases, and Stand-bys, 1955-60

(In millions of U.S. dollars)

	1955	1956	1957	1958	1959	Jan.-Aug. 1960
Activity in Year						
Drawings	28	693	977	338	180	185
Repurchases	232	113	64	369	608	352
Stand-bys agreed	0	1,077	183	339	315	163
Position at End of Year						
Drawings outstanding	234	814	1,727	1,696	1,268	1,069
Available under stand-bys	62	1,117	870	911	208	267

Drawings outstanding at the end of 1959 were $450 million larger than they had been three years earlier, but amounts available under stand-bys were $900 million smaller. For the purpose of assessing the ease or the tightness of international liquidity, it is probably most appropriate to measure the assistance of the Fund by outstanding drawings plus undrawn stand-bys. By this measure, Fund assistance decreased from $1.9 billion at the end of 1956 to $1.5 billion at the end of 1959, and decreased further in the first eight months of 1960 to $1.3 billion. It should not be overlooked, however, that transactions with the United Kingdom are responsible for a substantial part of this trend.

58. The immediately preceding discussion may be summarized as follows: in the period 1956-59, the volume of trade increased 4 per cent per year, a rate of increase which was substantial, though somewhat lower than in earlier postwar years; export prices fell slightly, but were characterized by a stability which had been regarded only a few years before as most difficult to attain; the most important European currencies were made externally convertible; the over-all level of trade restrictions was reduced; and members made decreasing use of the Fund's resources after 1957. The United Kingdom, Japan, and most of the industrial countries of Western Europe improved their reserve positions, in many cases markedly, without any of the severe deflationary measures usually associated with an inadequate level of international reserves. While all of these developments were taking place, the level of international reserves increased at a slow rate, certainly less than 2 per cent per year. If the assumption is made that international reserves should increase as fast as trade, the events of 1956-59 would appear to be inconsistent with such a low rate of growth of international liquidity.

59. This is not to deny that the period saw a number of disquieting developments. Perhaps the major one was the emergence in 1958 of the large balance of payments deficit of the United States, a deficit which has still not been eliminated. But no one has ever suggested that this deficit was caused by an inadequate rate of expansion of international liquidity--nor that it can be cured by an increase in international liquidity. The balance of payments deficit of the United States did swell the reserves of the rest of the world, and to this extent may perhaps be considered as offsetting what would otherwise have been an inadequate rate of growth of reserves. But this is only to argue that the total of world reserves is not the only measure of adequacy and the only basis for financial policy. The distribution of reserves among countries has on many occasions been extremely important, and a number of other elements, particularly the quality of reserves and the substitutes for or supplements to reserves, also play important roles. In any event, the increase of reserves of all countries other than the United States during 1956-59 was smaller, by perhaps one third, than the increase of trade; and this increase was itself very highly concentrated in industrial countries.

60. The Fund at all times has had enough resources to operate on a large scale. Even the large operations in 1956 and 1957 did not rule out sizable additional operations, while the lower operations in 1958 and 1959

clearly left room for additional drawings and stand-bys. This raises two questions: why was the Fund not more active; and how could the Fund have engaged in additional operations if its policy had been directed toward pumping additional liquidity into the international system in order to increase the rate of expansion of reserves to 3 per cent per year, or even to higher rates closer to the actual rate of growth of trade. Perhaps the lending policy of the Fund was too "tough" and left unsatisfied a large amount of appropriate demands for drawings and stand-bys. Fund policy was undoubtedly too "tough" if the policy objective was to further increase the rate of growth of international reserves. The calculated increase of reserves for the three-year period 1956-59 at a rate of only 3 per cent per year[1/] was $6.0 billion, using the smallest reserve base, i.e., country reserves of gold and exchange. Reserves increased by only $1.6 billion. On this basis the Fund should have increased net drawings outstanding (plus undrawn stand-bys?) by an additional $1.5 billion per year.

Required Growth of Reserves at Various Rates, 1956-59

(In billions of U.S. dollars)

Reserve Base	Amount in 1956	Actual Increase 1956-59	Required Increase 1956-59 (In per cent) 3	4	5
Country Gold and Exchange Reserves	55.3	1.6	6.0	6.2	6.4
World Gold Reserves plus Country Exchange Reserves	57.3	1.9	6.3	6.5	6.6
Country and International Institutions Holdings of Gold and Exchange	63.8	6.7	7.0	7.2	7.4

But there would certainly be no agreement that Fund policy was too "tough" if its objective was to make short- and medium-term (up to five years) advances.

61. A management of the IMF operating during 1956-59 on the proposition that international reserves should increase pari passu with trade, and that an annual rate of increase of 3 per cent was "definitely noninflationary," would have tried to increase reserves by at least an additional $1.5 billion per year. The IMF could have achieved this objective only by making additional loans to nonindustrial countries, though the IMF could also have engaged in investment operations. A large proportion of such

1/ The volume of trade grew at the annual rate of 3.9 per cent.

funds would inevitably have been spent for imports from industrial countries, probably for economic development. Whether such an expansion in this period at this rate would have been desirable and noninflationary, and whether this is the most appropriate procedure for achieving what would have been achieved, are questions that would require extended consideration.

62. Alternatively, XIMF lending policy might be related to the growth of reserves, and the determination of reserve adequacy, as measured for countries plus all international monetary organizations (IMF, EPU/EF, and BIS). On this basis, reserves increased $6.7 billion in 1956-59, of which the major part ($4 billion) represented currency payments (i.e., tendering of notes payable on demand in currency) by IMF members in connection with their quota increases of 1959. This increase of $6.7 billion was almost enough to meet requirements based upon a growth of trade of 3 per cent per year, and fell short of meeting the actual rate of 4 per cent by $500 million. But this large increase of reserves was achieved by enlarging Fund quotas. It may be puzzling to imagine why the delivery to the Fund of $4 billion of demand notes, which may not be cashed for many years, improves world liquidity immediately. The explanation is probably that the usual meaning of the term "reserves" is too restricted, and that it would be useful to introduce a term such as quasi-reserves into the analysis of the statistics. Perhaps published statistics on country reserves of Fund members would be more meaningful if their gold contributions to, and their quotas in, the IMF were added to their reserve holdings of gold and exchange.

63. International liquidity increases when the ability to borrow increases, whether from international, national, or private sources. It also follows that, with a given amount of borrowable resources, liquidity is greater when countries are willing to borrow than when they are not. When countries can borrow, and are willing to borrow, it is unnecessary for any international organization to force-feed liquidity into the system and into the reserve statistics, in accordance with calculated requirements based upon the growth of trade. Nor is it meaningful after the fact to compare the actual growth of reserves with the actual growth of trade. It is sufficient to assure that the amount of quasi-reserves is large--that the lender of last resort always has some resources to lend--and to let the reported total of reserves take care of itself. Countries will then rely on reserves and quasi-reserves in the proportion that seems to them most appropriate.

IV. Conclusion

64. Triffin has focused attention upon some major problems of international liquidity. His diagnosis of present and prospective difficulties, and his recommendations for meeting these difficulties, are thought-provoking but highly controversial.

65. The implications of Triffin's proposal are far-reaching. An international agency would be authorized to manage and systematically expand the international money supply. The character of the Fund's operations would be changed to facilitate expansion of international liquidity at what is conceived to be an adequate rate. The expanded Fund would have authority to create new money in the form of deposits, which would to an increasing extent rest on loans to, and investments in, underdeveloped, net debtor countries. The process of creating deposits would involve drafts on the real resources of other members, largely the developed countries. The character of the assets of the expanded IMF would increasingly be changed from currency holdings and three- to five-year loans, conceived to be self-liquidating and revolving, into medium- and long-term loans which would have a different character. These changes would rest on important exchange guarantees. They could involve widespread intervention of the XIMF in the money markets of the United States, the United Kingdom, and perhaps other countries. They would involve changes in the sources of funds for long-term investment. The authority to require gradual liquidation of dollar and sterling balances would either reduce the gold reserves or the long-term capital exporting ability of the United States and the United Kingdom. The gradual liquidation of sterling balances would limit; if not end, the sterling area. The expanded IMF would inevitably be less liquid than the present one, and this might raise questions about its ability to provide the key currencies that members may need, unless reserve deposit requirements are raised and the gold contributions of a few members increased far beyond the level initially proposed.

66. These far-reaching changes, and others which can be foreseen only dimly, are based upon findings of the dangerous state of, and prospects for, international liquidity. The proposals are based upon a simplified view of the statistics on reserves and trade that does not reflect such important factors as the distribution of reserves, the change in the quality of exchange assets, the state of balance of international trade and exchange rates, and the growing role of the IMF. At best, these findings of serious reserve deficiency are unproven; at worst, they are incorrect, at least for the next five or ten years. It may be argued that ten years is not a long time, and that the world should now anticipate developments over a much longer period. As to this, opinions differ. There have been many forecasts of reserve requirements based upon the rate of growth of trade. With practically no exceptions, these forecasts concluded that reserves would soon become inadequate, and that this inadequacy would cause deflation.

67. These comments in no way imply that international liquidity does not present many difficult problems. There is reason to believe, however, that the lines of development in the postwar period, and the recovery that has already been made, offer the best chance for further progress, and that the IMF with its enlarged resources and its proven type of operations provides the guidance and monetary support that should facilitate further expansion and stability of the structure of international reserves.

ALTMAN ON TRIFFIN

A REBUTTAL

May I first confess to my embarrassment at having to comment on Mr. Altman's excellent paper. It is in the nature of a rebuttal to concentrate on points of disagreement, and this is particularly unpleasant in the present case. I have learned a lot from Mr. Altman's paper and from his previous writings on this topic. I cannot, moreover, but feel inordinately flattered at having my views so thoroughly dissected and scrutinized by the Assistant Director of Research and Statistics of the International Monetary Fund. Yet, I feel equally disappointed at the uniformly negative tone of his criticisms, and at the absence of any positive and constructive alternatives to the proposals which I have ventured. I would have welcomed a more candid recognition of the problems which we face, and an effort to amend, rather than merely dismiss, my own suggestions for dealing with them. Such amendments are certainly necessary. It would be a miracle indeed if any plan of a lone student, isolated in the ivory tower of his university, proved fully acceptable to the practical experts and responsible statesmen of several scores of independent nations. Even in my moments of wildest optimism, I have never hoped to be able to do more than to initiate and stimulate a broad discussion of the long overdue reforms obviously necessary to adjust to modern needs and conditions an international monetary system inherited from a long series of uncorrelated—and often haphazard—reactions to the crises of yesteryears. The international negotiations that will soon become indispensable to that end would benefit far more from constructive criticism and alternative suggestions than from complacency with what now exists, but obviously cannot endure.

1. A wrong diagnosis?

My diagnosis of the present problem can be expressed in a nutshell:

1. The present sources of increase in world reserves impart a most dangerous vulnerability to the international monetary system, and to the key currencies upon which it is becoming increasingly dependent. Monetary reserves outside the United States and the United Kingdom are built on a decreasing proportion of gold and an increasing proportion of foreign assets, mostly sterling and dollars. The latter proportion rose from 9 percent in 1913 to 36 percent in 1928, but collapsed to 13 percent in 1933 with the first breakdown of the gold exchange or key currencies standard.[1] It has now risen to well over 50 percent of world reserves, but undermined gravely the position of one of the key currencies, sterling, in the early postwar years, and that of the other, the dollar, today. A repetition of the 1931 breakdown of the gold exchange standard may yet be avoided, but it has become a distinct possibility, widely discussed in the financial press all over the world.

2. Even if the United States were to regain tomorrow "overall" equilibrium in its balance of payments, it would remain saddled with an enormous burden of floating foreign debt—$19.3 billion as of the end of August 1960, nearly triple the size of our so-called free gold reserves—which would handicap severely its freedom of monetary management during the course of any future recession in domestic employment and economic activity. Our "overall" balance of payments is usually measured by the sum of our current gold losses and increases in foreign dollar balances. Large conversions of dollar balances into gold might leave us in "overall" equilibrium—our gold losses being offset by the parallel reduction in our indebtedness abroad—and yet lead to a major dollar crisis forcing us to choose between deflation, devaluation, an embargo on gold, drastic cuts in our foreign aid or military defense programs, tariff increases, other trade or exchange restrictions, etc., or various possible combinations of such unhappy policies.

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[1] May I take objection, in passing, to Mr. Altman's suggestion that I might regard the extension of the gold exchange standard in the 1920's as having possibly been "a primary factor in the deflation that began in 1929." All I said is that it "led * * * to the devaluation of the pound sterling, to the collapse of the international gold exchange standard, and to the consequent aggravation of the world depression" ("Gold and the Dollar Crisis," p. 9). That is enough, to my mind, to condemn the system without blaming it in addition for other cyclical developments, the world agricultural crisis, and other sins of commission or omission in the economic policies of the 1920's.

I shall, in this paper, refrain from further comments of this sort on minor disagreements upon points of detail, irrelevant to the main issues under consideration.

3. Disregarding such catastrophic—but, let us hope, improbable—possibilities, the fact remains that the restoration of overall equilibrium in the U.S. balance of payments would dry up the major source by far of current liquidity and monetary reserve increases for the world. The rapid and persistent increase of official dollar balances over the last decade accounts for more than 50 percent of the rise in world's reserves during that period. Together with U.S. gold losses, it made up two-thirds of foreign countries' reserve increases over the 10 years 1950–59, and more than 90 percent over the 2 years 1958 and 1959.

I cannot discover in Mr. Altman's criticism of my diagnosis any strong rebuttal, or even comprehensive appraisal, of my first two points. They are largely ignored or swept under the carpet. As for the third, it is unconvincing to him, primarily because he considers as "at best * * * unproved," and "at worst, * * * incorrect" my "findings of serious reserve deficiency * * * at least for the next 5 or 10 years. It may be argued that 10 years is not a long time, and that the world should now anticipate developments over a much longer period. As to this, opinions differ" (par. 66, p. 33).

Mr. Altman's detailed arguments on this point are spread throughout his paper. They boil down to the fact that "Triffin's view of the required growth of reserves is essentially a mechanistic one. It is simply not true that the need for monetary reserves can be read off arithmetically from a table relating reserves to trade" (par. 38, p. 17). The quality and distribution of reserve assets should be taken into account, as well as each country's reserve policies. Net reserves may be as important as gross reserves. Past forecasts of reserve deficiency have often proved to have been wrong, etc.

I don't disagree with any of these points, but—as Mr. Kennedy said to Mr. Nixon—I don't recognize myself in the strawman that Mr. Altman wishes to knock down. I prefaced my whole discussion of reserve measurements and adequacy in "Gold and the Dollar Crisis." (See, particularly, pp. 35–37) with very much the same arguments as Mr. Altman. I also explicitly "confessed" there that my reason for retaining "the ratio of gross reserves to annual imports * * * as a first, and admittedly rough, approach to the problem of reserve adequacy" was the fact that this approach had been followed—with similar qualifications—by the famous IMF staff study of 1958 on "International Reserves and Liquidity," whose main author—or so at least rumor has it—is precisely Mr. Altman. I also warned the reader that the "results would admittedly be too crude to determine any precise level of reserve adequacy, but they will prove more than sufficient to indicate whether current or prospective reserve levels are likely to facilitate, or seriously hamper, the smooth functioning of international currency convertibility" (p. 36).

I followed exactly, in the chapter appraising prospective reserve adequacy over the next 10 years (ch. 5, pp. 47–58), the very procedure adopted in the Fund's study. I questioned, however, the wisdom of excluding from their calculations any reserve increase for the high reserve countries without allowing, on the other hand, for any reconstitution of reserves by at the least some of the major countries which had given evidence of having such policies in mind. I questioned also the wisdom of accepting as a basis for the IMF optimistic forecasts of reserve adequacy a future growth rate based on past averages of "normal" peacetime experience diluted "with the abnormally low, and in fact predominantly negative, growth rates of wartime years and of the 1930's world depression. An expected adequacy of reserves based upon the assumption of a third world war or of another deep and protracted world depression is hardly encouraging as a guide to policy" ("Gold and the Dollar Crisis," p. 48).

I am as surprised to find no answer to these two questions I raised against the IMF calculations, as I am to be profusely criticized for having followed them too slavishly in order to develop and appraise their own implications.

Let me, therefore, clarify, if need be, my own position about reserve adequacy. I do not now claim, and have never claimed, that "the level of reserves in 1957 or in 1958, the years used by Triffin as bases for reserve calculations, represented the minimum reserves required by the non-Communist world, and that in the future these reserves must grow as fast as world trade" (Altman, par. 38, p. 17). What is I said is that there can be little doubt that the 35-percent average level reached in 1957 by all countries outside the United States and the United Kingdom was on the low side of any reasonable estimate of world liquidity requirements, and that any further contraction below that level would make it very difficult for a number of key countries to adhere firmly to the convertibility policies which they would otherwise be willing and eager to pursue" ("Gold and the Dollar Crisis," p. 46).

Mr. Altman points to the satisfactory increase of world gold and foreign exchange reserves since 1956 as contradicting my forecast that gold alone would not suffice to satisfy the expected growth of post-1957 reserve requirements in an expanding world economy. What his own figures (on p. 28 of his paper) indicate, however, is that the expansion in the world's stock of monetary gold over this period—$2.1 billion—played only a minor part in the very rapid, and indeed more than adequate, expansion of monetary reserves outside the United States. These increased by more than 12 percent over this period in spite of exceptionally large disbursements to the IMF—in repayment of past loans and as subscriptions to the Fund's capital increase—of substantial sales of foreign exchange to commercial banks, and of the exclusion from reserve calculations at the end of this period of the considerable claims previously held on EPU—$1.3 billion—and included in the reserve figures for 1956. Reserves outside the United States progressed indeed at a highly satisfactory rate over this period, but this had far less to do with gold production than with the enormous drain on the U.S. net reserve position. U.S. gold losses and increasing short-term indebtedness abroad contributed more than $3.6 billion to the reserve increases of foreign countries, even though at a very uneven pace: minus $0.9 billion in 1957, plus $3 billion in 1958 and plus $1.6 billion in 1959.

This brings out, indeed, the major flaw in Mr. Altman's criticism of my discussion of prospective reserve adequacy. He takes me to task for what he does himself; i.e., for ignoring the structure and distribution of world reserves when discussing their overall level. My own discussion, however, was essentially directed at stressing the inadequacy of gold production alone as a source of reserve increases. I never denied that reserves could be kept at an adequate level as long as the United States could afford an overall deficit of $3 to $4 billion a year in its balance of payments—as has been the case ever since the end of 1957—and as long as foreign countries continued to accept dollar I O U's in lieu of gold, in settlement of a large portion of these deficits. Quite obviously, however, it would be foolhardy to regard such assumptions as providing a safe and viable basis upon which to meet indefinitely future increases in world reserves. Mr. Altman seems to think that it definitely is, "at least for the next 5 or 10 years" (par. 66, on p. 33). On this too—to borrow from his next sentence—I trust that "opinions differ."

Let me finally note, to close this discussion, that the problem is not a new one, but a very old one. Gold has long ceased to feed more than a fraction of annual increases in world monetary reserves. It contributed less than 40 percent of such increases over the period 1914–28, against more than 60 percent derived from the withdrawal of gold coin from circulation and from the rapid rise in dollar, and particularly sterling, reserves at that time. The revaluation of gold provided more than 50 percent of the reserve increases of the years 1934–38, measured in terms of the U.S. dollar. The unprecedented growth of sterling balances accounted once more for the largest part of reserve increases during the Second World War, but at the cost of sterling inconvertibility and devaluation. In the last 10 years, gold production in the West has contributed little more than a third of reserve increases, more than half of which has been derived from the continued growth of dollar balances, and a smaller, but increasing portion—close to 40 percent in the last 3 years—from Russian sales of gold in the Western markets.

My own proposals for dealing with the problem may be open to serious objections, but can somebody seriously defend as preferable the present system under which annual supplies of reserves are utterly dependent upon—

1. The hazards of golddigging in a country whose economic life may be brought to a standstill tomorrow by the threatening eruption of racial warfare;
2. Mr. Khrushchev's policies about U.S.S.R. gold sales in the West;
3. The perpetuation of our balance-of-payments deficits and the continued acceptance of dollar I O U's by other countries.

Let me now turn to Mr. Altman's objections to my own proposals for a reform of the IMF statutes.

2. A controversial prescription?

My recommendations for a radical reform of the world's monetary system are bound to be "controversial." I fully agree here with Mr. Altman, and hope indeed to benefit from the controversy which he has so brilliantly opened up and which he and others, I also hope, will pursue, enrich, and enlighten, in preparation for a forthcoming renegotiation of the IMF articles of agreement.

The first objection of Mr. Altman has already been dealt with above. He sometimes ascribes to me—or thinks my readers will ascribe to me—a typical Chicago school proposal for a "mechanistic" increase of world reserves at an invariable and "almost self-evident" rate of 3 percent a year. He rightly criticizes such a concept, and recognizes elsewhere that I have never propounded it. Indeed he deplores my unwillingness "to provide it [the IMF] with a statement of policy objective, let alone any specific guides to operations policy" (par. 46, on p. 23). This does not prevent him, however, from harping again and again on the "mechanistic" character of my proposals and from concluding that "an expanded IMF with responsibilities toward adequate levels of international liquidity implied by Triffin would be put in the position of attempting to do internationally what no central bank has been willing to attempt nationally" (par. 52, on p. 26).

Certainly, no central bank has yet accepted the proposal of Professor Friedman to insure a constant increase of money supply at a 3 or 4 percent annual rate, come hell or high water. But the efforts of all central banks have been bent for at least half a century upon the task of facilitating the adjustment of money supply to the attainment of feasible, but noninflationary, levels of employment and economic growth. They have never hesitated to use so-called sterilization, neutralization, or compensatory policies to insulate their economy from unwanted shocks that would interfere with the achievement of this broad objective. They certainly would never have willingly abandoned the effective regulation of money supply to chance events comparable to those mentioned above (on p. 8) and on which the provision of international monetary reserves is now utterly dependent. This being said, I agree with Mr. Altman that the task of the expanded IMF cannot be laid down in advance in any automatic or mechanistic formula, and that the Fund's authorities will have to "consider a combination of criteria" and use at all times flexible and intelligent judgment in facing the unpredictable problems of tomorrow.

