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**EMPLOYMENT, GROWTH, AND PRICE LEVELS**

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**HEARINGS**

BEFORE THE

**JOINT ECONOMIC COMMITTEE**

**CONGRESS OF THE UNITED STATES**

**EIGHTY-SIXTH CONGRESS**

**FIRST SESSION**

**PURSUANT TO**

**S. Con. Res. 13**

OCTOBER 26, 27, 28, 29, AND 30, 1959

**PART 9A—CONSTRUCTIVE SUGGESTIONS FOR  
RECONCILING AND SIMULTANEOUSLY OB-  
TAINING THE THREE OBJECTIVES OF MAXI-  
MUM EMPLOYMENT, AN ADEQUATE RATE OF  
GROWTH, AND SUBSTANTIAL STABILITY  
OF THE PRICE LEVEL**

Printed for the use of the Joint Economic Committee

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**STUDY OF EMPLOYMENT, GROWTH, AND PRICE LEVELS**

(Pursuant to S. Con. Res. 13, 86th Cong., 1st sess.)

OTTO ECKSTEIN, *Technical Director*  
JOHN W. LEHMAN, *Administrative Officer*  
JAMES W. KNOWLES, *Special Economic Counsel*

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# EMPLOYMENT, GROWTH, AND PRICE LEVELS

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MONDAY, OCTOBER 26, 1959

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, at 10 a.m., pursuant to notice, in the Old Supreme Court Chamber, the Capitol, Senator Paul H. Douglas (chairman of the committee) presiding.

Present: Senators Douglas and Bush; and Representatives Reuss, Curtis, and Widnall.

The CHAIRMAN. We are beginning this morning the last week of our formal public hearings. We shall devote these hearings to an attempt to develop an integrated approach and, if possible, integrated solutions, to the central question of how we can obtain substantially full employment and an adequate rate of economic growth and at the same time preserve some substantial stability in the price level. This is the central problem of economic policy for the immediate times and we want to acknowledge the kindness of so many eminent economists who have come here to testify to offer their opinions and judgment.

This morning we are especially pleased to welcome an old friend, Prof. Richard A. Musgrave, formerly a professor of political economy at the University of Michigan, now a professor at the neighboring University of Johns Hopkins.

Mr. Musgrave, will you proceed?

## STATEMENT OF RICHARD A. MUSGRAVE, PROFESSOR OF POLITICAL ECONOMY, THE JOHNS HOPKINS UNIVERSITY

Mr. MUSGRAVE. Mr. Chairman, I should like to read my prepared statement.

We have been asked to present suggestions for reconciling and attaining simultaneously the three objectives of maximum employment, adequate growth and substantial stability of the price level. This is not an easy task, and I am not sure that I can add to the wealth of evidence which has already been laid before you, and to the excellent work which your staff is doing. However, I am aware of the vital importance of your task, and I shall try my best to be useful.

Since the emphasis is to be on suggestions for specific policy measures, I thought it best to avoid the temptation of presenting you with yet another attempt at analyzing the alluring concepts of cost-push and demand-pull inflation, even though my policy conclusions are necessarily affected by my own views on this matter. However, some remarks will be needed on the nature of the three objectives, and on their priorities.

## THE GOALS OF POLICY

The objectives of employment, price level stability and growth are all desirables, but they are relative objectives, which can be accomplished in varying degrees, and since conflicts may arise among them, little is gained by listing them without some understanding regarding the degrees of urgency involved.

Employment: It is my view that high and, if reasonably defined, full employment is a basic requirement of a satisfactory social system. Unemployment relief, no matter how ample, is not a substitute for employment, which provides the major link of integration between individual and society. For this reason, or, if you wish, value judgment, I am most hesitant to pay the price of involuntary unemployment in order to achieve the other objectives.

On balance, I do not believe that there is a serious conflict between high employment and growth. To be sure, the two objectives may clash in certain situations. Shifts between jobs, needed to accommodate technical progress will be more rapid if unemployment is higher, and the danger of unemployment may, under some conditions, be a spur to greater work effort. However, greater labor mobility may be achieved by other means than unemployment, and the longrun effects of job insecurity on incentives may well be detrimental rather than helpful.

The more basic point is that growth is furthered by the intensive use of all of our resources, and that only in a buoyant economy will there be sufficient incentive for private enterprise to undertake the aggressive policy of expansion which, in the absence of extensive Government investment, is needed for rapid growth. These seem to me the more important factors so that, in all, growth and high employment are complementary, not rival, objectives.