Secondly, Mr. Altman fears that my proposals might interfere with the rude but beneficial discipline of gold flows (par. 28, on p. 13) but he also objects a few pages later (par. 33, on p. 16) to the fact that "expansion of the IMF along the lines recommended by Triffin would not by itself eliminate the risks of pressure on the dollar and gold outflows from the United States."

I confess to some embarrassment at having to answer both points at the same time. In brief, my proposals would not weaken the discipline of gold flows, but, on the contrary, reduce the distortion of their timing which results from the present operation of the gold exchange standard, as opposed to the gold standard. It is a fact that the piling up of so-called key currency balances under that system postpones the gold flows that would otherwise accompany overall payments deficits. They facilitate, or even stimulate, thereby the continuation of such deficits, but at the cost of weakening the net reserve structure of the key currency countries and exposing them to sudden and large withdrawals of funds at a later date. In spite of its enormous gold reserves, the United States itself would hardly have been able to accumulate overall deficits of more than $15 billion over the 10 years 1950–59, if the "discipline of gold outflows" had not been considerably relaxed by the acceptance of more than $11 billion of this amount by foreigners in the form of dollar balances, of which more than $6 billion is in official monetary reserves. Conversely, the fate of our dollar would not be endangered today by the existence of more than $19 billion of short-term debts abroad, legally convertible into gold, either directly or indirectly.

By outlawing the accumulation of national currencies as international reserves, my proposals would tend to restore, at least in part, the normal discipline of gold flows. They would not, however, eliminate automatically the weakening and distortion of that discipline resulting from the flows of private short-term funds. This would remain a problem to be dealt with by the monetary authorities of each country, but which the new IMF would nevertheless be in a much stronger position to help them solve, through its own loans and investment policies.

Mr. Altman cites some disadvantages which the new system might have for the key currency countries; i.e., for the United States and the United Kingdom. They might, for instance, be called upon to make some amortization payments on the dollar and sterling balances transferred to the new Fund by their present owners, even though, according to my proposals, only as and when this proves useful to the implementation of the Fund's tasks and policies, and only at a maximum pace of 5 percent a year. Can this be rated as a disadvantage, how-

ever, as compared with a situation under which the present owners are free to convert into gold, at any time, the totality of these balances? Mr. Altman quotes, in this connection, my expectation that the Fund might well, in the initial years of the new system, seek further dollar and sterling investments of its enlarged resources, thus helping "smooth out the transition from the present system where international liquidity has come to depend increasingly on a continuous increase of such balances." He dismisses this suggestion airily, but mysteriously, with the remark that "it is a fair comment that only an extraordinary reader will share this expectation" (par. 49, footnote 2, on p. 25).

Mr. Altman also objects to the exchange guarantee that would automatically be attached, under the Fund's statutes, to the deposits of its members and to its dollar and sterling investments. Yet, this has long been an accepted procedure in all Fund's transactions, including, by the way, the $500 million invested by it in U.S. Treasury bills and fund awaiting investment and for which the same quantity of gold can be reacquired from our Treasury upon termination of the investment. It was also an accepted procedure in EPU, and seems indeed far more reasonable than a system under which the value of such claims can arbitrarily be written down by any devaluation decision of the debtor.

Mr. Altman also considers (par. 29, on p. 14) that my plan would spell the end of the sterling area. Such an interpretation has never been given to my proposals by the British themselves,[2] and I think—quoting Mr. Altman out of context—that "it is a fair comment that only an extraordinary reader will share this expectation.' After all, I devoted 24 pages of my book (pp. 121–144) to argue that "the management of a worldwide clearing system, and particularly the investment of the large funds derived from its operation, will present enormous administrative and political hurdles, which can best be surmounted through some decentralization of the Fund's decisionmaking process" (p. 128), and to describe as examples of such desirable decentralization the setting up of a European Clearing Union and of a European Community reserve fund. The suggestions developed in these pages could be similarly applicable to other regional organizations, including sterling area arrangements, as long as these do not involve any weakening of the broader, worldwide convertibility and cooperation commitments of their members, but aim on the contrary at consolidating them through additional measures of integration and harmonization reducing the danger of conflicting and mutually defeating national policies.

A more valid objection of Mr. Altman relates to the composition of the Fund's assets. The expansion of the Fund's loans and investments should normally be expected to direct capital mostly to the underdeveloped countries, and I suggested indeed such a general line of policy in my book. Aware, however, that direct lending of this character would be anathema to the more conservative minds among central bankers, I suggested that relatively long-term investments for economic developments be financed only indirectly "through purchases of IBRD bonds or other securities of a similar character" ("Gold and the Dollar Crisis," p. 118). The increasing investments in IBRD bonds taken up in recent years by one of the most orthodox of central banks—the Bundesbank of Germany—should help make such a "radical" idea more "respectable" than it would have been otherwise.

More may prove necessary, however, to meet Mr. Altman's objection and get around the "taboos" still prevalent in some circles about the nature of the assets which it is proper for monetary institutions to acquire. Fund's investments could, for instance, be channeled to a greater extent toward older financial centers such as Frankfurt, Amsterdam, Paris, etc., and—notwithstanding Mr. Altman's remark quoted above (see p. 12)—London and New York. This would strengthen these centers' capacity and willingness to finance themselves oversea development. Technically, this would, it is true, expose them to the accusation that they are making themselves illiquid by "lending long and borrowing short." Yet, this is precisely what they have traditionally done in the past. Moreover, their resulting indebtedness to the Fund would make them far less vulnerable than is now the case to sudden, speculative withdrawals of the funds invested in their market. The vast resources derived by the Fund from its members' minimium deposit requirements could only grow in time, with the growth of members' reserves, and there would be no reason or occasion impelling the Fund to liquidate massively its own investments in members' markets.

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[2] See, for instance, the comments of Prof. Brian Tew in "International Mentary Cooperation, 1945–60" (fifth edition, London, 1960), p. 183.

Foolproof reassurances in this regard would presuppose, however, the full implementation of my proposals for minimum reserve requirements, including in case of need future increases in such requirements to the extent necessary to preserve the full convertibility of members' deposits into any and all currencies needed by them for international settlement purposes. Mr. Altman stresses the objections which might be raised against such proposals, but fails to point out that the new commitments required of members in this respect would replace, rather be additional to, their present subscriptions to the Fund's capital and their prospective subscriptions to future capital increases. I pointed out, in my testimony before the Joint Economic Committee (see p. 13 of "Gold and the Dollar Crisis") that such a substitution would result, in the case of the United States, in an increase of our gross monetary reserves as well as in the consolidation of a large portion of the foreign floating debt which might at any time be cashed for gold at the Treasury.

Last, but not least, Mr. Altman seems to confuse "convertibility" with "convertibility into gold" (see par. 12, on p. 6, par. 25, on p. 11, and particularly par. 50, on p. 26). Fund deposits could always be used at any time—at least in conjunction with members' gold reserves—to make payments anywhere in the world. The fact that minimum deposits have to be kept with the Fund and cannot be withdrawn in gold metal does not make them inconvertible in the most meaningful sense usually attached to that word. The status of such deposits could be compared to that of the legal reserves which must be kept by our banks with the Federal Reserve System and which they cannot liquidate in cash or currency without contravening their minimum deposit obligation. Would Mr. Altman call "inconvertible" sterling balances which can freely be drawn upon to make payments in any and all convertible currencies, including dollars, simply because they cannot be cashed for gold metal at the Bank of England? He is, of course, free to do so, but he and his Fund colleagues should then stop talking about the enormous progress achieved by many countries in 1958 in restoring the "convertibility" of their currency.

3. Mr. Altman's alternative suggestions

In spite of his basic disagreements with my "diagnosis" of the present and prospective international monetary problem, Mr. Altman concedes that something may have to be done to "facilitate further expansion and stability of the structure of international reserves" (par. 67, on p. 33). He offers little or no guidance as to what this should be, however, and implies that the present "IMF with its enlarged resources and its proven type of operations" will be equal to the task, although he concedes, in another passage (par. 17, footnote 1, on p. 17), that "it may be prudent, as E. M. Bernstein has suggested to arrange for borrowing in advance of need, by issuing to a small number of countries debentures which could be called for payment to meet large emergencies."

My main reasons for considering these proposals as woefully inadequate to meet the problems of tomorrow should by now be obvious to the reader, and have been discussed at length in the previous writings listed by Mr. Altman. I shall, therefore, limit myself here to a few points of a more technical character, related to some basic defects in the IMF statutes and methods and operations.[3]

Article V of the Fund agreement requires prospective borrowers from the Fund to indicate the particular currency which they wish to purchase and to "represent" that that currency "is presently needed for making in that currency payments which are consistent with the provisions of this agreement." This is, of course, utter nonsense. Such a clause would have meaning only in a world of bilateralism. Under convertibility conditions, the normal way in which a country keeps its currency convertible is by repurchasing from the market, with any other widely traded currency that it wishes, excess supplies of its own currency that tend to depress its exchange rate. It can never "represent" to the Fund that it needs to borrow a specific currency, and no other, for that purpose.

In fact, members' requests have so far centered practically exclusively on the U.S. dollar. Over a period during which the United States was the major reserve loser in the world, dollar drawings far exceeded—whether on a net or on a gross basis—90 percent of total drawings from the Fund, and aggravated

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[3] For a comprehensive discussion and appraisal of the IMF mechanism and operations, and of the reforms needed to make it an effective instrument of international monetary stabilization, see my "Europe and the Money Muddle" (Yale University Press, 1957), ch. 3, pp. 109–138 and 294–301.

our gold losses and the buildup of our short-term indebtedness to foreign countries. Continental Europe's monetary reserves more than tripled over the same period, but the only continental European courrency disbursed by the Fund—on a net basis—was the German mark, for the paltry amount of $100 million.

This absurdity was openly denounced at the last Fund meeting by no less an authority than the British Chancellor of the Exchequer. His words are worth quoting in full:

"There is one further question which I should like to raise. It concerns the method of operation of the Fund. Is there a danger of these operations exacerbating the problem of imbalance because of the tendency for members in short-term difficulties to take drawings from the Fund in only a limited range of currencies? Let me explain my point in a little more detail.

"The history of past drawings from the Fund shows that these have been concentrated to a very large extent on the U.S. dollar. This is not surprising. Other member countries naturally wish to draw currencies which they can hold as reserves or can use in exchange operations to maintain their rates. But in our view drawings should, so far as possible be of the currencies of those countries which are in overall surplus. Undue concentration on the reserve currencies might have unfortunate consequences in the future. For member countries might wish to draw reserve currencies at a time when those currencies were under strain.

"I am sure that this subject is not new to the Fund, but I think it would bear further study now when we can look at it not as something imminent, but as something which could become real at some future date and which in common prudence we ought to provide for. We should be glad to cooperate in such a study and should be ready to make some practical suggestions.'

My proposals would meet this problem in the simplest and most automatic manner conceivable, avoiding any need for ad hoc discussions and decisions on individual drawings. All Fund loans would be credited to the borrower's deposit account with the Fund, rather than immediately disbursed in any particular currency. Subsequent currency withdrawals by the borrower would be debited from his account and credited to the account of the country whose currency is drawn, but would not necessarily affect the latter's lending to the Fund. If it is not at that time in net overall surplus in its balance of payments with the world at large, its total reserves—gold and deposits with the Fund taken together—would not increase, and it would be free to cash for gold, if it wishes, any deposits accruing to its account beyond its minimum deposit requirements. Only the countries with overall surpluses and reserve increases would be under obligation to increase their loans to the Fund, thus increasing the Fund's own lending capacity in the currencies which are actually in final demand for world settlements.

This points to a major, and broader, difference between the present and the reformed IMF. The present lending capacity of the Fund depends essentially on capital subscriptions, rigidly, and largely arbitrarily, determined by negotiation, and which can be changed only infrequently through new and complex negotiations among members. Three-fourths of these capital subscriptions, moreover, are in local currencies—including millions or billions of pesos, rupees, rupiahs, hwans, afghanis, bolivianos, cruzeiros, kyats, etc.—most of which are of no earthly use to the Fund. Others, like the dollar today, may, on the contrary, be used improperly, as pointed out above, at times of heavy dollar deficits. The Fund's resources in the currencies of overall surplus countries may, on the other hand, prove far short of the contributions which Fund lending in these currencies should, but does not now, make to the settlement of these countries' surpluses. Finally, while net creditor positions with the Fund do indeed enlarge those creditors' rights to draw upon the Fund, they are expressed in a form which many countries, and particularly the United States, regard as insufficiently liquid to justify their being treated as part and parcel of their monetary reserves. This may reflect the excessive caution prevalent among central bankers, but it is a fact of life. So is the reluctance—deplored by Messrs. Altman and Bernstein—of some of them, including the United States, to draw upon the Fund in cases where such drawings would be eminently justified, but might appear as a sign of weakness, and stimulate undesirable speculation in the gold and exchange markets of the world.

Under my proposals, the rigid quota system would be dispensed with entirely. The Fund would derive its resources from the minimum, and free, deposits maintained with it by members. The overall amount of the minimum deposits, and their distribution as between countries, would at all times adjust flexibly to the

changes in each country's overall monetary reserves, and provide thereby the Fund with a pattern of resources directly related to the world demand for the various currencies needed for ultimate settlements. Finally, these deposits themselves would remain as fully liquid and usable for such settlements as gold itself and as the deposits now freely maintained by members in the form of currency balances in New York or in London. This was well described by as eminent an expert as Lord Keynes, and need not be rehashed here.[4]

As for Mr. Bernstein's proposed debentures, the effective resources which the Fund could ever derive from them would also—as in the case of the present currency subscriptions to the Fund's capital—be limited to a mere fraction of the amounts actually negotiated. Of the $6 billion suggested by him, the $3.5 billion to be contributed by the United States and the United Kingdom could not be touched as long as these two countries do not develop substantial surpluses in their balance of payments; and of the $2.5 billion to be contributed by France, Germany, Canada, and some other countries, only those amounts could be used which corresponded to the individual surpluses of any of the contributing countries.[5] Once more, and exactly as for national currency subscriptions to the Fund's capital and capital increases, complex negotiations involving a large number of countries would end up in endowing the Fund with far lesser amounts of real, usable resources than would appear at first view. Below the mountain of paper subscriptions and debentures, there would lie only a molehill of currencies actually usable for Fund lending.

4. A modest initial step

Yet, as radical a reform of the Fund as that proposed here is bound to require some time before it can be fully understood, appraised, and negotiated. It will also have to surmount the enormous resistance which inertia, complacency, and fears of anything new and unfamiliar, have always opposed to institutional progress, particularly in the international field.

A first and very modest step could be undertaken far more rapidly and simply, and yet be sufficient to achieve large results in minimum time. Let the International Monetary Fund declare its willingness to accept, on a purely voluntary basis, reserve deposits from member central banks. These reserve deposits would carry an exchange guarantee, earn interest to the depositors, and be freely usable to purchase from the Fund any currencies needed for international settlements. They could be acquired from the Fund against equivalent surrender of gold or of any balances in convertible currencies—primarily sterling and dollars—which the debtors of such balances agree to guarantee against the devaluation of their own currency and to amortize progressively, but at a maximum pace of, let us say, 5 percent annually, insofar as deemed useful by the Fund for the proper conduct of its own operations.

The members' own interests should stimulate a considerable demand for such interest-earning, and yet exchange-guaranteed deposits. They would offer an attractive alternative to the massive conversions of dollar and sterling balances into gold, which have long been a major source of worry for the United Kingdom and have recently become an equal source of worry for the United States.

The keystone of such a proposal was endorsed unanimously, more than a year ago, by the Radcliffe Committee on the Working of the Monetary System.[6] Agreement between the United States and the United Kingdom would practically guarantee the acceptance of this recommendation by the Fund. Other countries, indeed, could have no reason to oppose a step which imposes no obligation on them, but offer them, on the contrary, an additional and particularly attractive outlet for the investment of their monetary reserves. These other countries now retain, without any compulsion whatsoever, more than half of their reserves in national foreign currencies, always exposed to devaluation, inconvertibility, blocking, or even repudiation by the debtor. There is every reason to believe that no compulsion should prove necessary to induce them to retain as large a proportion, at least, of their reserves in the interest-paying and exchange-guaranteed deposits which would now be offered to them as an alternative.

This simple and immediately feasible measure might thus suffice to head off the crisis that could otherwise ensue from panicky conversions of dollar and sterling balances into gold. This would give central banks the time necessary

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[4] See the passages quoted in "Gold and the Dollar Crisis," pp. 91–92.
[5] See his Joint Economic Study Paper No. 16, "International Effects of U.S. Economic Policy," January 1960, p. 86.
[6] See p. 248 of the report.

to gain familiarity with the system, and to negotiate with greater confidence the more ambitious reforms necessary to consolidate it and to adjust the IMF and the international monetary system to the needs of our age.

May I, in closing, urge the reader to keep a sense of perspective in appraising the broad issues raised by my proposals and by Mr. Altman's criticisms. No human institution will ever be perfect and foolproof. The reforms which I suggest are certainly not exempt from a number of shortcomings, some of which, but not all, might be corrected in the process of negotiation. These shortcomings, however, should be compared with those of an international monetary system whose long-term survival is admittedly impossible—at least beyond the 5 or 10 years' reprieve optimistically granted it by Mr. Altman—and whose short-term functioning involves us right now in the most reckless and unnecessary gambles about prospective gold production in South Africa, prospective gold sales by Russia in Western markets, the willingness of the key currency countries to supply reserves to the rest of the world through large and persistent deficits in their international payments and, last but not least, the continued acceptability of these countries' increasing flow of I O U's as a safe medium for the investment of their monetary reserves by the other countries of the world.

APPENDIX

I would like to meet here a number of minor points raised by Mr. Altman, but some of which may be due to accidental misprints or cleared up by agreement on the exact meaning of some of the concepts and techniques used in his calculations:

1. Mr. Altman's guess in footnote 3, on page 5, is perfectly correct. The 20-percent criterion retained for compulsory reserve requirements was not uninfluenced by my hope that the coincidence which he notes would facilitate the acceptance of the proposed reform by the country which will have the largest voice in its negotiation.

2. The calculations mentioned in paragraph 11 (p. 5), paragraph 25 (p. 11), and paragraph 49 (p. 25), are based on the most pessimistic, but not necessarily most realistic, guess as to the relative attractiveness of gold and Fund deposits to the members of the reformed Fund. See page 113 of my book. I would particularly object to the word "presumably" in the last sentence of paragraph 11 as representative of my thoughts on this matter.

3. The estimates quoted in paragraph 25 and footnote 1 (pp. 11–12) are somewhat garbled and partly ununderstandable to me. The deposit requirement of the United States should read $4.5 billion, instead of $4.1 billion. The $2 billion of net claims on the IMF would be transformed into Fund deposits and raise by an equal amount the gross monetary reserves of the United States. (See p. 13 of my book.) Finally, $3.5 billion of short-term liabilities to foreigners would be converted into long-term liabilities to the Fund. These calculations may be "controversial," but few people would hesitate to regard the net effect of these transactions as a "strengthening" rather than a "weakening" of the U.S. reserve position.

4. The increase in Germany's reserves was excluded by me, following Mr. Altman's own assumption in "International Reserves and Liquidity," from the calculations of prospective reserve requirements discussed in paragraph 39 (p. 18).

5. The doubts raised by Mr. Altman at the end of paragraph 40 (p. 18) about the future reserve policies of the United Kingdom, and supported by his extensive footnote quotation from the Radcliffe Committee report, are not unreasonable. Let me note, however:

(*a*) That he rounds upward to $5 billion the $4.6 billion figure used in my calculations and quoted correctly by him in paragraph 4 (p. 2).

(*b*) That a $4 to $5 billion reserve target was repeatedly mentioned by the British in numerous official statements regarding the restoration of sterling convertibility;

(*c*) That my figure of $4.6 billion is likely to be as close to a realistic reserve target for Britain as the one of $2.2 billion implicit in the calculations of the Fund's report on "International Reserves and Liquidity";

(*d*) That my estimate of $2.5 billion for France is far closer to the current level of French reserves than the $1.2 billion estimate of the same study.

6. I agree with Mr. Altman's criticism (in par. 40, p. 20) of the inclusion of IMF exchange assets in the estimate of world reserves used in my Wicksell lectures. This figure was borrowed somewhat hastily from the "International Fi-

nancial Statistics" own estimates of world reserve which might profitably be revised also, for instance along the lines suggested by Mr. Altman in paragraph 55 (p. 29). I cannot, however, quite reconstruct the derivation of his $3.3 billion for reserve increases in this paragraph, unless he includes there nonofficial holdings of deposit money banks as reserves.

May I finally express some surprise at his use of my 1958 lectures in this sole connection, in preference to the more comprehensive and revised estimates used in my book and other more recent writings?

[From the New York Times, Oct. 30, 1960]

To Regulate Gold Prices—Changes in Our Monetary Policy To Fight Speculation Discussed

The writer of the following letter, professor of political science at Yale and formerly associated with the Board of Governors of the Federal Reserve System and the International Monetary Fund, participated in the planning and negotiation of the European Payments Union.

To the Editor of the New York Times:

A Treasury official commented as follows on the sudden jump of gold prices in London:

"We are watching it closely. We are wondering just what has happened * * *."

Just watching won't do much good, especially if the watching is done by people who can still be "wondering just what has happened," after the multiple warnings given them for more than 3 years that just such a crisis was bound to erupt sooner or later in the face of continued inaction by the U.S. Government.

Our persistent gold losses and increases in liabilities abroad are not new. They have now lasted for over 10 years, and took an alarming course for the worse nearly 3 years ago. All pleas for consideration of the problem and of the means to meet it have been shrugged off by the administration, which blandly denied that there was any cause for serious concern.

The dramatic jump in London gold prices on October 21 should not be regarded with undue alarm. But it should certainly shake the complacency of our officials. This sudden break in the market can be traced to the ostrichlike attitude adopted once more by them during the annual meeting of the International Monetary Fund in Washington 3 weeks ago.

FEAR OF EMBARGO

The absurd and blind optimism and lack of concern exhibited by them on this occasion were received with dismay by their foreign colleagues, who began to fear that we would not act in time to avoid in the end a gold embargo, and a de facto devaluation of the dollar.

The rise in the gold price in London could easily have been stemmed at a very minor cost in terms of gold outflow from here if the Bank of England had been encouraged to continue to regulate the market as it has so successfully done ever since its reopening in 1954. It is obvious that it received no such encouragement. There are even reasons to believe that it was informally told that we were totally uninterested in what might happen to the price of gold in the free market.

The speculative fears that have now been triggered by the do-nothing attitude of our Treasury will make official interventions on the gold market far more costly than they would have been otherwise. Yet our means of fighting such speculation are still enormous and far more than sufficient to break it.

We still have about $7 billion of so-called free gold above the amounts legally earmarked as cover for our currency. We could also, whenever we wish, draw up to nearly $6 billion, or even more, from the International Monetary Fund.

MAINTAINING DOLLAR

A devaluation of the dollar, or—what would in the end come to the same thing—a gold embargo would be an act of sheer folly and a wanton crime against the people of this country, and against the friendly nations who have long accepted

our financial leadership and placed their trust in the U.S. dollar and the integrity and intelligence of our monetary management.

Something, however, needs to be done. Brave talks and incantations about a sound dollar are not enough. The solutions are simple and obvious. They have been amply discussed here and abroad for more than a year, and have received official support in the recommendations of the Radcliffe Committee in England. Only our own Treasury and administration have refused to show any constructive interest in a problem which is their own, and crucial, responsibility.

ROBERT TRIFFIN.

NEW HAVEN, CONN., *October 21, 1960.*

DECEMBER 9, 1960.

Mr. PER JACOBSSON,
Managing Director, International Monetary Fund,
Washington, D.C.

DEAR MR. JACOBSSON: The Joint Economic Committee has just concluded a hearing on the current economic outlook. Prof. Robert Triffin, of Yale University, was one of the members of the panel appearing before the committee.

During Mr. Triffin's testimony he referred to materials which he had prepared in reply to a paper issued on October 17 by Mr. Altman and the Research and Statistics Department of the International Monetary Fund. The title of the Monetary Fund paper is "Professor Triffin's Diagnosis of International Liquidities and Proposals for Expanding the Role of the IMF."

On motion of Senator Bush, there being no objection, Mr. Triffin's paper entitled "Altman on Triffin, a Rebuttal" was included in the public record of the hearing.

In order to complete the record and in fairness to Mr. Altman, the committee also moved to include a copy of the original paper by Mr. Atlman in the public record of the hearing. It is my understanding that while the paper has not yet been released for public use it has been given very wide distribution. The Joint Economic Committee would greatly appreciate having a copy of the paper for inclusion in the record of these hearings.

Faithfully yours,

PAUL H. DOUGLAS, *Chairman.*

INTERNATIONAL MONETARY FUND,
Washington, December 15, 1960.

Hon. PAUL H. DOUGLAS,
Chairman, Joint Economic Committee,
Congress of the United States,
Washington, D.C.

DEAR SENATOR DOUGLAS: As requested in your letter of the 9th December, I am enclosing herewith a copy of Mr. Altman's paper issued on October 17 entitled "Professor Triffin's Diagnosis of International Liquidity and Proposals for Expanding the Role of the IMF." I would not object to this paper being included in the record of the Joint Economic Committee hearings on the current economic outlook if this is the desire of the committee.

I should like to mention, however, that this paper was prepared personally by Mr. Altman, and not by the Research and Statistics Department of the International Monetary Fund. It is not an official document of the Fund, and the views presented in the paper should not be considered as necessarily reflecting the views of the executive directors or of the management of the Fund. Although the paper has been given some distribution, it has not been published or made available for public use. Mr. Altman is revising his paper to take account of observations he has received, and to clarify certain points, and it is intended to publish the revised version in the March 1961 issue of International Monetary Fund Staff Papers, where it will, of course, be freely available to the public. Here again, however, I should stress that all issues of Staff Papers carry an extract from the foreword to the first issue to the effect that the views presented in the papers are not to be interpreted as necessarily indicating the position of the executive board or of the officials of the Fund.

In order to make clear the exact status of Mr. Altman's paper, I should be grateful if you would include this letter in the record of the Joint Economic Committee as a preface to Mr. Altman's paper.

Yours sincerely,

PER JACOBSON, *Managing Director.*

Senator BUTLER. This is not a copy of a letter that I have.

Senator BUSH. He was asking about the official replies to the committee's requests.

The CHAIRMAN. The official replies are to be included in this proceeding. This is supplementary literature.

Mr. TRIFFIN. I think, Mr. Chairman, you should obtain probably the permission of the Fund to publish that paper which was not for public use, but which was given very wide distribution.

I think, though, that the intention was that this would be published next February in a volume at Harvard. Thus I do not think there is anything confidential in it.

Senator BUTLER. Mr. Chairman, do I understand that the remarks now will be addressed not to the replies received from the President of the United States, the Secretary of the Treasury, and the President of the International Monetary Fund, but will be directed to this reply from the International Monetary Fund under other circumstances?

The CHAIRMAN. As I understand it, he is going to address his remarks to the situation and this other material is only presented to give the background of the discussion of the controversy.

Senator BUTLER. Are those letters available now?

The CHAIRMAN. Yes.

Senator BUTLER. Can we see them?

The CHAIRMAN. Certainly.

Senator BUTLER. It may be that we will want to ask some questions in connection with those replies.

Mr. TRIFFIN. Let me, however, brush aside these technical controversies and see whether the events of the last year have confirmed or not the broad trend discussed there in October of 1959.

I distinguished at that time in my testimony two problems, the first of which was already amply discussed then, but the second largely ignored in current economic and political discussions of our balance-of-payments crisis.

The first, and best known, problem was to restore full competitiveness in our external trading position.

I anticipated some improvement in this respect, but felt that time would be needed to effect—

in as smooth a manner as possible—in the interest of countries as well as in our own—the readjustment of our current overall balance-of-payments deficit.

The improvement so far this year has been highly gratifying. It is indeed much larger than I would have dared hope.

In the first 9 months of 1960, we have been running a surplus on current account at an annual rate of $2 billion as contrasted with a current account deficit of nearly $1 billion in 1959.

That is to say an improvement of about $3 million——

The CHAIRMAN. Is that in the balance of trade or balance of payments?

Mr. TRIFFIN. Trade and services, but only on current account, excluding all capital movements.

The CHAIRMAN. Excluding capital movements and foreign aid?

Mr. TRIFFIN. That is right.

Let us not think, however, that we have licked the problem. Our exports have been benefited this year from booming conditions in Japan and Western Europe and have been abnormally swollen by a temporary spurt in cotton and airplane deliveries abroad.

Moreover, a $2 billion surplus in our current account is still considerably short of what would be needed to finance the 4 to 6 billion dollars annual rate of economic aid and capital exports, public and private, which has characterized the last 10 years and will remain necessary to the preservation of our world leadership in the years to come.

Thus, our $2 billion surplus on current account will be much more than absorbed this year by our exports of capital, and will still leave us with an overall deficit about $4 billion in our international payments.

Another year or two will probably prove necessary to close that gap, but this is no reason for panic. The amounts involved are extremely small in relation both to our gross national product and to the overall level of our foreign transactions.

Our huge gold reserves, moreover, should give us ample time to deal with such a problem in a rational manner, avoiding costly and unnecessary disturbances to our own economy and to the economy of other friendly nations.

Finally, the indispensable readjustments in our balance of payments should be eased considerably over the next year or two by the delayed adaptation of European, and particularly German, prices, wage, and expenditure levels, to the enormous increases in productivity which have temporarily and abnormally boosted these countries' competitiveness in world markets in relation to our own.

If I may, I would like to draw your attention to another paper of mine which I have put in the record under the title: "Digest of Crucial Statistics on the Gold and the Dollar Problem." The first part of this gives some figures which relate to the statements I have just made.

(The document referred to follows:)

DIGEST OF CRUCIAL STATISTICS ON GOLD AND THE DOLLAR PROBLEM

I. On the U.S. competitive position in world trade

1. The general index of export prices rose by 8 percent in the United States from 1953 to the middle of 1960, while it declined by 2 percent, on the average, in continental Europe.

2. Steel prices have played a major role in this deterioration of the U.S. competitive position. U.S. prices were reported at $129 a long ton in the middle of 1960, as against $101 in Belgium and about $106 in both France and Germany. Prices had risen by 26 percent in the United States since 1953, as against 1 percent in France, and about 10 percent in Belgium and Germany.

3. Consumer prices and wages, however, were rising far more rapidly in Europe than in the United States, reflecting delayed adjustments to the spectacular recovery of Europe's productive capacity and balance of payments since the war. These overdue readjustments are particularly noticeable in Germany where wages in manufacturing industries have risen by 60 percent since 1953 (as against 29 percent in the United States), and by 9 percent in a single year (as against 2.5 percent in the United States), from the second quarter of 1959 to the second quarter of 1960.

II. On the international liquidity position of the United States

[Billions of dollars]

	1949	1957	September 1960	Nov. 25, 1960
1. U.S. gold stock	24.6	22.9	18.7	18.0
2. Foreign countries' dollar holdings	6.4	14.9	19.1	----------
3. Net U.S. position (line 1 minus line 2)	+18.2	+8.0	−0.4	----------

III. On the adequacy and composition of world monetary reserves outside the United States and the United Kingdom

[In percent of imports]

	1913	1928	1938	1959
1. Gold	32	29	51	23
2. Foreign exchange	3	16	11	24
3. Total	35	44	62	48

IV. Sources of reserve increases outside the United States, 1950–59

[In percent of total increase]

1. Gold	30
(*a*) From current production	24
(*b*) From U.S.S.R. sales	6
2. U.S. deficits	65
(*a*) Gold losses	29
(*b*) Official dollar balances	36
3. Other	5

Mr. TRIFFIN. I remain convinced, myself, that the major danger that faces us today and that may face the rest of the world tomorrow, has to do with the other problem to which I drew your attention a year ago, but which unfortunately still seems to be only very dimly perceived and understood by most responsible officials in this country.

Our dollar is threatened today not only by our current balance-of-payments deficits, but also, and far more immediately, by the huge short-term claims accumulated in our market by foreigners, and which they are legally entitled to convert into gold at our Treasury, either directly or indirectly.

These amounted to about $17 billion when I spoke to you last year. They have climbed since then by another $2½ billion to well over $19 billion, while our gold stock declined by nearly $2 billion over the same period.

The excess of our gold reserves over and above our short-term indebtedness abroad reached a peak of more than $18 billion in 1949. It had already dropped to less than $3 billion by the middle of last year. It turned negative last August, and it is highly probable that by now the dollar balances held in our market by foreigners exceed our total gold stock by about $1 billion.

The CHAIRMAN. Mr. Triffin, if you take into account the some $12½ billion in gold which I believe is required as a 25-percent reserve on Federal Reserve notes, the present balance amounts to only about $5½ billion. Is that not true?

Mr. TRIFFIN. About $6 billion, yes; that is right.

The CHAIRMAN. Therefore, the liquid claims of nonnationals would be approximately four times that?

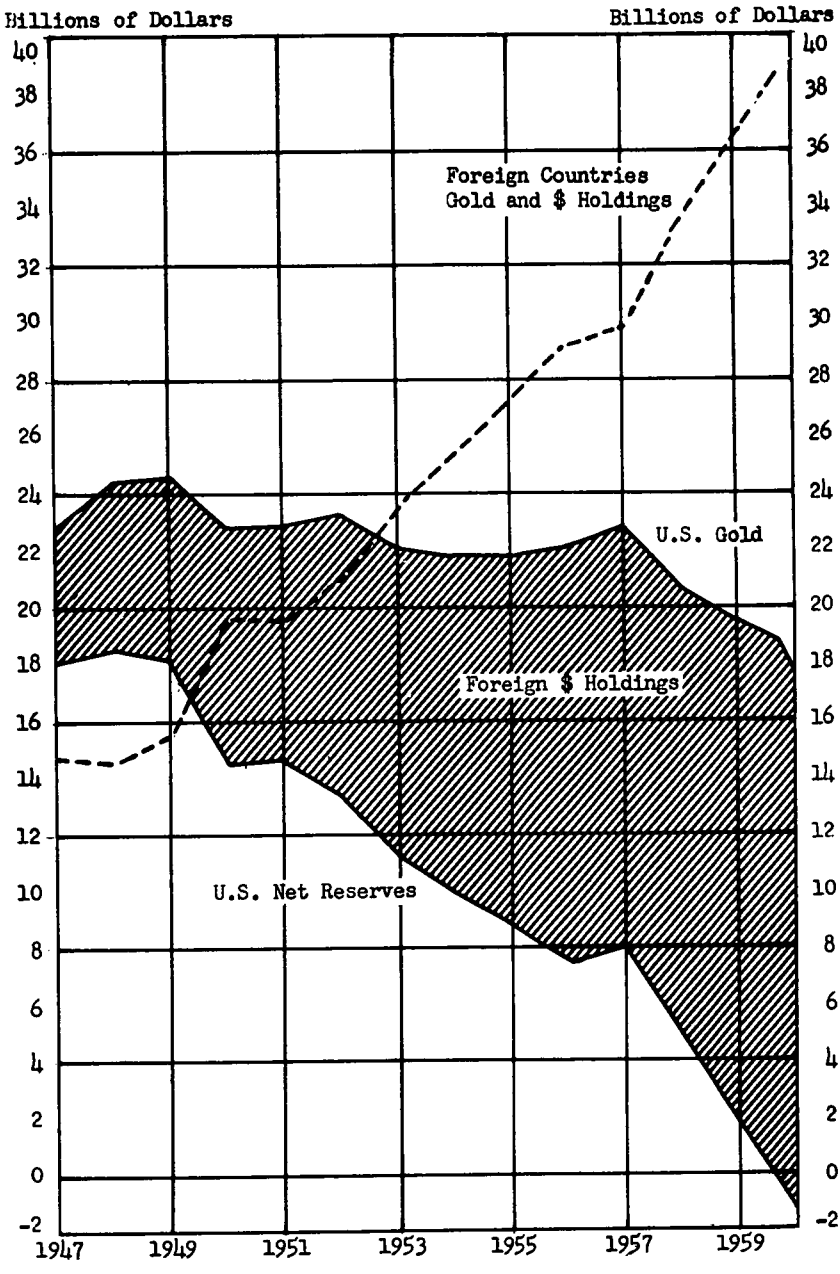
Mr. TRIFFIN. Yes, sir.

May I give you a chart which I did not have time to produce in broader form, but which shows this very clearly, I think.

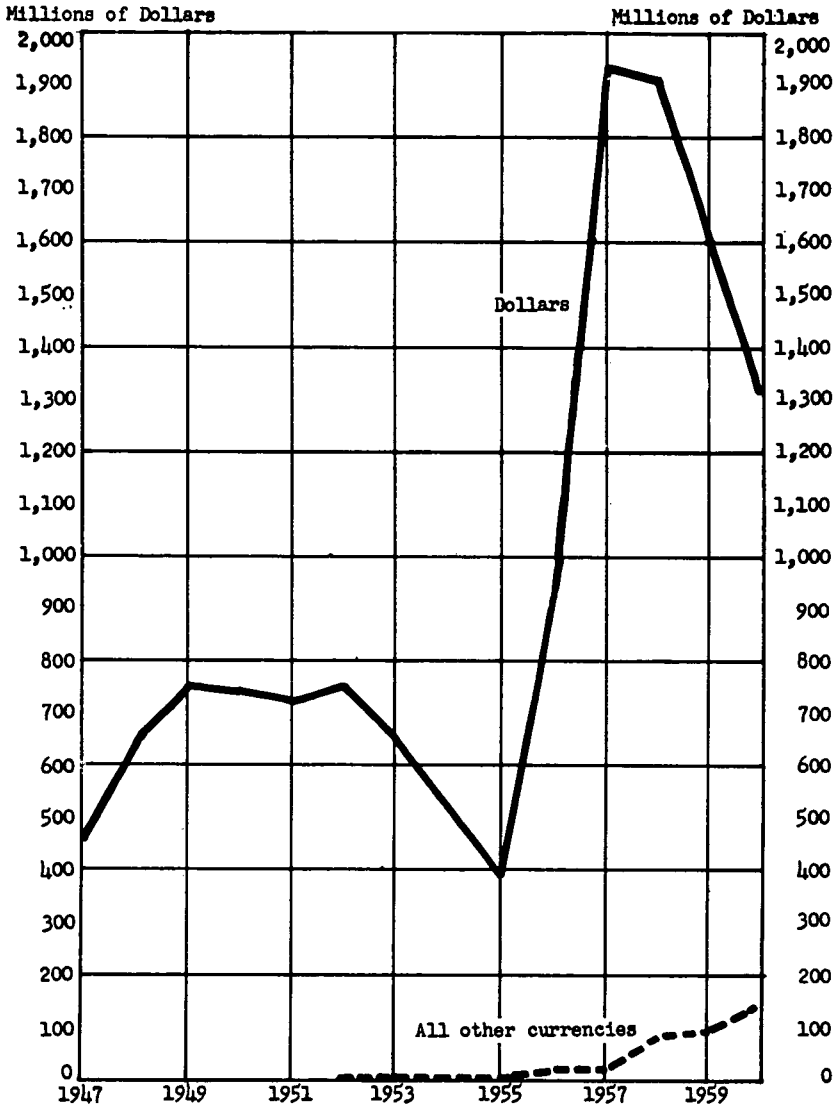
The CHAIRMAN. Senator Bush suggests that this chart be put in the record.

Mr. TRIFFIN. Yes.
The CHAIRMAN. We will have it reproduced in proper form.
(The chart referred to follows:)

WORLD GOLD AND DOLLAR HOLDINGS



NET CURRENCY SALES BY THE IMF, 1947–1960 (CUMULATIVE, END OF YEAR)



Gold and dollar holdings and net currency sales by the IMF

[In millions of U.S. dollars]

Cumulative position, at the end of—	Gold and dollar holdings				Net IMF sales	
	United States			Other countries	U.S. dollars	All other currencies
	Gold	Foreign dollar holdings (−)	Net			
1947	22,868	4,854	18,014	14,778	462	----------
1948	24,399	5,854	18,545	14,596	658	----------
1949	24,563	6,409	18,154	15,450	758	----------
1950	22,820	8,393	14,427	19,577	743	----------
1951	22,873	8,271	14,602	19,532	719	----------
1952	23,252	9,864	13,388	20,888	752	4
1953	22,091	10,825	11,266	23,428	656	4
1954	21,793	11,895	9,898	25,418	517	4
1955	21,753	13,028	8,725	27,183	376	4
1956	22,058	14,590	7,468	29,086	962	19
1957	22,857	14,861	7,996	29,785	1,929	19
1958	20,582	15,598	4,984	33,546	1,910	84
1959	19,507	17,711	1,796	36,486	1,613	91
September 1960	18,725	19,136	−411	39,000	1,328	138

	Gross drawings		Net drawings		Cumulative gross		Cumulative net	
	Dollars	Other	Dollars	Other	Dollars	Other	Dollars	Other
1947	461.6	6.1	461.6	----------	461.6	6.1	461.6	--------
1948	196.6	11.4	196.6	----------	658.2	17.5	658.2	--------
1949	101.5	--------	99.6	----------	759.8	17.5	758.1	--------
1950	----------	----------	−14.6	----------	759.8	17.5	743.5	--------
1951	6.6	28.0	−24.3	----------	766.4	45.5	719.2	--------
1952	85.1	--------	32.5	DM 4.4	851.5	45.5	751.7	4.4
1953	67.5	162.0	−95.3	----------	919.0	207.5	656.4	4.4
1954	62.5	--------	−138.9	----------	981.5	207.5	517.5	4.4
1955	27.5	--------	−141.8	----------	1,009.0	207.5	375.7	4.4
1956	677.6	15.0	586.3	C$15.0	1,686.6	222.5	962.0	19.4
1957	977.1	--------	966.9	----------	2,663.7	--------	1,928.9	19.4
1958	252.2	85.7	−18.8	DM64.5	2,915.9	308.2	1,910.1	83.9
1959	138.5	41.3	−297.3	DM7.0	3,054.4	349.5	1,612.8	90.9
Through September 1960	113.1	79.0	−284.4	47.3	3,167.5	428.4	1,328.4	138.2

Mr. TRIFFIN. Even if we were to regain tomorrow full balance on overall account in our foreign transactions, the dollar would still remain threatened by the ever present possibility of large scale conversions of those dollar balances into gold at our Treasury.

That is to say, we might well be in equilibrium in our overall balance of payments and yet be faced by massive demands for conversion into gold of short-term debts inherited from our former deficits.

Such massive liquidation by foreigners of their present dollar holdings would certainly become less likely as we give evidence of our determination and ability to put a stop to our persistent deficits of the last decade.

It would still exist, however, and might be triggered at any time by speculative rumors, justified or unjustified, or, more simply, by interest rate differentials between New York and other financial centers, particularly in Western Europe.

As long as such a threat is allowed to persist, we may find ourselves unable to shape our own credit and interest rate policies at home in the best interests of our economy without running the risk of large gold outflows from our shores and, ultimately, of a totally unnecessary devaluation of the dollar, disastrous to us and to the rest of the world as well.

Even if we chose to close our eyes to this danger, another major crisis would develop in time from the very success of our efforts to redress our own balance-of-payments position.

The elimination of our deficit would indeed dry up at the source two-thirds of the annual supply of monetary reserves on which the rest of the world has come to depend for the maintenance of international currency convertibility in an expanding world economy.

The present crisis of the dollar is indeed inextricably bound up with the ill-fated attempt to dig up and dust off an international monetary system which collapsed nearly half a century ago, during the First World War, and which must be thoroughly overhauled in order to adapt it to present day needs and conditions.

This international monetary system is theoretically based on the old, pre-1914 gold standard. Gold has long lost its former key role in the domestic monetary system of the United States, as well as of other countries of the world. It still remains, nevertheless, the ultimate means of settlement in international transactions, and remains also for that reason one of the main components of the international monetary reserves necessary to the preservation of currency convertibility, here and abroad.

Gold production, however, falls far short of the technical requirements and of the effective demand for reserve increases in an expanding world economy.

It has contributed considerably less than half of those increases over the period 1914–59, taken as a whole, and barely one-third during the decade of the 1950's.