The same cannot be said for the goals of high employment and upward stability in the price level. Some causes of inflation, such as a generally excessive level of demand, clearly do not call for unemployment as a solution. Hence there is no conflict. Potentially, the most serious conflict arises where the basic inflationary force stems from excessive wage demands, and where these demands are a function of a guaranteed policy of high employment. The argument is that such demands would not be forthcoming in the absence of a full-employment policy, either because union leaders would wish to avoid unemployment, or because employers would be unwilling to grant the requested increases if the necessary market was not assured. Perhaps such would be the case, but I fear that the amount of unemployment required to secure the necessary discipline might be substantial, and there is a good reason to expect that its major incidence would be among the innocent, including firms as well as unions, rather than the guilty. If such a situation exists, and as noted below, we should not be too quick to generalize from a 2-year experience, the solution lies in some degree of public control over wage and price policy in the basic industries, and not in the wastes and hardships of unemployment.

Where inflation is the reflection of adjustments in relative prices occurring in an economy with downward rigidity in wages and prices, there is again some conflict, but the degree of conflict is much less serious. A substantial degree of unemployment may be required to

remedy a relatively minor tendency to price rise, since a moderate degree of general unemployment does not assure that the lubricant of unemployed labor will be available in just the right places. The resulting degree of inflation is likely to be slight, and less damaging than the remedy of substantial unemployment. Appropriate policies here require selective controls over demand, designed to smooth the course of structural adjustments.

Thus, my general emphasis on high employment, as a matter of social value, is strengthened by skepticism regarding the efficacy of modest unemployment as a means of stabilizing the price level. At the same time, it is obvious that high employment, as a policy objective, must allow for the fact that job changes are unavoidable in a dynamic economy, and that it takes time to transfer between jobs. If everyone changes his job once a year, and if a week is required for transfer, about 2 percent of the labor force will be unemployed on this count. Given adequate market organization, and a sustained level of high employment, 2 or 3 percent should suffice for what is required for this purpose.

The case for high employment has suffered, since the enactment of the Employment Act, by the ambiguities which arise from the term "full employment". Opponents of a full employment policy delight in pointing to the difficulties of defining "full employment", and proponents have been forced to retreat into the vague nebula of "high employment". Public discussion might be aided, and full employment be restored to its rightful place of No. 1 policy objective, if the current measure of unemployment, that is, ratio of total unemployed to labor force, was replaced by a more reasonable concept, making allowance for the type and duration of unemployment and for other essentially qualitative aspects of the unemployment problem. We now have general public acceptance of the BLS index of cost of living as a measure of price level stability, and it serves its purpose. A counterpart is needed with regard to an index by which current performance relative to the target of full employment may be measured.

Stability of price level: My emphasis upon full employment, as just defined, as a primary policy objective must not be taken to mean that I am impervious to the dangers of inflation. This goes without saying for the disaster type of inflation, such as may be found in the wake of war finance, especially of defeated nations. The more relevant point is that even a modest rate of price increase, if continued sufficiently long, may result in serious inequities to various groups in the economy.

While the much-quoted case of schoolteachers has lost some of its force and other groups, such as OASI recipients, are similarly securing price-level adjustments, there remains the case of the private saver who has placed his assets in fixed obligations. Even if we assume that his earnings and hence his savings rise with the price level, an annual rate of inflation of, say 3 percent, may shrink by 40 percent the real value of savings accumulated over his working life. This assumes savings of 10 percent of income, compound interest at 4 percent, and a 30-year span. If the inflation rate is 2 percent and interest is 3 percent, the loss is 27 percent.

This is not to be taken lightly. It forces the small saver to invest in equity capital, thereby assuming a degree of risk which is unreasonable from his economic position. A well-organized society should not impose such compulsion to take risk; it should offer an opportunity for a riskless investment or form in which to preserve one's assets, riskless with regard to changes in price level as well as possible default.

If appropriate policies, monetary and fiscal, are pursued to avoid general excess demand, and if the generation of autonomous cost-push is checked at the source, we will still be left with some upward bias in the price level. In an economy in which money wages are generally rigid in the downward direction, this remains to be expected. As to the existence of this downward rigidity, no one will deny it, and I believe that little can be done about it. However, and this is a point usually forgotten in the current discussion, I do not believe that this downward rigidity is altogether a bad thing. A pretty good case can be made for arguing that the relative mildness of the postwar recessions was due, in significant degree, to the existence of this downward rigidity which, by its very nature, helped to prevent the development of a downward spiral, based on anticipation of falling prices and shrinking purchasing power.

A visitor from Mars, sitting in on current arguments about the inflation problem, might well be led to believe that we have just emerged from a holocaust of runaway inflation. This, of course, is far from the truth. The fact of the matter is that the average annual price rise from 1948 to 1958, as measured by the BLS index of wholesale prices, was about 2 percent, which is considerably below the rate, nearly 3 percent, of average advance in the BLS index during the golden years of 1895 to 1910. According to a new series by C. D. Long and A. Rees, the average rise in wholesale prices from 1895 to 1910 was 1.9 percent, or about the same as for 1948-58. According to the series by Long and Rees, consumer prices rose at an average of 0.9 percent during 1895-1910, as against 3 percent in 1948-59, which period, however, includes the Korean war.