Various makeshifts have been resorted to, under the pressure of circumstances, to make up this deficiency. The major one has been the acceptance of short-term sterling and dollar I O U's in lieu of gold as a medium for reserve accumulation by the central banks of other countries.

The so-called gold exchange, or key currency system of reserve accumulation played a large part in the downfall of sterling in 1931, and is an important factor in the gradual weakening of the international position of the dollar in recent years.

In 1958 and 1959, for instance, more than 90 percent of the reserve increases of foreign countries have been derived from the U.S. gold losses and rising short-term indebtedness to foreign central banks.

Clearly, the world cannot tolerate much longer an international monetary system which has become so utterly dependent for its functioning on such factors as these:

1. First of all, the hazards of gold digging in a country, South Africa, whose economic life might be brought to a standstill tomorrow by the threatening eruption of racial warfare.

2. Secondly, Mr. Khrushchev's policies about U.S.S.R. gold sales to the West. Such Russian sales were responsible for nearly 40 percent of reserve increases in recent years, and their abrupt cessation in 1960 contributed, at least in part, to the recent breakout of gold prices in London.

The CHAIRMAN. Mr. Triffin, do you have any idea as to the probable gold reserves of the Soviet Union inside the Soviet Union?

Mr. TRIFFIN. No more than what I have read from various guesses made by various people who do not claim to have any accurate information.

These guesses place it usually around $6 to $8 billion. That is to say, it is the largest gold reserve in the world after our own.

The CHAIRMAN. What is the annual rate of production of gold; A, in South Africa; and, B, in the Soviet Union?

Mr. TRIFFIN. For the Soviet Union we cannot be certain. I believe, however, that from the estimates which I have seen it is very close to South Africa. It is given for South Africa as about $700 million a year, and about the same figure is quoted for the Soviet Union.

The CHAIRMAN. What about the production of all other countries in the world?

Mr. TRIFFIN. It is relatively small. All other countries taken together would make about $400 million.

The CHAIRMAN. So the total annual production of gold is about $1.8 billion?

Mr. TRIFFIN. Including this estimate of $700 million for Russia, yes.

The CHAIRMAN. What amount would be the commercial use of gold each year?

Mr. TRIFFIN. It is difficult to tell, but at the moment I would like to exclude the figures from Russia because those are so conjectural, but out of the $1,100 million of gold production in the West, I believe that the increase of monetary reserves last year was of the order of $500 to $600 million.

The CHAIRMAN. About half?

Mr. TRIFFIN. About half goes into private hoards, or industry and the arts. Some private businessman in Switzerland who follows this very closely by reason of his interest in his business told me that he considers that this has been increasing very rapidly, not so much for hoarding reasons, but simply because of booming conditions in Europe, that a great deal more gold is going into the arts than was going into the arts legitimately some years ago.

So that the problem is likely to become more serious as we go on.

Senator BUSH. Taking the figure of $7 billion, which is an estimate, for what value I do not know, but you take the $7 billion from Russia and take our gold reserves and the other gold reserves of the countries who have gold reserves, what is your total estimate?

Mr. TRIFFIN. The total estimate I think runs to around $40 billion excluding Russia. If you include Russia, it would be $47 billion, roughly.

The CHAIRMAN. Then the increase in the monetary gold stock is not much above 1 percent a year?

Mr. TRIFFIN. That is right.

Senator BUSH. If I understood the Senator correctly, he estimated 7, 7, and 4, which would be 1.8 billion.

Mr. TRIFFIN. Yes, but that is total gold production about half of which goes into the arts or into industry, but does not go into monetary reserves.

Senator BUSH. About half of the 1.8 billion would go into commercial——

Mr. TRIFFIN. We were talking about 1.1 billion because we did not in this estimate of the chairman include Russian gold because there is so little information on that that it is rather conjectural to use it.

Senator BUSH. Then if you exclude them altogether, you have $40 billion on the one hand, against production of 1.1 billion, which would be 2½ percent now.

Now you have to take half of the 1.1 billion for industrial use so that brings it down to 5½. It would be about 1.4 percent annual increase.

Mr. TRIFFIN. That is right. Of course, if you consider what addition this makes in percentage to the total gold and foreign exchange reserves of countries, it is even less than that because total gold and foreign exchange reserves are about $60 billion, or something of that order.

Senator BUSH. Thank you.

Mr. TRIFFIN. So far I indicated two sources of increase in those monetary reserves of countries; first, gold digging in South Africa, and, second, the Russian gold sales to the West which are a matter for their policy, and then, third, the perpetuation of our own balance-of-payments deficits and the continued acceptance of dollar I O U's as monetary reserves by other countries.

The latter accounts, as I mentioned before, for about two-thirds of current reserve increases to date.

If you take each one of those, you will see each one is completely haphazard and the last one obviously one that cannot continue.

A fundamental reform of the international monetary system has long been overdue. Its necessity and urgency are further highlighted today by the imminent threat to the mighty U.S. dollar itself. Both problems are closely intertwined and should be attacked together.

I have discussed elsewhere the reforms of the International Monetary Fund that would seem best suited both to help us solve right now the present dollar crisis and to forestall, later on, a world liquidity shortage.

As usual, however, administrative complacency and inertia have continued so far to oppose apparently unsurmountable obstacles to the simple and obvious remedies at hand.

Secretary Anderson referred in his statement at the Fund meeting last September to those suggestions advocating changes in the international monetary system as now functioning. He concluded it was now functioning efficiently and that:

> We are not confronted with any immediate need to consider changes in the system as a whole, or in the International Monetary Fund.

Similarly, the IMF staff paper to which I referred earlier, argues that we can in all probability limp along with our present international monetary system, and I quote again:

> At least for the next 5 or 10 years.

And that it may be unnecessary to "anticipate developments over a much longer period."

The Fund recognized that "as to this, opinions differ." They do indeed. The art of forecasting has not yet been sufficiently perfected to allow us to wait safely until the very last moment before tackling an impending crisis.

Bureaucratic wisdom too often advises us "not to cross our bridges before we come to them." I prefer, for my part, the opposite counsel, "An ounce of prevention is worth more than a pound of cure."

We have waited only too long already. I hope—nay, I trust—that the new administration will be ready to deal boldly and imaginatively with the issues that confront it, and that it will prefer forward-looking, long-range solutions, both to the panic action of the last few weeks and to the ever-tempting makeshifts and halfway measures that would once more postpone, rather than solve, the fundamental problem, that is to say, the long overdue adjustment of the 19th century gold standard to the world of the 20th century.

Thank you, gentlemen.

The CHAIRMAN. Thank you very much, Mr. Triffin.

(The prepared texts of Mr. Triffin's presentation follows:)

STATEMENT OF ROBERT TRIFFIN TO THE JOINT ECONOMIC COMMITTEE OF CONGRESS, WASHINGTON, D.C., DECEMBER 8, 1960

Mr. Chairman, members of the committee, my oral statement will be very brief.

I testified before your committee a little more than a year ago on the same problems that concern us today. I outlined, at your request, the measures which I regarded as essential to deal with the alarming deterioration in the international position of the U.S. dollar. In concluding my statement, however, I expressed the fear that only a real crisis would shake us into action ("Hearings on Employment, Growth, and Price Levels," Oct. 28, 1960, p. 2935).

Your committee undoubtedly shared the same concern, and decided to transmit the records of the day's proceedings to the President, the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, and the Managing Director of the International Monetary Fund for such comments as they might have. I was not privileged to see the exact text of the answers which you received from these gentlemen, but I have good reasons to think that they were essentially negative. Even as late as last September, official optimism and reassurances were generously poured upon the delegates who attended the annual meetings of the International Monetary Fund and Bank. More recently, wide distribution was given by the International Monetary Fund to a paper issued on October 17 by its Research and Statistics Department on "Professor Triffin's Diagnosis of International Liquidity and Proposals for Expanding the Role of the IMF," and in which detailed and scathing criticisms are leveled against the views which I presented to you a year ago. As I told you at that time (see p. 2954 of the hearings), I fully expected such a reaction, and I very much welcome the opportunity given me today to put into the record the rather technical paper which I have prepared in answer to the Fund's criticisms.

Let me, however, brush aside these technical controversies, and see whether the events of the last year have confirmed or not the broad trends discussed here in October of 1959. I distinguished at that time two problems, the first of which was already amply discussed then, but the second largely ignored in current economic and political discussions of our balance-of-payments crisis.

The first, and best known, problem was to restore full competitiveness in our external trading position. I anticipated some improvement in this respect, but felt that time would be needed to effect "in as smooth a manner as possible—in the interest of other countries as well as in our own—the readjustment of our current overall balance of payments deficit" (pp. 2914, 2907–2908, and 2938).

The improvement so far this year has been highly gratifying. It is indeed much larger than I would have dared hope. In the first 9 months of 1960, we were running a surplus on current account at an annual rate of about $2 billion, as contrasted with a current account deficit of nearly $900 million in 1959.

Let us not think, however, that we have licked the problem. Our exports have benefited from booming conditions in Japan and Western Europe, and have been abnormally swollen by a temporary spurt in cotton and airplane deliveries abroad. Moreover, a $2 billion surplus in our current account it still considerably short of what would be needed to finance the $4 billion to $6 billion annual rate of economic aid and capital exports—public and private—which has characterized the last 10 years and will remain necessary to the preservation of our world leadership in the years to come. Thus, our $2 billion surplus on current account will be much more than absorbed this year by our exports of

capital, and will still leave us with an overall deficit of about $4 billion in our international payments. Another year or two will probably prove necessary to close that gap, but this is no reason for panic. The amounts involved are extremely small in relation both to our GNP (less than 1 percent) and to the overall level of our foreign transactions. Our huge gold reserves, moreover, should give us ample time to deal with such a problem in a rational manner, avoiding costly and unnecessary disturbances to our own economy and to the economy of other friendly nations. Finally, the indispensable readjustments in our balance-of-payments should be eased considerably over the next year or two by the delayed adaptation of European—and particularly German—price, wage, and expenditure levels to the enormous increases in productivity which have temporarily and abnormally boosted these countries' competitiveness in world markets in relation to our own.

I remain convinced myself that the major danger that faces us today—and that may face the rest of the world tomorrow—has to do with the other problem to which I drew your attention a year ago, but which unfortunately still seems to be only very dimly perceived and understood by responsible officials in this country. Our dollar is threatened today not only by our current balance-of-payments deficits, but also—and far more immediately—by the huge short-term claims accumulated by foreigners and which they are legally entitled to convert into gold at our Treasury, either directly or indirectly. These amounted to about $17 billion when I spoke to you last year. They have climbed since then by another $2.5 billion to well over $19 billion, while our gold stock declined by nearly $2 billion over the same period. The excess of our gold reserves over and above our short-term indebtedness abroad reached a peak of more than $18 billion in 1949. It had already dropped to less than $3 billion by the middle of last year. It turned negative last August, and it is highly probable that by now the dollar balances held in our market by foreigners exceed our total gold stock by close to $1 billion.

Even if we were to regain tomorrow full balance on overall account in our foreign transactions, the dollar would remain threatened by the ever-present possibility of large-scale conversions of those dollar balances into gold at our Treasury. That is to say, we might well be in equilibrium in our overall balance-of-payments, and yet be faced by massive demands for conversion into gold of short-term debts inherited from our former deficits. Such massive liquidation by foreigners of their present dollar holdings would certainly become less likely as we give evidence of our determination and ability to put a stop to our persistent deficits of the last decade. It would still exist, however, and might be triggered at any time by speculative rumors—justified or unjustified—or, more simply, by interest rate differentials between New York and other financial centers, primarily in Western Europe. As long as such a threat is allowed to persist, we may find ourselves unable to manage our own credit and interest rate policies in the best interests of our economy without running the risk of large gold outflows from our shores and, ultimately, of a totally unnecessary devaluation of the dollar, disastrous to us and to the rest of the world as well.

Even if we chose to close our eyes to this danger, another major crisis would develop in time from the very success of our efforts to redress our own balance-of-payments position. The elimination of our deficits would indeed dry up at the source two-thirds of the annual supply of monetary reserves on which the rest of the world has come to depend for the maintenance of international currency convertibility in an expanding world economy.

The present crisis of the dollar is indeed inextricably bound up with the ill-fated attempt to dig up and dust off an international monetary system which collapsed nearly half a century ago, during the First World War, and which must be thoroughly overhauled in order to adapt it to present-day needs and conditions.

This international monetary system is theoretically based on the old, pre-1914, gold standard. Gold has long lost its former key role in the domestic monetary system of the United States as well as of other countries. It still remains, nevertheless, the ultimate means of settlement in international transactions and remains also, for that reason, one of the main components of the international monetary reserves necessary to the preservation of currency convertibility, here and abroad. Gold production, however, falls far short of the technical requirements, and of the effective demand, for reserve increases in an expanding world economy. It has contributed considerably less than half of

those increases over the period 1914–59 as a whole, and barely one-third during the decade of the 1950's.

Various makeshifts have been resorted to, under the pressure of circumstances, to make up this deficiency. The major one has been the acceptance of short-term sterling and dollar I O U's, in lieu of gold, as a medium for reserve accumulation by the central banks of other countries. This so-called gold exchange or key currency system of reserve accumulation played a large part in the downfall of sterling in 1931, and is an important factor in the gradual weakening of the international position of the dollar in recent years. In 1958 and 1959, for example, more than 90 percent of the reserve increases of foreign countries have been derived from the U.S. gold losses and rising short-term indebtedness to foreign central banks.

Clearly the world cannot tolerate much longer an international monetary system which has become so utterly dependent for its functioning on—

(1) the hazards of golddigging in a country—South Africa—whose economic life may be brought to a standstill tomorrow by the threatening eruption of racial warfare;

(2) Mr. Khrushchev's policies about U.S.S.R. gold sales to the West (responsible for nearly 40 percent of reserve increases in recent years and whose cessation in 1960 contributed, at least in part, to the recent breakout of gold prices in London);

(3) the perpetuation of our balance-of-payments deficits, and the continued acceptance of dollar I O U's as monetary reserves by other countries.

A fundamental reform of the international monetary system has long been overdue. Its necessity and urgency are further highlighted today by the imminent threat to the once mighty U.S. dollar. Both problems are closely intertwined and should be attacked together.

I have abundantly discussed elsewhere the reforms of the International Monetary Fund that would seem best suited both to help us solve right now the present dollar crisis and to forestall, later on, a world liquidity crisis. As usual, however, administrative complacency and inertia have continued so far to oppose apparently unsurmountable obstacles to the simple and obvious remedies at hand.

Secretary Anderson referred, in his statement at the Fund's meeting last September, to the suggestions advocating changes in the international monetary system as it is now functioning, but concluded that is was functioning efficiently and that "we are not confronted with any immediate need to consider changes in the system as a whole or in the International Monetary Fund." Similarly, the IMF staff paper to which I referred earlier argues that we can, in all probability, limp along with our present international monetary system "at least for the next 5 or 10 years," and that it may be unnecessary to "anticipate developments over a much longer period."

The Fund recognizes that "as to this, opinions differ." They do indeed. The art of forecasting has not yet been sufficiently perfected to allow us to wait safely until the very last moment before tackling an impending crisis. Bureaucratic wisdom too often advises us "not to cross our bridges before we come to them." I prefer, for my part, the opposite counsel: "An ounce of prevention is worth more than a pound of cure."

We have waited only too long already. I hope—nay, I trust—that the new administration will be ready to deal boldly and imaginatively with the issues that confront it, and that it will prefer forward-looking, long-range solutions both to the panicky action of the last few weeks and to the ever-tempting makeshifts and halfway measures that would once more postpone, rather than solve, the fundamental problem, i.e., the long overdue adjustment of the 19th century gold standard to the world of the 20th century.

APPENDIX

The following estimates may be used to bring up to date tables 1, 2, and 3 of my October 28, 1959, statement to the Joint Economic Committee (pp. 2915–2917 of the committee's hearings on employment, growth, and price levels).

TABLES 1–2.—*Balance of payments of the United States, 1952–60*

[Annual rates, in billions of dollars]

	Current account [1]			Exports of U.S. capital and economic aid			Overall balance		
	With the world	With Western Europe	With the rest of the world	With the world	With Western Europe	With the rest of the world	With the world	With Western Europe	With the rest of the world
1952–57	2.1	0.1	2.0	3.9	1.2	2.8	−1.8	−1.1	−0.7
1958	1.5	−.8	2.4	5.4	.8	4.7	−3.9	−1.6	−2.3
1959 [2]	−.9	−1.9	1.1	4.3	.3	4.0	−5.2	−2.2	−3.0
1960:									
January–June	2.1	−.4	2.5	5.3	.7	4.6	−3.2	−1.1	−2.1
January–September	2.0			5.6			[3] −3.6		

[1] Including ordinary transfers.
[2] Excluding U.S. contribution to International Monetary Fund capital increase.
[3] Net sum of following items:

(*a*) Recorded payments	4.3
(1) Direct and long-term foreign capital	0.7
(2) Liquid foreign dollar holdings	2.5
(3) U.S. gold sales	1.1
(*b*) Unrecorded payments (errors and omissions)	−.7

TABLE 3.—*Monetary gold and dollar holdings, 1949–60*

[In millions of U.S. dollars]

	Monetary gold [1]				Dollar holdings			Gold and dollar holdings		
	Total (a=b+c+d)	United States (b)	Foreign countries (c)	International institutions (d)	Total (e=f+g)	Foreign countries (f)	International institutions (g)	United States [2] (h=b−f)	Foreign countries (i=c+f)	International institutions (j=d+g)
End of—										
1949	35,055	24,563	9,041	1,451	8,226	6,409	1,817	18,154	15,450	3,268
1952	35,968	23,252	11,024	1,692	11,719	9,864	1,855	13,388	20,888	3,547
1957	38,961	22,857	14,924	1,180	16,600	14,861	1,739	7,996	29,785	2,919
1958	39,862	20,582	17,948	1,332	17,637	15,598	2,039	4,984	33,546	3,371
1959:										
June	40,340	19,746	18,684	1,909	20,078	16,800	3,279	2,946	35,484	5,188
December	40,689	19,507	18,775	2,407	21,529	17,711	3,818	1,796	36,486	6,225
1960:										
March	40,849	19,457	18,938	2,454	21,937	17,928	4,009	1,529	36,866	6,464
June	41,180	19,363	19,302	2,515	22,702	18,632	4,070	731	37,934	6,585
August		19,045		2,562	23,508	19,307	4,200	−262		6,762
September		18,725		2,564	23,373	19,136	4,237	−411		6,801
October		18,443								

[1] Gold estimates are obtained residually by deducting dollar holdings from estimated gold and dollar holdings.
[2] Excess of U.S. gold stock over dollar holdings of foreign countries only, but not of international institutions.

Source: Federal Reserve Bulletin.

The Crisis of the Dollar-Exchange Standard

Taken by itself, the flareup in the free gold markets, on October 20, would hardly deserve the attention which it has received in the financial press. Free gold prices remained for years well above $35 an ounce—and often closer to $50 than to $40—in the late 1940's and early 1950's, without endangering at any time the prestige and solidity of the U.S. dollar.

The situation is different today, however, in two major respects.

First of all, the evolution of our balance of payments over the last 10 years has been marked by an increasing loss of competitiveness of American manufactures in world markets, particularly in relation to our main competitors in Japan and in the European Economic Community. Our current account surplus with the world at large dropped from nearly $6 billion a year in 1949 to an actual deficit of nearly $1 billion in 1959. This problem, fortunately, may already be well on its way toward a solution. The spectacular recovery of our exports this year has pulled us out of the red already, and the year 1960 will probably close with a current account surplus of some $2 billion in our merchandise and service transactions with the rest of the world.

This is not enough. We should aim at a surplus of $4 billion to $6 billion a year, if we are to maintain our capital exports and economic aid to the underdeveloped countries at a level commensurate with our responsibilities as the leading economic and political power of the world. Our laggard rates of growth and productivity must be stepped up sharply, and our wage and price structure must be kept in line with that of our major competitors in world trade.

I am confident that this can, and will, be done, even though it may still take us a year or two to reach our objective. In any case, the problem and its solutions are by now familiar to all, and have been amply debated recently by economists, business men, and even political leaders.

There is, however, another and broader aspect of this issue which is of crucial importance to the world at large as well as to the United States, but which is still all but ignored in contemporary discussions. This has to do with the $19 billion of short-term "dollar balances" held in our market by foreigners, and the role of these balances in the present monetary system of the world.

Even after we regain overall balance in our international transactions, we shall remain saddled with this huge short-term debt which its holders can—directly or indirectly—cash at any time for gold or foreign currencies. We might be in so-called "overall equilibrium" in our foreign transactions, and yet be unable to honor massive demands for such conversion of our dollar balances into gold, sterling or German marks. This situation may constitute tomorrow—indeed, it has already become—a major handicap to our freedom of action, both with respect to our foreign economic and military policies, and to our internal credit and interest rate policies. For example, we have been talking recently of pulling troops out of Germany in order to reduce our gold outflow. We have also found ourselves somewhat hesitant to reduce interest rates to fight an incipient recession, because this might induce an exodus of short-term funds from New York to London or to other financial centers abroad, and result again—as it did in 1958—in a huge drain of gold from Fort Knox.

This headache of ours is inextricably tied up to the fundamental absurdity of the international monetary system itself, as it has operated in the last 10 years, and even in the last half century.

This international monetary system is theoretically based on the old, pre-1914, gold standard. Gold has long lost its former key role in the domestic monetary system of the United States as well as of other countries. It still remains, nevertheless, the ultimate means of settlement in international transactions and remains also, for that reason, one of the main components of the international monetary reserves necessary to the preservation of currency convertibility, here and abroad. Gold production, however, falls far short of the technical requirements, and of the effective demand, for reserve increases in an expanding world economy. It has contributed considerably less than half of those increases over the period 1914–59 as a whole, and barely one-third during the decade of the 1950's.

Various makeshifts have been resorted to, under the pressure of circumstances, to make up this deficiency. The major one has been the acceptance of short-term sterling and dollar I O U's, in lieu of gold, as a medium for reserve accumulation by the central banks of other countries. This so-called gold-exchange or key-currency system of reserve accumulation played a large part in the downfall

of sterling in 1931, and is an important factor in the gradual weakening of the international position of the dollar in more recent years. In 1958 and 1959, for example, more than 90 percent of the reserve increases of foreign countries have been derived from the U.S. gold losses and rising short-term indebtedness to foreign central banks.

Clearly, we cannot tolerate much longer an international monetary system which has become so utterly dependent for its functioning on—

(1) the hazards of golddigging in a country—South Africa—whose economic life may be brought to a standstill tomorrow by the threatening eruption of racial warfare;

(2) Mr. Khrushchev's policies about U.S.S.R. gold sales to the West (responsible for nearly 40 percent of reserve increases in recent years and whose cessation in 1960 contributed, at least in part, to the recent breakout of gold prices in London); and

(3) the perpetuation of our balance-of-payments deficits and the continued acceptance of dollar I O U's as monetary reserves by other countries.

A fundamental reform of the international monetary system has long been overdue. Its necessity and urgency are further highlighted today by the imminent threat to the once mighty U.S. dollar. Both problems are closely intertwined and should be attacked together.

The first, and most feasible, action which could be taken would be to allow the International Monetary Fund to accept reserve deposits from its member central banks, just as our Federal Reserve System accepts reserve deposits from commercial member banks in this country. Under the rules of the Fund, such deposits would carry a gold-exchange guarantee making them extremely attractive to central banks and providing them with an alternative to the cashing of their present dollar balances in gold metal at the U.S. Treasury. About half of our short-term debt abroad could, as a result, be transferred from their present owners to the Fund, and cease to be a constant threat to our freedom of action with respect to both our domestic monetary management and the conduct of our foreign economic policy.

This suggestion could be implemented all the more rapidly as it has already received, in England, the unanimous blessing of the Radcliffe Committee on the Working of the Monetary System.

Its adoption would give us time to explore and negotiate with other interested countries the longer run reforms of the International Monetary Fund Charter necessary to provide our world with a stable and viable international monetary system, adjusted to the needs of our times.[1]

ROBERT TRIFFIN.

YALE UNIVERSITY, *November 1960.*

THE TWILIGHT OF THE GOLD STANDARD AND THE WORLD DOLLAR CRISIS

(By Robert Triffin)

In the decade following the First World War, the world gold shortage was a frequent subject for discussion among academic economists and the main topic on the agenda of a long series of international conferences culminating in the marathon debates of the ill-fated Gold Delegation of the defunct League of Nations. The gold shortage was temporarily solved in the meantime by the growing use of two national currencies—sterling and the dollar—as international world reserves, alongside with the gold in short supply. This, however, could not be more than a makeshift. It ended, disastrously, in the early 1930's with the successive devaluations of both of these currencies, and the consequent collapse of the world monetary system.

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[1] For a more detailed examination of the problem raised in this paper, and the solutions suggested by the author, some readers may wish to consult—

(1) "Gold and the Dollar Crisis," Yale University Press, New Haven, Conn., 1960.

(2) "Europe and the Money Muddle," Yale University Press, New Haven, Conn., 1957.

(3) Joint Economic Committee of the 87th Congress, "Hearings on Employment, Growth, and Price Levels," pt. 9A, Washington, 1959, pp. 2905–2954.

(4) "Improving World Liquidity," the Banker, London, January 1960, and a letter to the editor, may 1960.

(5) "Le Crépuscule de l'Etalon de Change-Or," Problèmes Economiques, No. 665, Paris, September 1960, and "Comptes Rendus des Travaux de la Société Royale de'Economie Politique de Belgique," No. 272, June 1960.

In the decade following the Second World War, the basic role played by gold in our international monetary system was all but forgotten. A new slogan came to dominate academic discussions and governmental policies, the slogan of the "world dollar shortage." These policies were eminently successful. They accelerated the reconstruction of war damage and the expansion of the underdeveloped economies, and stimulated a rate of growth in world trade and world production unprecedented in duration and magnitude in the history of the world.

Yet, they too were built upon the same makeshift as in the 1920's. They too threaten to end in the early 1960's in a new collapse of world trade and world currencies similar to that of the early 1930's.

This grim parallel has its roots in a common and age-old problem: the routine and inertia which tie man to his past and make him incapable or unwilling to effect in time the adjustments necessary to the successful performance, and ultimate survival, of his economic, social, and political institutions in a fast-changing world.

The utter absurdity and anachronism of our international political system are made apparent to all of us by the apocalyptic threat of an atomic war which might end life on this planet. The absurdity and anachronism of our international monetary system are certainly less gruesome. They are also less obvious to the layman, enwrapped as they are in the mysterious and awe-inspiring trappings of high finance. They are nonetheless equally real and ominous.

A simple comparison may be helpful at this stage. We all know too well the need which we have to carry some amount of currency in our pockets and to keep a checking account at our bank in order to bridge the gap between paydays and to be able to pay daily for our groceries and other purchases. The amounts of currency and deposits which we have to hold for this purpose bear some obvious—even though fairly loose—relation to the level of our income and expenditures. In very much the same way, countries must hold—generally in their central bank—international reserves to bridge seasonal and other inevitable and unpredictable gaps between their receipts from, and payments to, other countries. The amounts of reserves required for this purpose also hold an obvious—even though equally loose—relation to the turnover of trade and production.

Try now and imagine how trade and production could have grown in this country over the last century if the only means of payment available to all of us, as a group, had been the amount of gold coins that could be minted from the haphazard growth of gold mining in California and Colorado. This, fortunately, was never the case, neither here nor in any other country. Paper currency and bank deposits played throughout a large and growing role, alongside of declining amounts of gold, silver, and other minor coin, in the national monetary system of every country. Even in the heyday of the gold standard the total monetary gold stock of the United States, for instance—both in the form of gold coin and central gold reserves—fell from about 30 percent of the overall means of payment of the country in 1860 to about 8 percent in 1914. The provision of an adequate, but noninflationary, volume of money for our expanding economy depended already then—as it still does today—upon the soundness and resiliency of our banking institutions and credit policies, rather than on any blind enslavement to the much vaunted automatic discipline of the so-called—or rather miscalled—gold standard.

The basic problems which deposit banking has long been able to solve within national borders, under the guidance of national monetary authorities, still remain largely unsolved, however, as far as international payments are concerned. Or rather, since the world has to go on, they have been solved, after a fashion, but only through a succession of makeshifts, and at the cost of recurrent international crises manifesting themselves in the form of widespread deflation, currency devaluations and trade and exchange restrictions.

Under the so-called full-fledged gold standard, prevalent in the last third of the 19th century and until the First World War, gold alone was used exclusively—or nearly exclusively—by most central banks as international reserves, and as the ultimate means of settlement for temporary imbalance in all major countries' international transactions. The enormous gold discoveries of the mid-19th century had made possible for a while the adoption of such a system, but the maintenance of adequate gold reserves by central banks the world over was fed in addition, even then, by the gradual replacement of gold coin by currency and deposits in the countries' national monetary circulation. This latter process, however, was bound to come to an end, and did with the worldwide

demonetization of gold in the 1920's and early 1930's. The world gold shortage has been with us ever since, although its timing and acuity have also been vitally affected by the vast price disturbances arising from wartime and postwar inflation and from the great depression of the 1930's.

Over the whole period from 1914 through 1959, new gold production outside the Soviet bloc has fed considerably less than half of the average increase in the world's monetary reserves. In the 15 years from 1914 through 1928, it accounted for only 38 percent of reserve increases, another 30 percent of which was derived from the withdrawal of gold coin from active circulation, and the remaining 32 percent from the growing use of major national currencies—primarily sterling in those days—as international reserves by central banks, alongside of gold itself. This custom had spread under the prodding of British currency experts and the spur of the interest that central banks could earn on such foreign exchange investments—but not, of course, on the gold kept in their vaults. Together with the flight of hot money from the war-torn and inflation-wrecked Continent of Europe, it helped the British restore the pound to its prewar parity in 1925, while continental currencies sank excessively in value under the impact of speculative money flights from the continent to London.

This soon proved a very mixed blessing for Britain. The overvaluation of sterling or—to take the other side of the coin—the undervaluation of other European currencies handicapped British exporters in relation to their main competitors in world markets. Europe boomed while Britain suffered from economic stagnation and unemployment. Britain, moreover, felt impelled to tighten credit and interest rates in order to attract or retain foreign funds in London and avoid unsustainable gold losses. Such monetary policies were bound to aggravate the deflationary pressures already at work on the British economy. They became, in any case, powerless to stem the flow when the later stablization of currency conditions on the continent triggered a massive repatriation of the funds which had previously sought refuge in London. Continental central banks reluctantly agreed to support sterling for awhile by moderating their own conversions of sterling funds into gold. This merely postponed the day of reckoning. The collapse of a bank in Vienna unleashed a new wave of currency speculation which led to further withdrawals of funds from London. On a fateful day of September 1931, Britain threw in the sponge. The collapse of the most powerful currency that the world had ever known spelled the collapse of the international gold exchange standard itself, and ushered in a long period of exchange chaos in the world's monetary relations.

A grim parallel could easily be drawn between the rise and fall of the sterling exchange standard after the First World War on the one hand and, on the other, the rise of the dollar exchange standard after the Second World War and the difficulties which we are facing today. Foreign funds have, ever since 1934, sought a haven in New York rather than in London. These speculative movements played a role in the consolidation of exchange rates—mostly in 1949—at levels which appear now to have undervalued European currencies with respect to the dollar. Our economy has grown, for the last 10 years, at a snail's pace in comparison to the rates of growth experienced by most European countries. The repatriation of European funds which had previously sought refuge here initiated a gold outflow of more than $2 billion in 1958. This drain was slowed down to $1 billion in 1959, under the impact of a drastic stiffening of interest rates in this country. It has recently threatened to assume again dramatic and alarming proportions, when we timidly tried to reduce interest rates in order to combat new recessive and unemployment tendencies in our economy. Our gold losses jumped from an annual rate of $200 million a year in the first quarter of 1960 to one of $400 million in the second quarter and $2,500 million in the third quarter of the year. Yet, foreign central banks have fortunately continued so far to support the dollar—as they did sterling in the late 1920's—by taking and retaining in the form of dollar balances, rather than gold, a substantial portion of their ever increasing claims against us.

Foreign funds here total today some $40 billion, of which close to $20 billion are held in the form of bank deposits, Treasury bills, bonds and notes, and other investments withdrawable on very short notice. These so-called dollar balances now exceed our total gold stock of $18.5 billion, nearly $12 billion of which are—absurdly, but legally—earmarked as backing for our currency. Our so-called free gold reserves have dropped therefore to little more than one-third of our short-term foreign obligations.

Our position is still immeasurably stronger than that of sterling on the eve of the 1931 devaluation. We are not condemned yet to a devaluation of the dollar which would once more shake confidence, here and abroad, in the integrity of our monetary policies, usher in a long period of chaos in exchange rates and benefit mostly the two largest gold-producing countries in the world, i.e., South Africa and the U.S.S.R. Time is running short, however, and we are each day living more and more dangerously on the edge of the precipice.

The new administration will face a double task to redress such a dangerous situation.

The first is to stimulate our exports of goods and services to a level sufficient to finance our own purchases abroad together with the heavy commitments to foreign aid and economic development which we must continue to shoulder, in order to preserve our leadership of the free world. Our European allies should assume a fair share of this burden, but our own contribution must remain commensurate to our responsibilities as by far the richest country in the world.

Great progress in this direction has already been made in 1960, but little or nothing has been done or planned as yet in relation to the other problem that confronts us. This is to protect the dollar against the impact of large and unpredictable outflows of short-term funds from our market, without resigning ourselves to a protracted era of high interest rates that would dangerously slow down economic growth in our country and interfere with our ability to combat economic recession and unemployment. This objective cannot be achieved without a fundamental reform in the dollar exchange standard which characterizes the present international monetary system of the free world. Such a reform has long been overdue but will assume a crucial importance and urgency as soon as we succeed in solving the first problem mentioned above, i.e., in correcting the overall payments deficits that have, for more than a decade, been the main source of increase in the world's monetary reserves and international liquidity.

I have stressed, in the first part of this paper, the inadequacy of current gold production in the West as a source of supply for monetary reserves in an expanding world economy. The increase in the free world's monetary gold stocks over the last decade averages less than 1½ percent a year; i.e., less than one-fourth of the annual growth rate—about 6 percent—in world trade and world production. Foreign countries have nevertheless succeeded in increasing their monetary reserves over this period at an average rate of 6 percent a year—equal to the rate of growth of world trade and production—but two-thirds of this increase has been derived from our own gold losses and rising indebtedness to foreign central banks. The restoration of equilibrium in our balance of payments will dry up, therefore, two-thirds of the sources which have fed, ever since 1949, the international monetary requirements of the world economy.

The most logical solution of the twin problems of the age-old world gold shortage and of the now impending international dollar crisis is obvious enough, and would have been adopted long ago if it were not for the enormous difficulties involved in overcoming the forces of inertia and in reaching agreement among several scores of countries on the multiple facets of a rational system of international money and credit creation. This is, of course, the only explanation for the survival of gold itself as the ultimate means of international monetary settlements. Nobody in his right mind could ever have conceived of a more absurd waste of human resources than this senseless digging of large holes in distant corners of the earth for the sole purpose of extracting gold from them and of transporting it and reburying it in other deep holes—in Fort Knox and other gold graves—especially excavated to receive it and heavily guarded to protect it.

The history of human institution, however, has a logic of its own. Gold as a commodity presented undoubted advantages over other commodities that could alternatively be used as money. The substitution of debt or paper money for commodity money within each country's national borders was a slow, gradual, and still relatively recent phenomenon in world affairs. Its extension to the international sphere—through the use of key currencies in world reserves and world payments—is even more recent and has developed haphazardly under the pressure of circumstances rather than as a rational act of creation on the part of any national or international authority.

I have described at length in my book on "Gold and the Dollar Shortage" the ways in which the International Monetary Fund, created at Bretton Woods in 1944, could be used as an anchor for a long overdue reform of our international

monetary system. I can do no more here than summarize this suggested reform in very broad and simple terms, eschewing all the technical details, objections, and rebuttals that fill that volume.

In brief, gold production has long ceased to provide more than a fraction of the growing reserve needs of the international community. Foreign exchange reserves must be accepted, and have long been accepted, as an additional component to the countries' international monetary reserves. This foreign exchange component, however, should not remain—as it has remained up to now—dependent upon national currencies, always exposed to devaluation, blocking or inconvertibility decisions by the debtor countries, and to unpredictable shifts from one key currency into another or into gold by the countries which precariously decide, on a day-to-day basis, to hold such national currencies as international reserves.

Foreign exchange reserves should be held by central banks exclusively in the form of international deposits with the International Monetary Fund, just as the cash reserves of our commercial banks are held exclusively with the Federal Reserve System acting as a single reserve depository for all its member banks. These deposits with the fund should form the basis for the Fund's loans and investments in member countries, just as the deposits held in the Federal Reserve System serve as a basis for the System's advances and investments in our own market. They should enable the Fund to gear its overall credit policies in such a way as to provide adequate—but noninflationary—levels of international reserves for the world economy, rather than abandon the provision of such reserves to the hazards of gold production in South Africa, Russian gold sales in the markets of the West, and, last but not least, the accumulation of foreign deficits and the loss of net international reserves by the United States.

Countries other than the United States and the United Kingdom would constitute, initially, the bulk of their deposits with the Fund by transferring to it the dollar and sterling balances which they now hold as part of their monetary reserves. The United States and the United Kingdom would, as a consequence, now owe these balances to the Fund rather than to several scores of foreign central banks. The Fund would hardly wish to liquidate precipitously its holdings of such balances at the risk of precipitating a monetary crisis in the United States or the United Kingdom, and should not, in any case, be allowed to do so. Its right to demand repayment should be limited to a preagreed annual ceiling and should, even then, be exercised only insofar as useful for the conduct of its own operations. In view of the vast expansion of its resources which the proposed reform would entail, it could, on the contrary be expected to seek, for several years to come, to expand its dollar and sterling investments, thus giving us a further and useful breathing spell to bring about, in as smooth a manner as possible, the needed readjustments in our overall balance of payments.

The United States and the United Kingdom would, in this manner, recoup the freedom of monetary management—particularly in relation to their interest rate policies—which is now so severely handicapped by the fear of the gold losses that would accompany the liquidation of foreign-owned short-term dollar and sterling balances. As for the other countries, they should also welcome the opportunity of exchanging their overbloated dollar and sterling balances for equivalent Fund deposits. They now hold large amounts of such balances in preference to gold because of the interest earnings which they carry. They do, however, expose themselves thereby to the exchange losses which would be entailed in a dollar or sterling devaluation, to say nothing of the risks of blocking, inconvertibility, etc. Deposits with the Fund would offer them the same incentive of interest earnings—although at a slightly reduced rate—while giving them at the same time the full gold guarantees which automatically attach to all transactions with the International Monetary Fund. Deposits with the Fund would be as safe as gold itself, and as freely usable for payments anywhere in the world. Their conversion into any currency needed for payments would be effected most simply, efficiently, and economically by drawing a check on the paying country's account and depositing it in the account of the country whose currency is purchased.

Such a reform could be initiated most easily by a mere declaration of the Fund that it will, in the future, accept such reserve deposits from its members, on a purely voluntary basis. The advantages of interest-earning, gold-guaranteed deposits with the Fund over both sterile gold holdings and exchange-risky balances in national currencies should be sufficient to induce most countries to exchange voluntarily for Fund deposits the bulk of their present foreign exchange

holdings and even possibly some portion of the reserves which they now retain in gold. The major advantages of the plan could therefore be achieved without waiting for a fundamental, and much overdue, overhauling of the International Monetary Fund Agreement.

Such an overhauling would, however, remain highly desirable in order to rationalize and streamline the fantastically complex, woefully rigid, and basically absurd provisions bequeathed to the Fund by its intellectual father, Harry Dexter White. This need not involve a full-fledged return to the rival plan of Lord Keynes, presented to Washington by the British treasury in 1943. While immensely superior in its techniques to the White plan, the Keynes plan was open to serious objections. It would have imposed upon every Fund member the obligation to accept Fund deposits, without any limit whatsoever, in full settlement of any debts due to it by any other country. It would also have denied the depositors any right to demand gold from the Fund in reimbursement of their deposits. Such provisions would have endowed the Fund with unlimited lending power to aid any and all deficit countries, and the latter were granted in the Keynes' plan exceedingly vast and automatic borrowing rights on the Fund.

Quite understandably, the United States considered this a totally unacceptable basis for the setting up of the International Monetary Fund, since it would have opened the door wide to excessive and wildly inflationary lending by the Fund. These sound objections could have been met however, most directly and simply without sacrificing, in the process, the truly sound and fruitful features of the Keynes plan. The Fund should retain the right it now has or asserts to subordinate its lending assistance to full agreement on the borrowing country's policies. Its overall lending authority could, in addition, be limited to an annual ceiling sufficient—but no more than sufficient—to provide for a normal, noninflationary, rate of growth of the total volume of international reserves. One could, for instance, adopt a highly conservative estimate of such needs—allowing, let us say, for a maximum reserve increase of 3 or 4 percent annually—provided that additional lending be made permissible, in case of need, by special voting majorities assuring a proper control of such decisions by the major creditor countries in the Fund. Finally, countries should be authorized to reconvert into gold, if they wished, any deposits accruing to their Fund account and exceeding a stated and mutually agreed, proportion of their total monetary reserves.

The adoption of such provisions would simplify enormously the present structure of the Fund's agreement and operations. It would, in particular, do away the system of rigid and arbitrary subscriptions to the Fund's capital and substitute for them fully liquid and convertible deposits whose maximum amount would automatically adjust to the fluctuations in each country's balance of payments.

These proposals have been amply scrutinized and discussed, here and abroad, by academic, financial, and government experts over the last few months. They obviously raise a host of questions which could not be fully examined in this brief article. The real obstacle to action does not lie in their technical details—which could anyway easily be modified in the course of negotiations—but in their longrun political implications. There is no doubt that these reforms could be viewed as a first step toward the setting up of a supranational monetary authority, to which central banks and governments are understandably reluctant to yield any parcel of their cherished national sovereignty and independence.

Whatever one's views are in relation to this broad issue, it should be obvious that none of the measures proposed here would limit the present real sovereignty of any country any more than it is already. What they would do is to substitute, in a limited area, collective, mutually debated and agreed, limitations on national monetary sovereignties for the much harsher, haphazard, and often disastrous limitations now imposed upon them by chance events and by the uncoordinated use of their sovereignty by several scores of so-called independent countries, with little or no regard to their compatibility and their impact on others.

I have no doubt that future events will push us inevitably and irresistibly in the direction outlined here. The real question at issue is not whether or not these, or broadly similar, reforms will be adopted in the end. It is whether political leadership in the United States and the other free countries will prove sufficiently enlightened and dynamic to adopt them in time, or whether they will have to be forced upon us by new crises and upheavals such as we experienced 30 years ago, during the first years of the worst international economic depression that the world has ever known.

ROBERT TRIFFIN.

Suggestions for further reading:

Brian Tew, "International Monetary Cooperation, 1945–60." London, 1960.
Robert Triffin, "Gold and the Dollar Crisis," Yale University Press, 1960.
Robert Triffin, "Europe and the Money Muddle," Yale University Press, 1957.