Also, the fact of the matter is that the cost of living remained about constant from 1948 to 1950, from 1952 to 1956, and again since 1958. Thus since 1948, significant price advances occurred only in connection with the Korean war and in 1956-57. The experience of 1956 to 1957 is disturbing, and all comparisons have their weakness, but in all, this is hardly the story of an alarming record.

The main change in the longer-run picture is that we have learned, we hope, to maintain employment, and hence will be relieved of periods of severe depression, in which prices have declined traditionally. On balance, this should be a considerable improvement, not a worsening, of our position.

Growth: I now turn to growth, our final and most difficult policy objective. If we did not have to worry about international problems, I would clearly rank growth third in my list of policy objectives. And this for two reasons. Other things being equal, everyone will agree, as a matter of course, that an increase in growth is a net gain. However, this is a truism only. In reality, other things are not likely to be equal, and forced growth is likely to be a costly affair.

Unless generated entirely by an increased rate of innovation, more rapid growth will require a higher level of capital formation, and hence a lower level of current consumption. For this and other reasons, social welfare policies may have to be curtailed, the tax structure may have to be made less progressive, investment may have to be subsidized, and so forth. The extent to which these things will have to be done will depend upon the rate of growth which we wish to attain, but I think that we would be mistaken to assume the objectives of social welfare and growth to be coincidental.

Normal growth, such as has been customary in the past, is necessary to provide a healthy social climate and to help overcome the remnants of poverty in our country, but forced growth will add little, and may even endanger these objectives. Also, a forced rate of growth will complicate the task of maintaining stability of price level. Rapid growth generates, and to some degree requires, excess demand. The inverse proposition, that rapid growth is needed to meet wage demands in a noninflationary fashion, is unconvincing. It assumes that such demands are independent of productivity gains, an assumption which seems quite unrealistic.

For these reasons, my enthusiasm for a policy of forced growth is limited. I am in favor of technical progress, to be sure, especially if the costs thereof are borne equitably; but beyond this, I am unwilling to accept substantial sacrifices in the form of inflation or extensive controls in order to raise the rate of growth above a level of, say, 3 percent, such as has been customary in the past. This much for growth in the absence of international considerations.

In reality, we do not live in isolation, and these international considerations are all important. Here much depends on the urgency of the international situation. If it were necessary, as a matter of national survival, to raise the level of GNP, a vast increase of 25 percent or more could be accomplished in a rather short period, and this even without the substantial initial unemployment which characterized the prewar position. By increasing working hours and labor force, by allocating strategic resources to essential uses, and by taking other measures typical of a war economy, an increase in output could be accomplished within a year's span, raising GNP to a level which, in the normal course of events, it might take a decade to accomplish. Evidently the cost would be high and the sense of urgency is not that great. Yet we can hardly argue that the growth objective should be just that which can be achieved without doing anything inconvenient, and, in particular, without requiring any sort of direct controls. The requirements of the international situation will hardly happen to coincide with this convenient target. Some inbetween solution is needed.

The proper target, it seems to me, cannot be stated simply in terms of an overall rate of growth in GNP. I see no important international objective which is served by increasing the supply of luxury services to the American consumer. Rather, we have to focus on the contribution of growth to our capacity for defense, and to our ability to help underdeveloped countries to improve their standard of living. Therefore, my concern for rapid growth is primarily a concern for the kind of growth which helps to further these objectives. This shifts the problem from one of overall growth to one of structure of growth.

With regard to defense, such unpleasant matters as relocation of industry to maintain capacity under attack, as well as provision of shelters for the civilian population, should be given high priority. These are both projects of such magnitude as may absorb a good part of the incremental growth which we can achieve. Our persistent refusal to face these needs seems beyond rational understanding. Also, the different degrees of convertibility of civilian into defense production in various areas of growth cannot be overlooked and our disastrous lag in rocketry requires drastic action.

With regard to economic aid, I am quite aware that redistribution of our output among the vast populations of the underdeveloped countries would not go far in solving the problem, and that more harm than good might be done by destroying the original sources of wealth. But I am also unable to escape the thought that our concern for social justice cannot stop within the boundaries of our own country, if a decent international society is to develop.

Hence, the case for substantial and sustained economic aid seems to me imperative, and if it is to be met, it will have considerable bearing on the structure of growth at home. Certainly the existence of poverty in vast areas of the world renders invalid the proposition that this is the age of opulence, where production has ceased to be of economic concern.

#### THE MEANS OF POLICY

I now turn to the choice of policy measures designed to accomplish these objectives, beginning with some comments on the proper mix of policies.

Mix of policies: Considering first the choice between fiscal and monetary policy as a means of restricting the general level of demand, it has been argued that fiscal restriction is more favorable to a policy of growth than is monetary restriction, the assumption being that the former curtails consumption, while the latter curtails investment. This is true to some degree, but not altogether.