TABLE I.—*International liquidity position of the United States, 1949–60*

[In billions of dollars]

	Assets				Liabilities (−)			Net assets	
	Total (a=b+c+d)	Gold (b)	Foreign exchange (c)	IMF quota (d)	Total dollar balances (e=f+g)	Foreign countries (f)	International (g)	I (h=a−e)	II (j=b−f)
End of—									
1938	15.2	14.6	0.6	----	−2.2	−2.2	----	13.0	12.4
1949	28.1	24.6	.8	2.8	−8.2	−6.4	−1.8	19.9	18.2
1952	27.1	23.3	1.0	2.8	−11.7	−9.9	−1.9	15.3	13.4
1957	27.8	22.9	2.2	2.8	−16.6	−14.9	−1.7	11.2	8.0
1958	25.9	20.6	2.5	2.8	−17.6	−15.6	−2.0	8.2	5.0
1959	26.3	19.5	2.6	4.1	−21.6	−17.7	−3.8	4.7	1.8
1960:									
June	26.3	19.4	2.8	4.1	−22.8	−18.7	−4.1	3.5	.7
August	26.3	19.0	3.1	4.1	−23.5	−19.3	−4.2	2.8	−.3
October	----	18.4	----	4.1	----	----	----	----	----
Changes:									
1939–49	+12.9	+10.0	+.2	+2.8	−6.0	−4.2	−1.8	+6.9	+5.8
1950–57	−.3	−1.7	+1.4	----	−.84	−8.5	+.1	−8.7	−8.2
1958	−1.9	−2.3	+.3	----	−1.1	−.7	−.3	−3.0	−3.0
1959	+.4	−1.1	+.1	+1.4	−3.9	−2.1	−1.8	−3.5	−3.2
1960:									
January–June	----	−.1	+.1	----	−1.3	−1.0	−.3	−1.2	−1.1
July–August	----	−.3	+.4	----	−.7	−.6	−.1	−.7	−.9
October	----	−.6	----	----	----	----	----	----	----
1950–August 1959	−1.8	−5.5	+2.3	+1.4	−15.3	−12.9	−2.4	−17.1	−18.4

TABLE II.—*World trade and monetary reserves, 1913–59*

End of year	Imports		Monetary reserves						
			World			World outside United States and United Kingdom			
	World	World outside United States and United Kingdom	Total	Gold	Foreign exchange	Total	Gold	Foreign exchange	
								Total	Dollar	Sterling and other
I. In billions of dollars:										
1913	21.0	15.5	7.8	7.3	0.5	5.4	4.9	0.5	0.1	0.4
1928	30.6	20.4	13.7	10.5	3.2	9.0	5.8	3.2	.6	2.6
1933	11.5	8.3	12.6	11.5	1.0	7.7	6.7	1.0	.1	.9
1938	23.5	16.6	27.7	25.9	1.8	10.3	8.5	1.8	.5	1.3
1949	59.9	43.9	47.3	34.9	12.4	21.0	9.0	12.0	3.2	8.8
1959	106.3	78.6	59.6	40.2	19.4	37.3	18.2	19.2	9.4	9.8
II. In percent of imports:										
1913	100.0	100.0	37.0	35.0	2.0	35.0	32.0	3.0	1.0	3.0
1928	100.0	100.0	45.0	34.0	11.0	44.0	29.0	16.0	3.0	13.0
1933	100.0	100.0	110.0	101.0	9.0	93.0	81.0	12.0	1.0	11.0
1938	100.0	100.0	118.0	111.0	8.0	62.0	51.0	11.0	3.0	8.0
1949	100.0	100.0	79.0	58.0	21.0	48.0	21.0	27.0	7.0	20.0
1959	100.0	100.0	56.0	38.0	18.0	48.0	23.0	24.0	12.0	12.0
III. In percent of total reserves:										
1913	----	----	100.0	94.0	6.0	100.0	91.0	9.0	2.0	7.0
1928	----	----	100.0	77.0	23.0	100.0	64.0	36.0	7.0	29.0
1933	----	----	100.0	92.0	8.0	100.0	87.0	13.0	1.0	12.0
1938	----	----	100.0	94.0	6.0	100.0	83.0	17.0	5.0	12.0
1949	----	----	100.0	74.0	26.0	100.0	43.0	57.0	15.0	42.0
1959	----	----	100.0	67.0	33.0	100.0	49.0	51.0	25.0	26.0

NOTE.—These estimates are derived primarily from Federal Reserve and IMF publications. They exclude throughout the Eastern bloc countries and are subject to a larger margin of error for the years before 1938. Reserve figures include gold coin in circulation in 1913 and 1928, IMF gold (but not local currency assets) and BIS, EPU, and European fund reserves.

TABLE III.—*Sources of increase in world reserves, 1914–59*

[In percent of total]

	Monetary gold					Foreign exchange				
	Total	Production	Coin withdrawal	Dollar devaluation	U.S.S.R. sales	Total	Dollar	Sterling and other		
								Total	Sterling	Other
1914–59	66	43	6	15	2	34	17	17	----	----
1914–28	68	38	30	----	----	32	6	26	----	----
1914–33	94	53	40	----	----	6	----	6	----	----
1934–38	95	41	----	54	----	5	3	3	----	----
1939–49	46	46	----	----	----	54	13	41	----	----
1950–59	43	34	----	----	9	57	50	7	----	----
1950–56	31	27	----	----	4	69	51	18	----	----
1957	200	128	----	----	72	−100	−86	−14	−100	85
1958	56	38	----	----	19	44	42	2	−35	37
1959	147	92	----	----	55	−47	159	−206	63	−269

NOTE.—See table II.

TABLE IV.—*Sources of reserve changes outside the United States, 1950–59*

[In percent of total]

	U.S. transactions			Other sources					
	Total	U.S. gold losses	Official dollar balances	Foreign gold			Other transactions		
				Total	Production	U.S.S.R. sales	Total	Official sterling balances	Other reserve balances
1950–59	65	29	36	30	24	6	5	----	----
1950–52	57	23	34	15	15	----	28	----	----
1953–55	68	25	43	29	25	4	3	7	−4
1956–57	−116	−186	70	215	146	69	----	−80	80
1958–59	92	67	24	26	17	9	−18	−2	16

NOTE.—See table II.

The CHAIRMAN. In carrying out the discussion yesterday we began at the center and worked alternately out to the wings. I think today we should begin at the wings and work toward the center. So I am going to ask Mr. Coffin to open the discussion.

Mr. COFFIN. Thank you, Mr. Chairman.

First, Mr. Triffin, I would like to ask a question or two of Mr. Greenwald.

In your estimate of a very slight downturn in private capital investment in this coming year, you used actual figures at present price levels. If the price levels were adjusted for inflation in terms of the absolute values of capital investment, is it not true that the proposed private investment for this coming year would be perhaps as low as any postwar year, even including the 1958–59 recession, all recessions since World War II?

Mr. GREENWALD. Well, the comparisons that I made in the earlier part were all made in current dollar terms. I believe capital goods prices will only register a very small change next year so that the difference between this year's price average and next year's would be very small. It might be 1 percent.

Mr. COFFIN. Well, in terms of the actual purchasing power invested, the purchasing power equivalent of the dollars invested in private capital next year, how would it compare with the lowest year since World War II?

Mr. GREENWALD. Well, if we take the $33.9 billion figure that I am forecasting for next year, and we adjust it by 1 percent, that gives a figure of roughly $33.6 billion in terms of 1960 purchasing power of the capital expenditure dollar.

If we look back at the capital expenditure figures, 1959 was roughly $32.8 billion and 1958 was about $31.5 billion, expressed in the same 1960 dollar terms. As a matter of fact, since 1950 only 1953, 1955, 1956, 1957, and 1959 are higher in constant 1960 dollar terms.

Mr. COFFIN. Have you made any computation as to what rate of private capital investment we should have on the average over the next decade in order to be able to absorb the rather large influx in the labor force we were told about yesterday by Mr. Wolfbein of $26 million?

Now, this is what I have in mind: Is it not possible to project targets or at least levels that we must meet if we are to be in good shape by 1970, taking a figure of, say, something like $12,000, if that is a reasonable figure, to support the average job?

This includes manufacturing and nonmanufacturing. If we multiply the $12,000 figure by 2.6 million, that would be the average investment needed to support the new influx into the labor force. We would come to a figure of about $35 billion that would be needed just to support new jobs per year over the next decade, leaving entirely outside the amount of money invested for modernization and replacement.

Mr. GREENWALD. I can only tell you that we have made an estimate for the year 1970, in current 1960 dollars, for the total amount of capital expenditures we think would be needed.

Mr. COFFIN. Do both jobs?

Mr. GREENWALD. This would take care of everything. The figure I believe we came up with was about $58 billion.

Mr. COFFIN. A year?

Mr. GREENWALD. Yes; per year. That is right.

Mr. COFFIN. And averaging it out over the whole period?

Mr. GREENWALD. The figure I cited would be for the year 1970. It would be a little less than $50 billion if you average it for the decade—actually quite a bit less.

Mr. COFFIN. Do you have any idea what it should be for 1961? That is for 1961 we have the estimate of 1.2 million added to the labor force plus, as I said some $98 billion in replacement and modernization.

Mr. GREENWALD. No, we have not done that.

Representative COFFIN. Would it be possible for you to submit to the committee some estimate?

Mr. GREENWALD. Any estimate I make at this time will have to be in terms of total investment in plant and equipment covering new facilities for new workers, facilities for new products, and modernization and replacement. I believe $40 billion of investment would be needed in 1961.

Representative COFFIN. I have now one question of Mr. Triffin.

With regard to your suggestion of changing our reserve basis, having in mind the relationship between our gold balances and the amount of short-term claims on these balances, which is just about 1 to 1 now, what is the history of other countries who for substantial periods of time have had their own currency as the basis for a system such as the British with the pound sterling. Did they operate with as low a relationship of claims and balances or much lower?

A British banker friend once told me, "The trouble with you Americans is that you don't know how to be bankers. You insist not only on a 1-to-1 ratio, you insist on a 2-to-1 ratio or more but we have done it for decades on a banking basis with no trouble whatsoever."

Could you place this problem in perspective from the experience of other countries?

Mr. TRIFFIN. You are quite right, especially in singling out Britain for this purpose, Mr. Coffin, because it is only Britain and the United States whose currency has been used in this role by the other countries.

In the case of Britain, Britain has had for a long time a relatively low ratio of gold to its short-term indebtedness abroad.

In 1931, you will recall this was one of the reasons for the downfall of sterling at that time.

In 1938 just before the war, the ratio was roughly in the neighborhood of 1 to 1, as it is for us today.

During the war the British financed a great deal of their defense expenditures abroad by letting short-term sterling I O U's accumulate in the hands of foreigners.

At the end of the war they emerged indeed with a ratio of gold reserves to sterling balances, which was indeed very small, and was to cause them a great deal of trouble—devaluating, inconvertibility, etc.—for many years.

As of now, the ratio of their gold reserves to sterling balances is about 1 to 3.

Therefore, their position is much worse than ours. But we must not forget two qualifications to this statement. One is that for most of the postwar period sterling was inconvertible and, secondly, that a very large portion, most of those sterling balances, of these short term debts of the British, are held institutionally within the sterling area by arrangements with the other members of the area. Sterling balances which are outside the area really are only $2,600 million in all, that is to say, somewhat less than the British reserves which are more than $3 billion today. Our dollar balances are not at all consolidated in the same manner by institutional arrangements with the countries which hold them.

Representative COFFIN. How dangerous do you think it is to have this one to one balance that we have now? I am thinking in terms of the time that is allowed us before we make any changes in our system or are forced to make it.

Is this a crisis or is this something that could become a crisis only at the ratio of about 1 to 1½ or 1 to 2?

Mr. TRIFFIN. I don't think you could make a calculation of this sort in this area because it all depends really on the willingness of people to hold those balances.

As our chairman noted, really if people withdrew today one-third of their balances, that would force us to pass legislation affecting our gold cover requirements.

Undoubtedly, in the heat that might be generated during such a discussion there might be further withdrawals.

And so a crisis might come at any time, but I frankly, myself, do not consider this as very likely.

In fact, foreign central banks have been very responsive in that respect. They have played ball with us. They don't want anything to happen to the dollar because they would be the first sufferers in that case.

Therefore, they have shown great restraint in converting their dollar balances at the Treasury.

I think that we can count on continued cooperation from them to examine the ways in which this situation might be cured once and for all.

Representative COFFIN. I have time for one more question.

Coming from this long-range problem to the immediate future, what, in your opinion, are the steps that should be taken to correct our balance of payments problem in the short run and on whom would the burben of these steps fall?

I assume that when you give us your prescription that you would give priority to the steps where the burden would fall equitably on citizens of this country rather than on any specific group?

Do you have a series of steps that you think should be taken?

Mr. TRIFFIN. Again, I would like to distinguish the two problems, the problem of our current balance and the problem of our reserve position.

My papers deal primarily to the second problem, rather than the first, but, speaking briefly on the first, I feel fairly confident that the readjustment in European prices, wages and expenditure levels is going to do a great deal to solve this problem for us over the next 2 years.

We already have had last year, as I indicated, an improvement of $3 billion. If we can keep the same rate of improvement, we will be out of the woods in another year or two, I think, but in the meantime——

Representative COFFIN. You have indicated that the sales of cotton and jet aircraft have helped us.

Mr. TRIFFIN. That is right, and also we have been helped by booming markets in Europe. That is why I think it would take 2 years rather than 1 year to reach a comfortable position in that respect.

But in the meantime, I think that there are a number of things that could and must be done to hold the line for those 2 years.

One, for instance, is to encourage some prepayments of the foreign debts owed to us and which some of these countries have indicated they would be willing to repay in advance.

Germany has indicated that in the conversations which were held with Secretary Anderson.

Another point, I think, which should be given high priority is the impact of fiscal provisions which encouraged exports of capital abroad after the war. These provisions were certainly very useful at the time when they were enacted, but at the moment I think that many

corporations leave their accumulated earnings abroad because if they bring them back to the United States they would be heavily taxed.

As long as they leave them abroad they escape taxation.

You may deal with this in different ways, either by taxing them abroad as well, or by allowing them to repatriate earnings without taxing them here, but I think measures of this sort should be given a high priority by Congress in examining this situation.

I think this would be better than some other measures which have been taken recently.

If I could now comment on the second problem, I think that also in order to hold the line we have to protect ourselves against this danger of sudden conversion of past balances into gold.

I have given my own thinking and proposals on this matter to this very committee years ago, and I repeat them more briefly in my written statement.

I might read one paragraph of that, if you would like, that summarizes the matter very briefly.

Representative COFFIN. I think it would be useful to have it in the record at this point.

The CHAIRMAN. All right, then, without objection that will be done.

Senator BUSH. I would like to hear it.

Mr. TRIFFIN. It is in the paper called "The Crisis of the Dollar Exchange Standard."

The first, and most feasible, action which could be taken now would be to allow the International Monetary Fund to accept reserve deposits from its member central banks just as our Federal Reserve System accepts reserve deposits from commercial member banks in this country.

Under the rules of the Fund such deposits——

Senator BUSH. May I ask him to yield right there for a question?

The CHAIRMAN. Certainly.

Senator BUSH. Professor Triffin, you say "accept reserve deposits from its member central banks just as our Federal Reserve System accepts reserve deposits from commercial member banks."

Now, our Federal Reserve System does not just accept them, they require them.

Mr. TRIFFIN. That is right, sir.

Senator BUSH. Does this connote that you believe that members of the International Monetary Fund should be required?

Mr. TRIFFIN. I would foresee there two stages in time. Simply accepting such deposits would not require, I believe—although this may be controversial—would not require a renegotiation of the International Monetary Fund agreement.

It could be done immediately. In the longer range plan which I discussed with you last year, I suggested that in the course of a later renegotiation of the Fund agreement we give up, we eliminate the provisions for capital subscriptions to the Monetary Fund and replace them with much simpler provisions, contemplating precisely some compulsory reserve requirement, some minimum compulsory reserve requirements, as in the Federal Reserve today.

But this would require negotiation and I think would certainly take 6 months to a year to carry into effect.

The first proposal which I make here, and which I developed further in my answer to Mr. Altman is something which I believe could be achieved very rapidly and without any fundamental change in the Fund agreement.

I think that the Fund agreement could be interpreted as giving those powers to the Fund already.

Senator BUSH. Have you discussed this with Per Jacobson directly.

Mr. TRIFFIN. I have discussed it with him and with many people on his staff; yes, sir.

Senator BUSH. I was sorry to interrupt, but I thought it was important to clarify that. Whether it was a requirement or invitation.

Mr. TRIFFIN. The first step would be simply an invitation. The reasons for this is that we have to act as early as possible and also to accustom people to hold reserves with the Fund.

Once they are accustomed to it, they will more easily accept minimum deposits which is a form of compulsion.

But even without such compulsion, you see, countries outside the United States and United Kingdom hold voluntarily, without any compulsion whatsoever, about 50 percent of their reserves in sterling or in dollars.

They do so rather than in gold. They do so in order to get some earnings on those deposits.

On the other hand, they get sometimes a little panicky about it because while they make earnings on those foreign exchange reserves, they are always exposed to the risk of devaluation and exchange losses.

Now, if you offer them deposits with the fund which would be guaranteed against exchange losses and still would at the same time assure them some earnings, even though somewhat smaller than those that they get on dollar and sterling, then I think that the central bankers would be extremely attracted to that form of investment and they would not have to be forced to hold them. They would hold them voluntarily.

Senator BUSH. Does your proposition include the payment of interest by the International Monetary Fund on these reserves?

Mr. TRIFFIN. Certainly, sir, since the International Monetary Fund would receive, itself, interest and earnings on the counterpart assets which are back of those deposits.

Would you like me to finish the paragraph?

The CHAIRMAN. Yes.

Mr. TRIFFIN. Under the rules of the Fund such deposits would carry a gold exchange guarantee making them extremely attractive to central banks and providing them with an alternative to the cashing of present dollar balances in gold metal at the U.S. Treasury.

That is to say, again, Central banks have been extremely cooperative in that respect over the last year. They have increased their holdings of dollars far beyond what is customary and traditional for them to do, but there are demands for conversion in gold at the moment. Instead of doing this, they could deposit dollar or sterling balances with the Fund and get what they want essentially, that is a guarantee against exchange losses.

About half of our short term debt abroad could, as a result, be transferred from their present owners to the Fund and cease to be a constant threat to our freedom of action with respect to both our

domestic monetary management and the conduct of our foreign economic policy.

Representative COFFIN. Might I ask just one question for clarification?

The CHAIRMAN. Yes, sir.

Representative COFFIN. In view of your analysis of the failure of gold supply to keep up with the business of the world, would you not run into a problem, maybe we would be delaying the problem by decades, but to the extent that we may be building on a gold exchange guarantee we are basically coming back to the Achilles' heel of the system as you see it?

Mr. TRIFFIN. Yes, that is why I think in the long run. As was suggested by Senator Bush, some minimum reserve requirements would be indispensable for the system to function safely over a long period of years.

But, at the same time, let us be clear as to what this gold exchange guarantee would mean. It does not necessarily mean that a depositor would be entitled to take gold out of the Fund in exchange for his deposit.

What it would mean is this: that he is guaranteed against any devaluation and that he will always get the same amount measured in terms of gold; in case, for instance, of a devaluation his currency deposit would be increased to make up for the devaluation.

The CHAIRMAN. Senator Butler.

Senator BUTLER. I would like to address a question to Professor Triffin.

It has always been my understanding that the once mighty dollar referred to by you, Professor, on page 6 of your statement, is mighty, owing to its convertibility, to whomsoever may apply at any time, at any place.

Now, does the plan that you suggest in effect restrict the convertibility of the dollar?

Mr. TRIFFIN. No, sir.

Senator BUTLER. Well, you say you would do it so that you could not have a run on it. If somebody presents a dollar and he wants gold, he does not get gold, what does he get under your plan?

Mr. TRIFFIN. The convertibility of the dollar is already limited, today, technically to central banks and monetary authorities. Private individuals in this country cannot present their dollar at the U.S. Treasury for gold.

Senator BUTLER. I understand that.

The problem does not come from here. It comes from abroad, from the central banks of Europe?

Mr. TRIFFIN. Yes.

The point is this, Senator Butler, that central banks have accumulated dollars and sterling in part for the lack of another kind of asset which they could assimilate safely and on which they could make earnings at the same time. Gold is still regarded as the safest asset in that respect, but it earns no interest, and there just is not enough to satisfy the need for reserve accumulation in a fast-expanding world economy.

For these reasons central banks have been accumulating in the postwar years what looked like the next safest asset, that is dollar balances,

and this, although it may seem like a strange way to look at it, means in fact we were borrowing from them; when they were accumulating dollars in the form of Treasury bills or deposits, in New York, they were really lending money to us and at times money that we did not particularly want to borrow.

Now, if they have this other alternative of holding deposits with the Fund, I think they would prefer to use that alternative to holdings of national currencies, even dollars, and that you would suppress, you would eliminate a system under which the stability of the world monetary reserves is highly dependent on the success of monetary management in any one country, but may also, as it does today, handicap very much monetary management here as it long has created difficulties for monetary management in England.

You know that in England many people would like to get out from under and not have sterling no longer used as international reserves by foreign countries. It is not a universally held view but it is one which many competent people hold today in England.

Senator BUTLER. I hope you understand I don't protest to have any knowledge on the subject. I am just trying to inquire to see how it would operate under given circumstances whether it is definite that all nations would go off the international gold standard as most nations have now gone off the domestic gold standard.

Would that be the effect of it?

Mr. TRIFFIN. You might call it that in the long run.

Senator BUTLER. Could it be in any sense said to be a devaluation of the dollar?

Mr. TRIFFIN. No.

Senator BUTLER. A roundabout way of arriving at a devaluation?

Mr. TRIFFIN. No, it would be a way to permit in the international field the same development which has happened in the domestic field. That is, today, our monetary system really is no longer practically for domestic purposes based on gold.

Even in 1914 already the amount of gold in circulation was only about 2 percent of the total money supply in the United States. Little by little the habit had grown to use other means of payments alongside with gold, and gold today we have practically forgotten about it in our domestic transactions. We have to learn how to supplement and gradually replace gold reserves by credit reserves internationally, just as we have, nationally, gradually supplemented and finally replaced gold money with credit money, that is to say, currency and deposits.

Senator BUTLER. Yes, Doctor, but the whole system is based on confidence, is it not?

Mr. TRIFFIN. That is right.

Senator BUTLER. There was some dissatisfaction and some mistrust when we went off the gold standard. That has been cured. You think the same thing would result if we went off the international gold standard?

Mr. TRIFFIN. I think that the present system is so vulnerable that confidence today is at a very low ebb. It could not be worse.

Senator BUTLER. If such a proposal was made for the establishment of such an international Fund that you speak of, would that be an admission of weakness and shake the confidence of the people of the central banks that hold our dollars and securities?

Mr. TRIFFIN. I think you are quite right but I would say——

Senator BUTLER. What would be the short-term effect of that? Would you get into some sort of roundabout devaluation of the dollar and bring it on an international exchange more in relation to the sterling?

Mr. TRIFFIN. I would rather say the opposite. I am quite convinced that if such a plan as this or some other alternative plan is not adopted I would be afraid that within a period of 2 to 5 years, let us say, a reevaluation upward of gold would be inevitable. This is what many private people are banking on at the moment and betting on when they buy gold in London. The only way to avoid this and to avoid devaluation of the dollar is to see the problem frankly and try to deal with it.