Taxes may be imposed on investment as well as on consumption, and in meeting the requirements of equity the tax structure, short of a progressive expenditure tax, is bound to curtail both types of demand. General monetary restriction similarly restrains consumption expenditures on durables, especially housing, as well as—and perhaps even more so than—investment in plant and equipment. Thus, this dichotomy must not be carried too far.

There are plenty of reasons why both approaches are needed; and while their relative degrees of effectiveness will differ with economic conditions, it is only in very particular circumstances that the one may be expected to work without the support of the other.

Considering next the choice between so-called general and selective types of policy, two points should be noted.

First, the distinction is by no means as sharp as some people would like to have it; so-called general policies, such as open market operations, are frequently policies with hidden selective effects, effects which at times may lead to worse distortions in market patterns than those which follow in the course of explicit selective measures.

Secondly, the cause of the trouble, be it inflation or unemployment, may be such that the so-called general measures simply do not work,

but require selective remedies. On the inflation side, such is clearly the case under conditions of autonomous wage or price push, where such price rise results even in the presence of unemployment. On the unemployment side, such is clearly the case in dealing with problems of depressed areas, and with localized technological unemployment.

While the choice between selective and general measures has its ideological side, the basic issue is, or should be, whether the root of the trouble is such that the remedy can always be found in general measures. As I see it, the answer is clearly "No." Therefore, both approaches are needed.

My remaining comments, dealing with specific types of policy, will be directed largely at matters of fiscal, monetary and debt policy, since these are the areas in which my major interest lies.

Fiscal policy: In the area of fiscal policy, my main concern is to increase the degree of flexibility with which fiscal policy may be operated. We have no counterpart today in the field of fiscal policy, to the shortrun flexibility which is routine in monetary policy. The introduction of such flexibility, I believe, would be a real gain, and I see no great technical difficulties in providing for it. This thought extends to both the tax and the expenditure side of the budget.

On the tax side, much has been said in recent years about the beauties of built-in flexibility of the tax structure. Undoubtedly, this flexibility is a fine thing, and to the extent that it has been effective, it has been a happy windfall of the large defense budget. At the same time, I believe that the magnitude of the effectiveness of built-in flexibility has been quite limited, not only in terms of the dollar amounts involved, but also due to the nature of the particular taxes in which the change occurs.

Thus, in the recent recession, the change was mainly in the yield of the corporation profits tax. Given fairly constant dividends, the decline in its yield had probably little effect on demand. Nor do I believe that changes can be made in the tax structure, short of greatly increasing progressivity, which would significantly raise the total effectiveness of built-in flexibility at present levels of yield.

I propose, therefore, that we place ourselves in a position where prompt changes in tax rates can be made in response to the changing needs of economic conditions. In order to make this possible, two things must be accomplished:

One, a way must be found to disassociate such stabilization-type changes in tax rates from the more basic and fundamental problems of structural tax reform and of permanent upward or downward adjustment in the level of overall tax rates. Unless this is done, stabilizing adjustments cannot be made promptly, since enactment of changes in tax structure is necessarily a lengthy and controversial affair. After it has been agreed upon, for instance, that shortrun changes are to be made by adjusting the first bracket rate of the personal income tax—which I would prefer to changing the level of exemptions—such shortrun adjustments for purposes of stabilization may be made without reference to the controversial issues of tax structure. These adjustments would come to be looked upon as routine, I would hope, similar to the conduct of open market operations.

Secondly, the authority to make such changes must be vested with an individual or a group, sufficiently small to be able to take prompt action. From an efficiency point of view, it seems to me that the logi-

cal place for this responsibility would be with the Executive, simply because this is where the primary responsibility for the conduct of current stabilization policy must lie. This would indeed be a way of placing teeth into his responsibilities under the Employment Act, as well as in his responsibilities for maintaining price level stability. Also, it would be a most effective way of forcing integration of Federal Reserve with executive policy.

I am aware, however, that Congress might not be altogether sympathetic to such a proposal; there would be a fear that this would undermine the constitutional prerogative by which control over the purse strings is vested with the Congress.

I, too, believe that this prerogative is wise and proper, but I do not think that my plan would seriously interfere with it. Congress may provide specifically what types of changes in rates might be made and within what limits, and these limits might be changed from time to time by new legislation. The Executive would then be given the responsibility of making such changes as he deems necessary for purposes of stabilization.

I do not wish to go further and have Congress legislate under what conditions—for example, a 3-point increase in the cost-of-living index, or in some index of unemployment—which changes in tax rates should be made. This would reflect much too mechanistic a view of the complexities of our economy, and there is no more reason for tying down tax adjustments in this fashion as there would be for placing corresponding shackles on the conduct of open-market policy.

With those safeguards provided for, I believe that the basic prerogative of Congress to set tax structure and revenue levels would not be endangered. But if you feel otherwise, one might experiment with delegating such authority to a mixed group, including representatives of Congress and of the Executive.

On the expenditure side of the budget, a different approach is needed. While I am much opposed to permitting considerations of stabilization to determine the proper level and content of public expenditure programs, some degree of flexibility in the timing of such programs may be helpful as a cyclical stabilizer.

For this purpose, it may well be desirable to distinguish between two types of expenditures programs; namely, those which are essentially of a shortrun nature, and those which involve projects the execution of which necessarily extends over a number of years. There is a good case for arguing that the latter should be legislated in advance for a period of years.

This plan is not to be confused with proposals for a full-fledged capital budget, according to which capital expenditures are loan financed while current expenditures are tax financed. I do not favor such a plan, and wish to limit my division to the expenditure side of the budget only.

Given such a division, the Executive would then be left with some flexibility in determining the rate at which the longer run programs are to be carried out. Thereby, some degree of cyclical adaptability would be made possible without inviting hastily contrived make-work projects on the downswing, and without endangering an adequate level of public services on the upswing.

Turning now to the contribution of budget policy to economic growth, there appears to be agreement that a substantial expansion in public expenditures for research is in order.

The order of magnitude has been estimated in a recent party program as requiring an increase in Federal outlays from the present level of about \$5 billion, to a 1975 level of about \$17 billion. Unfortunately, there is less agreement on the equally, or more important, problem of Federal support for education. To my mind, such support is needed on a substantial scale, but this is not all that matters. The questions of what programs are to be supported, who is to receive the support, and how it is to be financed, are all important issues which remain to be decided.

As for my view, I believe that investment in human capital is vastly more important than investment in buildings; and what seems almost exclusive emphasis on construction is a most serious weakness in the bills now under consideration. Also, I believe that the primary function of the Federal Government in the financing of education is to assure that minimal levels of education prevail in the poor States, and not to support more extensive education in the rich States. As I see it, extensive transfer between States is an essential test for a good Federal program in this area. Moreover, primary attention should be given at the outset to precollege education, thus working from the ground up. It is especially through the inadequacy of elementary and middle-level education that talent is held back and human resources are not permitted to develop. Last but not least, aid to education should not be permitted to degenerate into yet another loophole in the personal income tax, a danger which, in view of various current proposals for tax benefits, seems to be substantial.

It remains to consider changes in the tax structure which might be made to encourage a policy for growth in the private sector. One approach to this problem is to increase taxes which fall more largely on consumption, while reducing taxes which fall on savings, thereby increasing the volume of resources available for capital formation. Short of supplementing the income tax by a progressive spendings tax, the feasibility of which I doubt, this means a shift from taxes on savings to taxes on consumption, and hence a less progressive or more regressive tax structure.

Since the marginal propensity to save at various points in the income scale does not differ as much as may be expected, the gain from such a policy would be quite limited, or the required shift would be very substantial. In the thirties, those arguing for progressive taxation to maintain purchasing power tended to overlook this fact, just as it is now being overlooked by those arguing for less progressive taxation to increase saving.

One effective device would be to increase the tax incentive to business firms to retain earnings, but this would run directly counter to our other objective, which is to integrate the personal and corporation taxes in an equitable fashion. Moreover, a good case can be made for channeling capital through the market, rather than vesting it wholly in retained earnings; and one must not forget that there will be times when higher private savings will have to be offset by a larger public deficit.

A more fruitful approach to the problem, it seems to me, can again be made by emphasizing growth through innovation, that is, replacement investment at increased productivity, rather than more investment at the same productivity. The question then is whether anything more can be done to give tax inducements to research expenditures. Such outlays already have the advantage of being permitted instantaneous depreciation by being expensed, and thus receive more favorable treatment than do other forms of investment.

Possibly, one might want to go further, and grant partial tax relief over and above the benefits of instantaneous depreciation. If research is to be subsidized in this fashion, great care will have to be taken to assure that the research in question is of a basic sort, such as will contribute to growth along the lines of national interest. More research outlays, offering higher pay for research into more trivial products, may further squander our scientific resources, and reduce rather than increase the relevant rate of growth. Thus, qualitative safeguards would be essential if such tax measures were taken.

Monetary and debt policy: I now turn to some aspects of monetary policy. Here I find myself arraigned between those who feel that the Federal Reserve System can do no wrong and those who feel that monetary policy can do no right.

It seems to me that monetary policy clearly matters, that we cannot do without it, and that by and large Federal Reserve policy of recent years has done pretty well insofar as changes in the general degrees of credit restriction and ease are concerned. However, the operation of monetary policy may differ considerably depending on which tools are used, and I believe that the Federal Reserve's actual choice of tools, not to speak of the arguments used to defend them, are very much open to debate and criticism.

As I see it, the System has been mistaken in its rather stubborn adherence to the bills' only doctrine. By surrendering the use of more widely dispersed open market operations, the System has discarded an important means of control without gaining much in exchange. By focusing heavily on changes in the total supply of money, the System has underemphasized the important effects on demand which result from shifts in the structure of claims; by taking a hostile attitude toward consumer-credit regulation, the System has evaded what I think is a responsibility which they should accept, and which, perhaps, should be extended even to mortgage credit.