I know that one may be accused of panic mongering by raising questions of this sort but in my judgment at least I think that the crisis of confidence which was reflected in the event in London in October was partly at least the result of the refusal to look the facts in the face, which characterized the discussion at the Fund meeting in September. Officially, many people said everything is all right, there is no crisis, everything is fine. When you saw the delegates who were listening to those speeches in the corridors afterward they told you, "Well, if they think this is fine and that everything is all right and there is no crisis, then we really are worried."

That was a greater shock to confidence to pretend that the house is not shaking when it is.

The CHAIRMAN. I was going to ask if Mr. Butler and Mr. Triffin would be willing to permit Mr. Tongue to come into this conversation, because I think he gave evidence of wanting to make a comment.

Representative BOGGS. Could I ask a question?

Mr. Triffin, you referred to some of the measures recently proposed. If that is all that is done, namely, the proposals of this administration, without some of the things you propose, do you see any solution?

Mr. TRIFFIN. In one word, no.

Senator BUTLER. I did not hear the question.

Representative BOGGS. My question was, Did he feel that the proposal recently advanced by the administration, namely, the recall of military personnel and their families, the purchase abroad of American-made goods and limitation of investment, and so forth, whether this standing alone without his further proposals which you are discussing with him would have any curative effects. His answer was no.

Mr. TRIFFIN. Would you allow me to make one further comment?

When I read this statement of mine to you about this plan I should have included one further sentence to indicate that this is not just an academic thought coming directly from the ivory tower. I would like to say that this suggestion of mine has been endorsed unanimously by the Radcliffe committee on the working of the monetary system in England.

Senator BUSH. Is that the Radcliffe report that was made a year or more ago?

Mr. TRIFFIN. Yes.

Senator BUSH. Mr. Tongue, now you have your chance at last.

Mr. TONGUE. I am a kind of general practitioner in this area, and I get a little lost in international monetary questions and problems. In

trying to simplify it for my own mind, it seems to me that we have two problems that we are dealing with here and that they are getting a little bit mixed up in the discussion. One is the balance-of-payments problem that the United States has today and which Mr. Triffin says will likely abate within a couple of years, through the adjustment mechanism and the change in some of these temporary factors which have affected us. Secondly, there is the problem of growing international illiquidity, or lack of liquidity, which relates to the question of the "hot money" and movement of these balances abroad. Now it seems to me what Mr. Triffin has suggested is that the first problem will take care of itself in due course following along some of the lines that have already been started but that we need to get to work right now on taking care of the second problem which is to create more liquidity so that we can have more time to work out balance-of-payments problems.

In effect that seems to me what he is suggesting: That we will set up this new system that will enable us not to worry so much about hot money flows, just as in the United States itself we do not worry about an imbalance of payments between New England and the west coast, and so on, but these things do settle themselves in the course of time.

Now I would offer this thought: I think he is quite right and I think we must do this and it is silly to try to stimulate gold production, to take care of it. We waste our resources in that way. But I would suggest that before we jump across the line to this particular "New Frontier" that we prepare ourselves because once we get into this thing with other nations it means that we are ultimately going to be subjected to monetary control by external force. If it is the International Monetary Fund, inevitably it must assume authority whether it wants to or not, whatever the protestations might be. So before I would jump into that, I would like to see the constitutional provisions under which the International Monetary Fund would administer this reserve setup that Mr. Triffin has suggested and which I think is a very sound suggestion.

Senator BUTLER. Mr. Chairman, may I ask a question at this point?

The CHAIRMAN. Certainly.

Senator BUTLER. In effect there could be a devaluation then under this system almost any time the European Community wanted to devalue?

Mr. TONGUE. That is what I say might happen.

Senator BUTLER. I believe there is some element of devaluation in it.

Mr. TONGUE. I think as of today if we jump in we do not know what the situation would be in the future. We do know that in this country the Federal Reserve, for instance, has certain restraints such as the Employment Act and preventing inflation as its guiding principles. We do not know what the guiding principles of the International Monetary Fund would be as it expands and contracts liquidity around the free world, and we should know what these provisions will be before we follow Mr. Triffin's fine suggestion.

Now it does seem to me, however, that there are things that we can do in the meantime to increase liquidity and to bide our time until we can negotiate some kind of agreement or some kind of international monetary constitution, if you will. One of these would be, for example, just to abolish the gold requirements we now have in the Federal Reserve System as has been suggested by very responsible people.

This would increase our ability to absorb these international flows without worry and without letting them bother us in a short-term period such as 1 or 2 years.

The CHAIRMAN. Congresman Boggs.

Representative BOGGS. Mr. Chairman, I have just one question that I would like to direct to Professor Triffin.

Assuming that we don't move in the direction which you and others indicate and assuming that we pursue this policy which has been recommended, of curtailing investment abroad and withdrawing, wherever possible, purchasing abroad and so forth, what would be the net effect of such a policy standing alone on the free world?

Senator BUSH. What is the question again, please?

Representative BOGGS. The question is, What would be the effect of the recommended policies, standing alone, on the free world?

Mr. TRIFFIN. For one thing, it depends really on what measures; again, what is the conjunction of measures taken to remedy the current deficits. This problem, as I indicated, was not the one that concerned me primarily today. I would like to indicate there that I do not believe for one moment that the adoption of my own suggestion would relieve us from the duty of keeping our own balance-of-payments in order. That is not correct. I think that, however, one problem ties in with the other. I judged that in order to remedy our balance-of-payments problem, not in a panicky fashion through measures that might prevent world progress and recovery, we have to gain time for about another 2 years.

We have to take measures which are slower acting but which are also sounder in the long run than those that we have been contemplating in the last few months. Therefore, we need to protect ourselves during those 2 years from the point of view of our reserve position, the problem which I really addressed myself to more specifically, we have to protect ourselves against massive conversions of dollar balances into gold.

I think that by the measures which I have proposed or other alternatives it would be possible to achieve that. It would give us the time to redress our balance of payments and also it would achieve a second purpose. Once our balance of payments is redressed, don't forget what I also indicated in my statement, that two-thirds of the way in which liquidity has been built up year after year in the world in the last 10 years, two-thirds of that would disappear because two-thirds of the supply of international liquidity was coming from the continuing balance-of-payment deficits of the United States. We have certainly to correct those deficits but when we do so we may see a liquidity crisis for the world at large replacing the dollar crisis which we have today. Again the proposals which I have made would forestall that longrun danger at the same time that it would remedy our present problem of immediate vulnerability. I am not sure whether I have clearly seen the impact of your question.

Representative BOGGS. I think you have. Let me state it a little differently. Assuming that we discontinue purchasing in some of these countries, like Japan, for instance, and elsewhere in the world, and assuming we call home the dependents of military personnel and assuming that we cut back on investments abroad and the mutual security program, what is the effect upon this in the free world generally? What does this do to their position?

Mr. TRIFFIN. I think we must distinguish there, sir, various measures which can be taken. For instance, let us take this question of encouraging private investment abroad. I think that some such encouragement might remain very useful to help the underdeveloped countries of the world and to maintain their own economy. Therefore, I would not recommend that measures be taken to modify that part of our program.

On the other hand, I don't think there is any more justification for measures that were designed, when they were taken, to speed up European recovery and European production. I think that European production is going very well at the moment and that we don't have to give tax concessions for that purpose any longer. So that I think this whole batch of measures, really, I would not condemn or approve as a package. We have to distinguish them. The reduction, for instance, of private investments, American investments, today in Europe would slow down the rate of gold and dollar accumulation in Europe but that would not be bad. That rate of accumulation is going too fast at the moment, really, both from their own point of view and from our own.

May I mention here in passing that one of the easiest answers to objections which are raised against my proposals is to say: "Mr. Triffin, you said 2 or 3 years ago that there would be a liquidity shortage and in the last 2 or 3 years there has been no liquidity shortage." That is true because we were losing $3 to $4 billion a year to contribute to that liquidity. What I always said was that there would be a liquidity shortage developing if the world had to depend on gold alone for the creation of liquidity. But the rate at which we have contributed to the creation of liquidity in the last 3 years by deficits of $3 to $4 billion a year is a rate which is unnecessarily generous and ample and therefore we can cut that without harming in any way the economy of the rest of the world.

The CHAIRMAN. Mr. Javits.

Senator JAVITS. Professor Triffin, I am very interested in your proposal and I am inclined to be very sympathetic to it. I have just had some direct experience abroad where I had the honor to serve as chairman of the Economic Committee of the NATO Parliamentarian Conference on this very subject. I want to be sure I understand you.

Do I understand your proposal to really mean fundamentally that we should find the technique for tying the credit and monetary reserves of the world to production rather than to the production of gold?

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. This is a fundamental thing.

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. Very much as we did ourselves in this country in the Federal Reserve System, but as we do not yet observe in the international area.

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. Of course, I think this is the essence of our problem. Whether your scheme is the way to do it or not, which we could all argue about, certainly this is something that has to be done. I could not agree with you more on the need for urgent and immediate attention. I would hope very much that your suggestion will be

taken up by us in this committee with a view toward getting the maximum amount of international consideration and discussion so that we might ourselves recommend that this be done if it proves to be the way to do it. You have put your finger on the dilemma of the Western World, how to keep from tying its own hands behind its back with a private economic system as opposed to a system which has free wheeling in that respect, to wit, the Soviet and Communist state trading system. Now in the light of that—and I could not agree with you more that this is quite a separate problem from the problem of the immediate deficit in our international payments—I ask you to give us, if you would, an order of priorities as to how you think we ought to take care of the problem of our temporary imbalance of international payments while we move into this very much more critical and basic area.

Now as I understand it from your paper, you would put as a last priority curbing capital exports in the shape of economic aid and private investment. In other words, you certainly would not do that first. That is what I am trying to get at. You would put that in the last order of priority.

Mr. TRIFFIN. I would draw a distinction there between capital exports and economic aid to the underdeveloped countries which I certainly would not put first and would not even want to come to, and on the other hand, special tax benefits designed to encourage investments in Western Europe. I think those are no longer justified.

Senator JAVITS. Notwithstanding the eloquence of Congressman Boggs, we have not gotten the latter yet. There is no tax benefit yet. There is a tax benefit to the Western Hemisphere corporations. That does concern investment in underdeveloped areas of Latin America.

Mr. TRIFFIN. I will take your word for that but I was led to understand that corporations which have subsidiaries doing business in Europe will not be taxed as long as they do not repatriate their earnings.

Senator JAVITS. That is exactly right. It is just the fact that our tax laws have not yet caught up with international financial and corporate operations. So you would, if possible, close the door in those respects, that is in respect of the industrially developed countries, and open the door by tax benefits like those possible in the Boggs bill or others like it in the underdeveloped area.

Mr. TRIFFIN. That is right, sir.

Senator JAVITS. But you certainly would put in the last order of priority the curbing of economic aid and private enterprise capital exports to underdeveloped areas.

Mr. TRIFFIN. Yes.

Senator JAVITS. I point out to you also that we have to be very careful and could not be too categoric about this area because investments in Germany or Japan, Holland or Belgium, often might prove to be extremely important elements in the development of underdeveloped areas. So we could not have cutoffs which were heedless of what is done with the money when it is invested.

Mr. TRIFFIN. I would not like to give advice on those problems which I have not been studying for this committee.

Senator JAVITS. Your general principles are adequate for this purpose. Now taking the first order of priority, would you not agree that that would be getting help from the newly recovered nations of Eu-

rope with our defense responsibilities and with aid to the less-developed areas?

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. That would be the first thing we ought to try to do.

Mr. TRIFFIN. And the elimination of remaining discrimination against dollar goods but this has been proceeding at a very satisfactory rate recently, also.

Senator JAVITS. Also the encouragement of tourism in the United States where we have adverse balance running against us of not less than a billion and a half a year.

Mr. TRIFFIN. Yes.

Senator JAVITS. Secondly, the drive for greater exports with emphasis upon longer term credits, which is disadvantageous today and an insistance on bringing down our costs in relation to the competitive conditions. And last, you would reluctantly come to any limitations we have to put on expenditures by our tourists or on capital exports.

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. That is a correct outline of your position?

Mr. TRIFFIN. Yes, sir.

Senator JAVITS. Professor Triffin, I thank you very much. I think I could not agree with you more. This is absolutely the way to do it. I just wanted to be sure I had your principles firmly fixed in my mind. I have expressed the hope, if the chairman will allow me, that we will get at this problem which you have flagged with your very provocative suggestion because that is the challenge of the Western World. Must we continue to be bound to the gold we take out of the ground in international terms or can we base our credit system on the productivity of the Western World? If we can I think we have the decisive key to unlock the door of real victory in this struggle of freedom against communism.

The CHAIRMAN. Mr. Greenwald.

Mr. GREENWALD. May I add just a point. McGraw-Hill did a survey on oversea investment in August of this year and at that time our conclusion was that the rate of increase is beginning to decline in terms of capital investment going overseas.

The CHAIRMAN. Congressman Bolling.

Representative BOLLING. I have no questions, Mr. Chairman.

The CHAIRMAN. Congressman Widnall.

Representative WIDNALL. I have a couple of questions of Mr. Henle. In the statement by Mr. Greenwald he indicated that easier money is almost certain to resort in more homebuilding in 1961. He made the further statement, however, easier money will not provide a very big stimulation in housing. I think that statement differs completely from the statements which the AFL–CIO have made on easy money as relates to housing. Do you think that is an accurate statement?

Mr. HENLE. Mr. Congressman, I would say this: I think easier money helps. I think it definitely does help but I certainly don't think, and I don't think we have ever indicated that this is the whole story, that so far as housing demands are concerned that all you have to do is provide easier money.

There are many untapped areas of housing need that must be met with special programs to bring housing within the limit of these people so they can afford it. It is not just a question of reducing mortgage interest rate.

Representative WIDNALL. Do you want to amplify your own statement?

Mr. GREENWALD. No, sir. I think what I said earlier is correct, and needs no further amplification.

Representative WIDNALL. Has your research development, Mr. Henle, ever developed any figures as to the number of persons in long-term pockets of unemployment which has been caused by loss of markets overseas or by importation of merchandise to the United States?

Mr. HENLE. No; we have not. I don't believe that those figures are available from the Government either. In fact, Congressman Widnall, our efforts with the Bureau of Labor Statistics have been directed toward trying to persuade them that this is an issue which their research should undertake. We think it is quite important that Congress and everyone interested learn the employment impact of foreign trade, both exports and imports.

Representative WIDNALL. I touched on that briefly in talking to Mr. Wolfbein when he testified. I think it would be extremely important to have those figures because it certainly means that we have got to attack the unemployment in that area in a different way than we would in some other area of the United States, if it is proven that this has been affected by foreign imports.

Mr. HENLE. I am hopeful that the Labor Department will see fit to include such a study in its proposed budget for 1962. I think that it requires special authorization from the Congress, because the funds they have available to them now are not sufficient for the purpose. I suspect, however, Congressman, that if you look at unemployment in the depressed areas as a whole, while there are some of these areas where employment has been adversely affected by imports, the employment effects of that sort are relatively minor compared to the total unemployment in these areas.

Representative WIDNALL. I have in mind as an example what effect on employment the importation of steel had here in the United States where 15 percent of our steel is being imported currently.

Mr. HENLE. I have not heard a figure that high at all. The research people in our steel union feel that so far as the health of the domestic steel industry is concerned, the question of foreign imports has not been a question of major importance in the steel industry.

Representative WIDNALL. That is all. Thank you.

The CHAIRMAN. Senator Bush.

Senator BUSH. Mr. Chairman, I would like to ask Professor Triffin to comment on proposals that have recently been made by responsible citizens that we change the law so as to not require the Federal Reserve Board to maintain the 25 percent gold backing for the Federal Reserve notes. This at the present time is tying up some $12 or $12½ billion, as the chairman pointed out a little while ago. I wonder if you would care to comment on that proposal right now.

Mr. TRIFFIN. Yes. As a matter of principle, Senator, I would be very much in agreement with that proposal in general for obvious reasons. You all know the story of the town where people had been complaining there were not enough taxis available at the station. So, the town passed an ordinance that no taxi could leave the station until another one came to replace it. Tying down our international reserves by compulsory requirements is just as absurd. For reserves to be

useful you must be able to use them, and therefore you cannot limit yourself and tie yourself in that manner.

On the other hand, I would say that, as of the moment, I would not wish to take the responsibility of advising a removal of that requirement at a time when the dollar is under suspicion. This is the kind of measure that should be taken at a time when the dollar is absolutely unquestioned. But at a time when there is suspicion, there are difficulties. I don't know, honestly, what psychological reactions might be on the market. On the one hand, people might say if the United States frees that $12 billion as well as the 6, we should have no worry that our dollar balances are as good as gold. There is enough gold there for us to get in case of emergency. That might be one reaction, and from that point of view that proposal has great merits. On the other hand, there might be the opposite reaction. If the United States feels it is ready to use not only the $6 billion of free gold that they still have but wants to be ready to dip also into the other $12 billion, that indicates that they don't anticipate any quick improvement in their overall position, that they are not determined to put their house in order. On the basis of my talks with foreign bankers, I am afraid that the second reaction might prevail over the first and that such a measure, which would only in any case be a palliative because it would not serve us in the long run, is a measure that might create more uncertainty than confidence in financial circles.

Senator BUSH. How does our practice in that respect compare with some of the larger countries in Europe, for instance?

Mr. TRIFFIN. Most countries abandoned that requirement many years ago, and at the latest during and immediately after the war and have never reestablished it. There are a few exceptions. I believe, for instance, that in Belgium that requirement was restored 2 or 3 years ago, but there are very few countries which have any limitations of this sort today.

Senator BUSH. What is your estimate of the effect of interest rates upon the balance-of-payments problem, upon our deficit? In other words, if interest rates should continue to decline in this country in the next few months, do you think that would have an unfortunate effect on the balance of payments or do you think it would be ignored? The balance-of-payments deficit, I mean.

Mr. TRIFFIN. What is most relevant, there really is comparative interest rates here and abroad, and from that point of view I think that I would look optimistically toward some reduction of interest rates in Europe, particularly in Germany. I think that is in process at the moment. Therefore, the handicap which we have been suffering this year from that point of view may well decrease. I estimated, I remember in 1959, for instance, that our balance of payments on current account had deteriorated between 1958 and 1959 by about $2½ billion. But our gold and dollar payments showed only $300 million of that. There was a difference of about $2 billion, and that I think was, roughly speaking, the measure of the movement of capital which was attracted here between 1958 and 1959 by the sudden stiffening of interest rates here.

I remember commenting at that time on this improvement in our balance of payments, that this left a big question, that you could not count, in 1960, on this flow of funds coming again, but you might have

to face the opposite movement, that that flow of $2 billion might now go out if interest rates dropped here as compared to foreign countries. This is what happened in 1960.

I think that is one of the major purposes which I have in mind in my papers. It is to try and decrease this very close link which exists today between our interest rates and the movement of gold. Of course, the two may work at times in the same direction. We may want a high interest rate for domestic reasons and this would also improve our balance-of-payment situation. But at the moment we may have to fight a recession and we may want to have lower interest rates and we are handicapped in that respect by the fear that low interest rates might precipitate an outflow of gold which we would not welcome at the moment.

Senator BUSH. Then we could say that events of the last few years have indicated that high interest rates attracts dollar balances.

Mr. TRIFFIN. That is right.

Senator BUSH. Then it does have an important effect on the dollar balances which would adversely affect the balance of payments?

Mr. TRIFFIN. That is right.

Senator BUSH. My final question is this—possibly some of the other gentlemen might care to comment on this. How do we relate the gold problem to our own fiscal and monetary policies? In other words, should we change our fiscal and monetary policies in any way that would appear to constructively deal with the balance-of-payment deficit and the gold problem? Do I make the question clear?

Mr. TRIFFIN. Yes, you do.

I think again the main line of attack would be related to the type of proposals which I have made but leaving that aside for the moment I think that most people would be inclined to use fiscal measures to encourage recovery rather than to use too low interest rates at the moment.

And, secondly, that in the problem of interest rates they would probably try to act more toward the lowering of long-term interest rates but without lowering too much the short-term interest rates which are primarily relevant for those money movements, international money movements. Those I think are the main distinctions I would draw.

Senator BUSH. Would you comment on that, Mr. Henle?

Mr. HENLE. I must start with the statement this is hardly my field but I do think that the distinctions which Professor Triffin has just made between the long-term interest rate and the short-term rate is a very important one.

In other words, as I understand it, he seems to feel that the movements of capital are attracted more by the short-term rates than by the long-term rates.

Senator BUSH. Internationally?

Mr. HENLE. That is right. Insofar as monetary policy here in this country is concerned, any effort to reduce long-term rates, getting back to Mr. Widnall's question, in the housing field, a reduction of the mortgage rate, for example, is not something that we should shy away from because it might have adverse international balance of payments effects.

Senator BUSH. Would you comment on that, Mr. Tongue?

Mr. TONGUE. Yes, I will be glad to. You have opened, it seems to me, a Pandora's box, or one of these questions where, if you grab here it comes out there. It covers the whole gamut of economic policy of this country today. To start with the effect on our international balance, of course when we cut interest rates here for the purpose of stimulating the economy this adversely affects the flow of funds abroad and our overall balance of payments problem. However, it does have some small impact in improving our balance of payments problem too because it reduces the amount of interest we have to pay foreigners for balances that are here on deposit or invested in short-term securities. In that connection it seems to me that I would like to demur from Mr. Triffin's suggestion about being in favor of cutting our gold reserve requirements against Federal Reserve notes and deposits some time but not now. I think this is the time we ought to do it and if that scares another couple of billion dollars abroad, why, so it does. Let it go. Because I do feel that from an overall standpoint it is desirable to attack our present domestic economic problem with monetary rather than with fiscal policy.

It seems to me that we have two problems in our country today domestically. One is the cyclical fluctuations, and we are now in what we call, I call, a mild recession, and we will recover from it. But our economy also contains built-in stabilizers of growing potency, so it tends to stick wherever it is and fluctuates less and less in both directions. We do seem to be at a point where we are operating at an unsatisfactory level around which the cyclical fluctuations are taking place. At least I cannot view with equanimity 6 or 7 percent unemployment indefinitely.