Other changes might be considered to increase the effectiveness of monetary policy. It may be desirable, in view of the experience of recent years, to transform our system of reserve requirements from one which relates to the volume of deposits to one which relates to the type of assets held. Such a distinction is useful in particular with regard to holdings of public debt and holdings of private paper, even if fine breakdowns between types of private paper would prove unmanageable.

Similarly, it may well be desirable to extend some degree of monetary control to the field of financial intermediaries, where such a large part of total lending activity originates. Once it is noted that what matters is the volume of loans rather than the volume of money, this becomes a rather logical proposition.

In all, there is no escaping the fact that credit markets must tighten, and interest rates must rise, as the economy moves into high levels of employment, but the extent of increase in the rate of interest, which is required to do the job, is not independent of the tools of restriction which are used, and I have the impression that the tools which have been used are not precisely the cheapest.

The same holds for the closely related problem of debt management. In turning to this topic, let me express the hope that Congress will reverse itself and remove the interest ceiling. It is highly undesirable in the longer run to place arbitrary rigidities in the way of those who are responsible for handling the current problems of debt management. The interest ceiling and, while we are at it, also the debt limit, should be repealed.

The question of what should be the proper maturity structure of the debt is not easy to answer. No one would hold that the entire debt should be reduced to zero maturity; that is, be turned into money. Nor could one advocate that the entire debt should be in infinitely long maturities, that is consols. Now 41 percent of the marketable debt is under 1 year, and 73 percent is under 5 years. This compares with 28 and 60 percent in 1949. There has thus been, over the last decade, a downward trend in the average maturity of the debt, a fact which hardly supports the recent and rather sudden alarm over the immediate need for lengthening the debt structure.

Nevertheless, some lengthening is desirable. In favor thereof speaks the presumption that investors who hold long debt will find themselves less liquid than others who hold short debt. Against extensive lengthening speaks the danger that the price of securities of longer maturity is given to wider fluctuations in the market and that this may interfere with monetary policy. Also, by issuing longer bonds, the Treasury assumes a given obligation of interest payments over a longer period to come, even though it may turn out later that the need for tight money may be relatively short lived. The fact that it might have been possible in the recent financing to sell longer term issues at a somewhat lower yield does not necessarily prove, as has been argued by the press and in higher places, that the failure of Congress to remove the interest ceiling has saddled the taxpayer with a higher burden; the point is that the higher yield has to be paid for a shorter period, and that it may be possible to refund at a lower rate later on.

I do not wish to be misunderstood. I am not against interest payments, and high ones if needed. The Treasury should sell its securities in the market at whatever price it takes, and holding down the total interest bill is, by itself, no test for good debt management. However, these sales should be made in the most efficient way possible. That is to say, the Treasury should make sure that it purchases the desired degree of illiquidity or nonspending at the lowest cost. The triumph over recent oversubscriptions is hard to understand, as it suggests that better terms were offered than needed to place the desired amounts. If more is paid than this lowest cost, debt management does, in fact, become social security policy, and this should not be the case.

Since the war, the mechanism of debt management has labored under various handicaps, which if removed would strengthen the hands of the Treasury and make it possible to achieve more at a lesser cost.

First of all, we should do away with the need for having to meet large volumes of refunding at fixed intervals. This places the Treasury into the position of the legendary fish vendor who, in economics textbooks, is the classical illustration of a seller who has no reservation price whatsoever, and is wholly at the mercy of the market. There is no inherent necessity why this should be the case, and why refunding operations should be tied closely to the maturity date of outstanding issues.

Outstanding debt becomes shorter every day, whether it has 1 day to go or 10 years. There is no reason why the Treasury should not refund outstanding debt through open-market operations whenever the situation appears opportune, and without waiting until it is cornered in the proximity of the cashing date. There is no reason why open-market operations—including exchanges between types of debt as well as between debt and money—should be limited to the Federal Reserve, and why the Treasury should not be free to withdraw and issue debt when desirable. If the Treasury is to engage in such a flexible policy of refunding, including authority to repurchase outstanding issues at market price even if above par, a much more even flow of refunding operations would become possible, and the conditions of the market could be turned into the Treasury's favor.

Apart from this, there remains the task of tailoring the type of security issue to the needs of the particular investor, thus making it possible for the Treasury to obtain the most favorable terms. This may require more extensive recourse to nonmarketable issues. In this connection, let me add that the treatment of the small saver has been most niggardly, even if we include the recent increase in the return on savings bonds.

As noted before, the small saver should be given an opportunity for riskless investment, and savings bonds should be a proper outlet. Going further, it appears that private financial institutions are increasingly providing for investment in equity funds as well as in fixed obligations, and it may well be worth the Treasury's try to do the same by offering a stable purchasing power bond. After all, the Treasury's resources are given by the taxable capacity of the country and this fluctuates, in dollar terms, with the price level.

Thus, there would be no risk to the Treasury in offering a savings bond the redemption price of which is tied to the cost of living. Quite possibly such bonds would find a market at a very low, perhaps close to a zero rate of return, and they would give the Treasury the opportunity of offering a unique investment outlet, which cannot be matched readily in the private market.

**Wage-price controls:** In closing, I must add a brief word on public policy regarding wages and prices.

It seems to me that the current dilemma of the steel strike urgently requires legislative action to provide for more effective ways of dealing with the problem. I believe that provision for a public factfinding board, with the responsibility of holding public hearings and making recommendations, would be most helpful, and it is tempting to speculate what, perhaps how much of a price cut, such a board might recommend in the current case.

The recommendations of the board must include both the problem of prices and wages, and to be effective, the board should have the right to subpoena and to obtain whatever financial data are needed. If

this does not suffice, some other and more drastic measures might be thought of, be it by way of mandatory public arbitration, or by other means which will cushion the effect of strike in one particular industry upon the economy at large.

While I hope that such measures will not be needed, they should be taken if other alternatives do not work. While they would be most unfortunate, they would be the lesser evil, and hardly the ultimate disaster which they are pictured to be in the current discussion.

The CHAIRMAN. Thank you very much, Dr. Musgrave.

Mr. Reuss, do you have some questions?

Representative REUSS. Mr. Musgrave, I want to congratulate you on your great paper which will be very helpful to us.

Starting at the end and working backwards, on your wage-price factfinding board suggestion, I notice, and I agree with you, that you express the hope that more drastic measures such as public arbitration on a mandatory basis would be necessary.

Do you not believe that the adoption of the factfinding board procedure, at least in pay-setting industries, and having jurisdiction over both prices and wages, would, in addition to the help that it could immediately render, be perhaps the best way of avoiding the necessity of stumbling into these more drastic measures?

Mr. MUSGRAVE. Yes; I would certainly agree that this would be the first thing to try and I would hope, and really expect, that it would have a great deal of influence on the behavior of both parties. Both the management and labor side would be quite hesitant to get themselves in a position where such hearings would have to occur, where there would be a good deal of publicity about their financial affairs and where they would become subject to these public pressures.

Even having the threat of such hearings taking place may reduce the necessity for holding them in the first place. I think it would be a great disciplining factor.

Representative REUSS. As you perhaps know, Senator Clark and I have introduced measures in both the Senate and House which would do almost exactly what you suggest with regard to what a public factfinding board sets forth.

Do you have any opinion as to whether had that bill, which has been reported favorably to the floor of the House by the Government Operations Committee on the House side, do you have any opinion as to whether that bill, had it been passed, say last March, and had been put into effect, might by its implementation in the days last spring when the steel strike was in the making, have had a publicly beneficial effect and perhaps have made possible either no strike at all or a strike of much shorter duration than we are now undergoing.

Mr. MUSGRAVE. I am not an expert in labor-management relations field, but I think that the steel situation is precisely the kind of situation where this would have had an effect. As I read it, on the one side you have a union which, over say the last decade, has gained wage increases substantially ahead of what has been typical for the manufacturing industries. So that if one were to apply a principle of wage increase at the rate of average advance in productivity or anything of that sort, one would say that there is no tremendous case here for wage increases.

On the other side you have an industry which under objective analysis, would show that they have engaged in rather aggressive price policy, so that when labor costs have risen, prices have risen by considerably more than was required by the increase in labor cost. Thus it would become evident that it is ill-becoming for this particular industry to argue the case for price level stability.

So I think we have a beautiful case of a factfinding board saying a plague on both your houses, and recommending that the consumer get a price cut. Both parties, I think, should have been rather able to predict this sort of outcome, and hence they would have been much more restrained.

Representative REUSS. Do you think if there had been such a high level board and their recommendation, after full study and before a strike had ever started, had been one along the general lines of a very modest wage increase and a price decrease in steel, do you think that such a recommendation would have been likely so to have informed public opinion through the media of newspaper editorials, radio commentators, speeches in Congress, and all the other methods of communication, this might have gotten through to the leaders both of the United Steelworkers and of the major steel companies and a settlement in the public interest arrived at before a strike ever occurred?

Mr. MUSGRAVE. I think it would have been a most helpful factor. I am not able to say just how far it would have gone in forestalling the difficulty, but it would have been a most healthy element in the picture.

Representative REUSS. May I now direct your attention to pages 7 and 8 of your written statement, where you talk about the fiscal monetary policy mix.

I happen to be one of those who feel that fiscal policy has played too small a role in the mix and while both monetary and fiscal policies have their roles to play, monetary has been overemphasized and fiscal underemphasized. You say this is true to some degree, but not altogether, although I hasten to add that I do not think it is altogether true that fiscal policy is the whole cheese, but I want to explore this with you just a bit.