At the same time we do need to stimulate growth in the country, and to stimulate growth we must have more savings, as well as a higher level of employment. A healthful way to get increased savings is a budget surplus. It adds to the savings of the country rather than the reverse. As to a budget surplus, we would have one now with full employment, a very substantial one, and I think we should aim to try to keep one. We need something else to stimulate the economy and it seems to me that for this we should use monetary policy. I feel that to date our efforts have been very feeble and very halting in this direction. We have had a rise in the money supply since May, but we are not even back yet to the levels of 1959 when the decline started. It may even be that in November we had a decline in the money supply. I haven't seen the official figures, but weekly figures would suggest this. At the same time, the flow of securities into the market, which would absorb savings, has been stimulated modestly but not sufficiently.

So it seems to me that we should take additional steps to reduce long-term money rates which are quite high for the situation in which we now find ourselves. They should be reduced in order to stimulate investment in housing, State and local projects, commercial and industrial construction, and public utilities expansion.

Now, if it should be felt that it was desirable to try to hold foreign balances here, I think it would be possible to do this by perhaps holding the short-term up where it is now or even possibly a little higher, while reducing the long-term rate. I am not certain it could be done, but in any event, I think we should take additional steps in monetary expansion to those that have already been taken.

The CHAIRMAN. Without wishing to precipitate internal civil war within the committee, I may say that this was the recommendation so far as long-term rates were concerned of the majority of the Joint Economic Committee.

Senator BUSH. When was the poll taken?

The CHAIRMAN. In the report last year.

Mr. GREENWALD. It seems to me the most volatile area in the balance of payments is the outflow of short-term funds. This outflow seems to reflect changes in interest rates, and also a lack of confidence in the growth of the United States.

Now, I point out this is a short-term problem because if the U.S. economy is going to grow in the next few years, as we all expect it to, then this will no longer be a major problem. And it may well wind up that there will be more inflow of short-term funds and long-term funds from foreign sources.

So I would say that if we can keep the interest rates under control then this would be the most important thing. We can exercise some control, for the most part, over all of the other areas of the balance of payments.

Representative CURTIS. I would like to ask Dr. Triffin some questions on the valuation of our net private investment in this balance of payments problem. There has been a net in our favor, has there not? In other words, we have been investing more abroad than is invested here. In fact, over a period of time that has accumulated considerably.

Now the question I raise and the reason I think it is significant and I want to ask your comments on, is this: If there were any such thing as a run on the gold reserves of the United States, much of our investment is in Western Europe and these short-term claims accumulated by foreigners which you mentioned are to a large degree in the Western European countries. Much of our private investment has been frozen and I guess a lot of it still is frozen in some of the Western European countries by the inability to withdraw our investment.

Don't you believe that that is going to produce both a political and economic decision on the part of the Western European countries if their private citizens or the governments themselves started any unusual claim against our gold reserves?

Mr. TRIFFIN. Yes, I think I agree fully with what you have said and I would like to stress again, as I did last year, that we are in no danger of becoming insolvent. We have accumulated large investments but very substantially in the form of direct and long term investments. Our problem really is a problem of liquidity, and not of solvency.

Now, in terms of that, the way in which I calculate it myself, I would say that our net international position today shows us in the black at the end of 1959 by nearly $44 billion. It had declined very slightly in the last 3 years, since the end of 1957. The difficulty with it is that most of the assets there, outside of our gold reserves, are assets which we could not liquidate rapidly if faced with a run on the dollar. We cannot liquidate our direct investments abroad very rapidly and we would not want to introduce exchange controls. I think any indication that we are ready to introduce exchange control in this country would be certainly again an act of panic, and totally unjustified.

Representative CURTIS. Short of doing that would be the unfreezing of some of our investments. It is long term, it is true, but part of the freezing of that is the political action of these Western European countries. Wouldn't the first step, if there were any attempt or any indication of a run on our gold reserves, produce action on our part to unfreeze this?

Mr. TRIFFIN. I think we should certainly press foreign countries, particularly in Western Europe, to liberalize the regulations on capital exports which were adopted during the years of the dollar shortage. But I think that very great progress in that direction has already been made and that the amount of restrictions that remain are not as considerable as one might think. Yet it is certainly action which would be desirable, and beyond that, I was indicating before that I would regard it as perfectly proper to encourage some prepayment of our foreign claims.

Representative CURTIS. Of course, we have these counterpart funds which many people think we never really will recoup, but what I am suggesting is that it seems to me an unrealistic thought to suggest that there would be any real problem that we face on liquidity, in the light of the fact that liquidity is so much affected by the political action, if you please, the decisions that we have made outside of economics with the political governments in Western Europe.

I think that you do agree that most of these holdings against us are in Western Europe, isn't that true?

Mr. TRIFFIN. Yes, but our own short-term investments abroad are very small in our total investments. The big bulk really is in direct investments and unless we want to sell our plants and firms abroad, and so on, we could not quickly do that and we would have to induce our own citizens to act in that manner.

Representative CURTIS. But through political action, or rather with reference to these other countries, you could reexamine some of these artificial barriers.

Mr. TRIFFIN. That is true, but I don't think that that is very substantial.

Representative CURTIS. You have brought out the point that I wanted to dwell on a bit. Incidentally, what effect do you think the failure of the Congress to remove the 4¼-percent interest ceilings on long-term bonds had upon this phenomena that you talk about, of the increase in the very large short-term claims which were accumulated by foreigners?

Mr. TRIFFIN. I don't think that it would have a very large effect there.

Representative CURTIS. This is past, but did it have an effect, our failure to do that? The Government did finance or had to finance, and all this did was to force them into financing in the short term under the 5-year term.

Mr. TRIFFIN. To that extent, it meant the short-term rate went higher than it might have gone otherwise.

Representative CURTIS. That is right.

Mr. TRIFFIN. And because of this foreigners might have had a greater inducement to hold short-term balances here instead of taking gold. If anything, it has helped us to some extent.

Representative CURTIS. But suppose that the interest rate for long-terms had been on an economic basis, instead of a pegged basis? Wouldn't we have been able to market the long-term bonds? The administration pointed out that that was the fundamental error and would badly affect our balance-of-payments situation.

So now I am asking in retrospect, Didn't that aggravate this situation?

Mr. TRIFFIN. I don't think from the point of view of the international situation it would have had a very great effect, because foreigners do not normally hold large amounts of those long-term bonds, and certainly not the central banks, for instance.

They usually concentrate their holdings on more liquid assets, because they want to use them as reserves and they do not normally buy very long-term securities.

Representative CURTIS. Certainly it is true that if we are not offering a realistic interest rate they are going to put their money somewhere else. It seems to me that is fairly obvious.

Mr. TRIFFIN. But the rates which are more relevant in this respect are short-term rates than long term.

Representative CURTIS. This proposed idea of yours, that wouldn't eliminate the U.S. balance-of-payments deficit?

Mr. TRIFFIN. No.

Representative CURTIS. This is a different problem.

Mr. TRIFFIN. Yes, that is a different problem.

Representative CURTIS. And you don't propose here any long-range program to eliminate this balance-of-payments deficit, and this is not directly involved.

Mr. TRIFFIN. I have mentioned a few measures which I think would be useful. What I think is that the first problem of correcting our balance-of-payments deficit is one which has attracted considerable attention. It was discussed during the election, and I think most people are very familiar with the measures that could be taken, while the other problem has not been widely discussed.

Representative CURTIS. Let me be sure that I am right, because this is a field that I am not too familiar with. In figuring our balance of payments, we include the net or the deficit of private investment, do we not?

Mr. TRIFFIN. It is part of it.

Representative CURTIS. Why is it? Actually I would think that those would even off, and we would get the securities in exchange for the investment. Why isn't that a washout figure?

Mr. TRIFFIN. Well, because we are concerned with that. Ultimately the thing that limits us is the problem of the gold withdrawals.

Representative CURTIS. In other words, simply because it is a frozen investment or a long-term investment, in other words, it is a liquidity measure?

Mr. TRIFFIN. And the fact is that unless we move into exchange controls, if our authorities feel under pressure they still cannot direct private investors here to repatriate their funds. It is something which private investors will decide.

Representaive CURTIS. We don't do it, but it is done abroad.

Mr. TRIFFIN. I think some moves should be taken on that. You are quite correct.

Representative CURTIS. Now, Mr. Greenwald, there is constantly this reference to the unsatisfactory level at which our economy is operating, and I have often wondered just how accurate are our estimates of how much we use our economic plant.

Let me refer first to our figures that we compiled on plant capacity. In your paper you point out that there is a tremendous need to modernize obsolete facilities. Isn't a great deal of this plant that we talk about not being used actually obsolete? One reason it isn't used perhaps is the fact that it is inefficient and obsolete.

Mr. GREENWALD. Well, it is my impression, from our surveys, that about two-thirds of our facilities were built prior to 1950, and about a third since 1950. This would make our plant and equipment pretty obsolete in terms of age. Not only that, but some of the new developments that have come about through the quickening pace of research and development have actually outmoded some of the facilities that has been built in the last 10 years.

Representative CURTIS. You are getting right to the point I want to drive home. I think it is true. The more rapid the technological advancement, the more rapid the obsolescence, and indeed today in our figures and tax law depreciations and so on, it is obsolescene more than wearing out that seems to be the economic factor.

Mr. GREENWALD. That is true.

As a matter of fact, as we move into the future, so far I have talked only about the past, but as we move into the future this faster pace of research and development is going to outmode many things, and companies are going to have to get a payoff in a much quicker time period than they have in the past, because new products will always be coming out. This stream of new products and new processes is going to make some major changes in the way companies plan investment and research and development expenditures.

Now to get back to the other point we were talking about, the industrial operating rate or rate of utilization of capacity as we refer to it, is for the manufacturing area. Our latest figure was 79 percent. It has gone as high, I believe, as 90 percent at the end of 1956, say.

Now these rates are determined from our survey. We ask companies "What rate are you operating at?" and I assume that the companies reporting to us know what this means. The operating rate figures actually check out on an industry basis. For example, this is true if you use the estimates of the American Iron & Steel Institute or the estimates of the American Petroleum Institutes, their operating rate figures are very close to ours.

In other areas it is more difficult to determine what an industry's operating rate is. Take for example the machinery industry. Some companies are turning out construction machinery and agricultural machinery at the same time and this makes it difficult to report an average operating rate.

But our experience has taught us that these companies do a very careful job of trying to estimate this rate for us.

Now there is another source of information on operating rates. The Wharton School has completed a series on the operating rate of industry. It differs somewhat from ours in definition, but the trend is the same, and it is down now relative to what it has been.

Representative CURTIS. I am trying to direct attention to this concept of 100 percent utilization. I even wonder whether that is what we should be shooting at anyway. If we want rapid growth, I think real economic growth is in technological advancement, and the more rapid the technological advancement the more the obsolescence, and the more of these figures that we have of plant capacity tend to be unrealistic because we are not going to use—I hope we aren't—the inefficient capacity. When we can get around to it, we are going to junk it.

I was directing attention there to that problem. I am not so sure that we would want to operate that way.

Let me get to another side point, and as I understand at one stage in the Korean war, steel was operating beyond 100 percent capacity, which as I interpret it means that they weren't shutting down for what would be prudent maintenance and repair, which would soon eat into capital. You can always do that under a forced draft, that is go beyond 100 percent.

If I am saying anything, it is this, that I think we ought to evaluate what we mean by plant capacity a little more, when we start referring to this aggregate of how much of our capacity are we using. Would you agree with that?

Mr. GREENWALD. Yes, and as a matter of fact we are seriously considering doing another survey real soon about the quality of this capacity that we talk about. However, I would like to point out that most companies do not prefer to operate at 100 percent of capacity. The preferred rate is somewhere above 90 percent, but not 100 percent, because this is not the most efficient way of working. Obviously, when the steel industry was working at over 100 percent capacity, they could not shut the plants down for repair. Therefore, the industry's equipment probably suffered, and this obviously affects the efficiency of the industry's operation.

Representative CURTIS. Incidentally, using the GNP as an indicator of how well the society might be doing, it can be very artificial. It is like the study of Russian railroads which indicates that apparently they are utilizing them beyond prudent capacity, which will look good for a certain period of time but in the long run might end up not so good.

Now if I could direct my attention to the other aspect of utilization of our economy, that is labor. I have been trying to point out that I regard it as an axiom and it has yet to be contradicated and I believe it is an axiom, that the more rapid our technological advancement the higher rate of frictional unemployment. That is the more obsolete skills we create. So when we talk about utilizing the full work force, if we are in a period of rapid economic growth, or technological growth, we are being quite unrealistic if we just use the aggregate of the number of people who could be working, but the question is, working at what?

If they haven't got the skills that are needed as a result of the new technological advancement, we just can't put them to work, at least from an economic standpoint.

If we have been in a period of rapid technological advancement, and I believe we have, although that is sort of a subjective study rather than objective, I would think that the rate of frictional unem-

ployment would be a great deal more. So again we are talking in aggregate terms and this is really directed to Mr. Henle. Are we being realistic when we are talking as though we could have 100 percent utilization of plant capacity and in this instance of work force in a period of rapid growth or technological advancement?

If we had a stable society that wasn't going anywhere, we could solve our full employment problem, and probably wouldn't have any problem of utilizing plant capacity because we would be still doing the same thing the same way.

Mr. HENLE. Well, Congressman, you certainly raise a very real question. Let me talk about it in this way: Admittedly the last 5 years have been years of more rapid technological advance, but somehow or other we haven't really put this technological advance to good advantage and converted it to a rate of growth that keeps up our economy.

Representative CURTIS. Measured how? I think we have ourselves bogged down in semantics which are defeating the very object we want. We talk about growth and then we measure it in GNP; and say our increases are there, whereas yesterday I pointed out a lot of our growth is shift, and real growth is shift, increased standard of living, and it has been a shift from manufacturing to services, but it won't show up in GNP, necessarily.

Mr. HENLE. I am perfectly willing to agree that the shift in our economy from the goods-producing industries toward the service-producing industries represents a higher standard of living. Yet if this is not reflected in people's incomes, and in productive employment, I don't see how you can measure it as an improvement.

Representative CURTIS. Here is the point. What are we after when we talk about growth? Is it just this aggregate or isn't it really in the terms, as I used them? Ten years ago it took me 5½ hours to fly from St. Louis to Washington and today it takes 3 hours. It is that kind of thing that indicates a society moving forward. The research and development that brings in new products is important.

Now that is the growth, but what I am thinking you are now saying, and I couldn't agree with you more, is that as we grow we certainly want to keep our people employed.

Mr. HENLE. If we don't have the income to make the flight from Washington to St. Louis, the technological advance doesn't do us much good.

Representative CURTIS. That is right, but the thing I am disturbed about is the use of the aggregates the other way. Though we have had tremendous technological advances, as you have said, very rapid in the past 5 years, and yet because we don't see it turning up in the GNP indicator perhaps as well as we might like, we act as if it didn't occur.

Now I would like to direct attention back to the unemployment thing. I am disturbed about it and I think that we all ought to be, but I think we have to identify it. I think it is one of the costs of rapid growth, and the very people that are talking about wanting more growth are the very ones who won't face up to the fact that that is going to create more problems.

What do we do with frictional employment? It is a retraining process, because today in our society we haven't much use any more for unskilled and semiskilled people and those with obsolete skills have to be retrained if they are going to be utilized into these new skills.

I think we can solve the problem, but when we fail to identify it we are not going to come up with the right solutions.

Mr. HENLE. Well, we have tried our best to identify it, and as a matter of fact this committee has done some good work in this field in its study of employment, growth, and prices. One of the byproducts of that study was some work by the Bureau of Labor Statistics, trying to break down the unemployment rates.

Representative CURTIS. It is to identify where it is, yes, and to identify it.

Mr. HENLE. But I do not believe, Congressman, that the results of that study confirm your impression that in the last 5 years this increase in unemployment is simply an increase in the frictional rate, because the frictional part of the total unemployment is relatively small.

Representative CURTIS. I would suggest that we have not fully identified it. Now let me illustrate. We have had an area where the technological advancement has been so great, in agriculture, that today one man can produce the food and fiber, and, in fact, more than we can absorb, when it took three men before.

What many have been calling an agricultural problem in my judgment has been a rural unemployment problem, and the pressures from that sector have come into manufacturing and the service field.

We see a decline in manufacturing employment and yet an increase in overall productivity and capacity to produce, and yet we see in the service field the increase. That is why I suggest that growth to a large degree is shift, and gross national product is not a very accurate series to measure growth. It is helpful and meaningful, but it is not a very accurate way of measuring it.

I do suggest that a great deal more of this unemployment has been frictional unemployment. Take your depressed areas. Everyone has identified them, certain ones, in West Virginia and Pennsylvania, and they have to do with the decline in specific industries, in the coal industry, or in certain aspects of steel, or railroads. These skills once needed by those industries are no longer needed. Congressman Widnall tried to point out the impact of foreign imports. The wooden clothespin industry is gone by the boards to a large degree, I think, because of clothes driers more than anything else, but the people who used to make wooden clothespins find their skills are no longer needed.

I suspect that a more thorough study of the problem would be more important than anything else. I do agree that a good start has been made to try to identify these things, but in the United States today we still don't even have nomenclature for skills. You would agree with that, would you not? We don't even have nomenclature as to what skills are.

Mr. HENLE. Well, we have definitions of occupations.

Representative CURTIS. Dated back to about 1910, as I recollect.

Mr. HENLE. Yes; but they are a little more valuable than that remark would indicate.

Representative CURTIS. The steel industry and the unions did an excellent job in their pamphlets on identifying and naming skills.

Mr. HENLE. But, Congressman, I still think that some stubborn facts remain, when you look at the unemployment figures and you look at the figures of output. If you don't like gross national product, use the Federal Reserve Board's index of industrial production, or use any measure that you like. The unemployment largely is a by-product of general economic developments. It goes up when things go down, when activity drops. The long-term rate has been up, and I would contend that the creeping unemployment that we have had is partly the result of the advancing technology but perhaps more directly of our failure to utilize this advance in technology constructively and with it to produce the output of which we are capable.

Representative CURTIS. Let me turn it around in specifics. I want to pay real credit to our labor leaders because of their resistance to the normal inclination to fight machines and innovations and automation, but certainly the very reason that there is this inclination, and some unions regrettably give in to it is for that reason—they don't want to have the unemployment that would result from the technological advancement. I think that is the incentive behind what has been identified as featherbedding, and it is a very understandable thing on the part of the labor unions and their members.

But I am seeking to point out only the phenomenon here, that the more rapid our growth, and that is what everybody wants, they say, the more you are going to have technological unemployment, and the greater the need therefore for retraining and vocational education in the field of the unskilled and semiskilled. All I am trying to do is identify the phenomenon so that we can apply the cure.

I think that you are suggesting that the real problem is something that is in the aggregate of our economic system, and it is not identifiable as I seek to do it. Maybe I am wrong, but is that where we differ?

Mr. HENLE. Now, you covered a lot of ground. First, so far as the reaction of workers and unions to technological progress, in one breath you paid some tribute to that.

Representative CURTIS. Because they resisted that normal inclination to a large degree.

Mr. HENLE. I think that that is true. I think that it is particularly true compared to the practices of both business and labor abroad, in other countries. At the same time you started to talk about featherbedding as if it was a major problem.

Representative CURTIS. I think in certain industries, I suspect that it may be, but I can't prove it.

Mr. HENLE. I don't think it is, and from the standpoint of employment maybe some real featherbedding would make inroads on unemployment. I think the unemployment figures would tend to point out that the American work force has accepted technological change. As George Taylor, the impartial factfinder who was called into the steel dispute, said to the steel companies, "If you think that you have featherbedding problems, let me tell you that most of industry would be delighted to operate under the rules that you have been having here in the steel industry."

The thousands of steelworkers idle in Pittsburgh, Youngstown, Chicago, and Gary are testimony to the fact that the Steelworkers Union has not tried in any way to pad employment rolls.

Representative CURTIS. Nor did John L. Lewis in the coal mines, and yet look at the number employed in coal mining today, compared

to before all of the machinery came in. That is why I can't help but think, and I don't want to say that you are minimizing, but at least you don't feel that my emphasis on that aspect of unemployment is as great as I think it is.

Mr. HENLE. Just to move to solutions and what can be done about this question, we agree with you that there are people whose skills become obsolete and that there has to be more retraining. We want to hook these retraining systems up to some form of income maintenance, either through the Federal and State system of unemployment insurance or through a supplementary Federal system for those people who have exhausted their payments under the State unemployment systems.

We think there is much work that the Federal Government can do in the education field to stimulate better and higher grades of vocational education and to keep the youngsters in school and get them better trained so that they are equipped to take jobs.

But, frankly, Congressman, there is this difference of opinion. I personally feel that the single, most important thing that can be done to reduce the level of unemployment is action of a general nature. I am in favor and will support and will help to work out these special programs in the field of employment service, or retraining and the like, to help guide people toward the jobs that are available. But unless at the same time you have the basic Government economic actions that will yield a greater number of jobs, this work in these specific areas is bound to be just frustration.

Mr. GREENWALD. Actually, it seems to me that the unemployment problem is likely to grow worse. We have 2 million people coming into the labor force each year. The new entries are for the most part 14 to 18 years old. The Bureau of Labor Statistics recently did a study on the manpower problem which highlighted the fact that there were many young people coming into the labor force.

Now, if we tie the fact that we have all of these young people to the fact that our future jobs will need greater skills, it suggests to me that unemployment could be 10 or 12 percent at some time in the near future.

Now, I am suggesting that perhaps what we have is a wrong definition of unemployment. Perhaps the committee would do something about that. But I don't see how we can, in the kind of highly technical economy that we are going to have, still count young people 14 to 18 years of age as unemployed if they are looking for jobs but can't find them.

The CHAIRMAN. I want to thank the panel. I do not wish to subject them to further strain, and so I shall waive any questions that I might have had. I want to compliment the members of the panel for their testimony, and thank them for coming, and I think that I should make it clear that in closing these hearings it is not our intention to produce any report or summary. The hearings have been designed primarily to bring not only the committee up to date on the economic situation but also to inform the general public. We appreciate your contribution very much.

(Whereupon, at 1:10 p.m., the committee was recessed subject to call.)

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