You talk about monetary restrictions. I am talking about:

General monetary restriction similarly restrains consumption expenditures on durables, especially housing, as well as investments in plant and equipment.

Is it not a fact that general monetary restrictions, tight money, high interest rates, have only a very marginal effect upon consumer expenditures on durables?

Is it not a fact, for example, that right now, at a time of the highest interest rates for a quarter of a century, outstanding installment credit on consumer durables is at almost an equal height, and isn't the reason for that that it is perfectly easy for an installment seller to stretch out the length of the terms by another month or two and thus absorb, without the consumers ever knowing it, a rather marked increase in the interest rate, like from 7 to 9 or 10 percent?

And is not that in fact what is happening and does that not constitute at least one strong argument why overemphasis on monetary policy at the expense of fiscal policy is not the best mix?

Mr. MUSGRAVE. I thoroughly agree that there should be no over-emphasis.

The basic point which I wanted to make here was that if we look at the traditional view of monetary policy, the way it has been talked about over the last hundred years, if we look at the history of the Bank of England and the discussion of its general function, one always thought of monetary policy as a device which restricts investment. If this were so, then one would come to the conclusion that people who want to emphasize the importance of growth should be hesitant about emphasizing the use of monetary restriction because that is essentially investment restriction.

Representative REUSS. And the days of monetary history were written, were they not, in the time before the invention of consumer credit?

Mr. MUSGRAVE. Yes.

I want to go on and argue that today monetary policy also bears on consumer expenditures, quite apart from business investment expenditures, and that maybe these effects on consumer expenditures are even more important than those on investment, especially with regard to housing, the extreme of consumer durables.

Now, I think you are correct in pointing out that monetary policy does not take too well in dealing with consumer durables of a shorter sort than housing, and with the installment credit area in general, because the financial institutions which take care of this are to a large degree outside the controls of monetary authorities.

However, this is something which is not inherent in the nature of monetary policy. We could make institutional arrangements, and I think we should make them—this is partly what I had in mind by the reintroduction of consumer credit controls—so that monetary policy would indeed be effective in restricting consumer purchases on a much broader form than it is now.

Representative REUSS. You would do that by indirect controls?

Mr. MUSGRAVE. If you want to call consumer credit direct controls; yes. A searching examination of the position of financial institutions supplying consumer credit and their possible inclusion in the control area, as well as the use of consumer credit controls would both be desirable.

Now, if you did this, you would have a pretty good control over the consumption area, but you still might not have a good control over plant and equipment expenditures. And this is precisely the area which one used to think was "it" for monetary policy. So that today, turning the tables, we can say that fiscal policy is the more general approach because it can address itself to all types of expenditures. It can restrain plants and equipment expenditures, as well as consumption.

Representative REUSS. If you particularize monetary policy as you suggest, but as monetary policy is now used it is an exceedingly general and blunt instrument, is it not, as currently used by the Federal Reserve System?

Mr. MUSGRAVE. I would say it is exceedingly selective rather than exceedingly general because its main impact is in certain areas of consumer outlays, but not even all of those and not in plant and equipment.

Representative REUSS. Involuntarily selective?

MR. MUSGRAVE. Involuntarily selective, you are quite right.

The CHAIRMAN. Congressman Curtis.

Representative CURTIS. Thank you, Mr. Chairman.

I want to join my colleagues in expressing appreciation for your paper. I think as far as my judgment is concerned, you have laid the issues out as fairly and as in proper balance as I have yet seen.

My problem is trying to figure out which part I disagree with, because the fundamentals I certainly do agree with. If there is agreement on the fundamentals in your paper, then we are reaching a point where maybe we can have some successful debate because it will be in that context and over some of the details.

One general proposition, as I gather from your paper, you feel that one thing we need if we are going to resolve these balances and get into the details is some measuring sticks in these areas that are more adequate than what we have.

As I gather, when you approach the problem of employment, you are pointing out, and very rightly, that we don't have very good measuring sticks to find out what we are doing in that area. Am I correct in that?

M. MUSGRAVE. Yes.

Representative CURTIS. I would say the same thing on price.

You refer to the consumer index but the more I delve into it and listen to the experts discuss it, I suspect that needs considerable improvement. How else are we going to get into this real question of quality increase and things like diversity with the fellow who purchases a variety of things. I think variety is a cost item, and yet how is it measured in the cost of living index?

Then just the mere fact of cost. Surely when we impose a tax at the Federal level of over \$80 billion on our people, that has to go into the price of goods and services to a large degree.

I think we would be bound to have a price increase there, too, which is not measured by our present set of statistics.

Do you feel that there is a great need for improvement there if we are going to be able to reach some sort of reasonable debate on this subject as to how we cope with these problems?

MR. MUSGRAVE. My thought was, as implied in my statement, that we are really worse off in the employment measure than we are in measuring price level stability.

If you take the case of unemployment, certainly people transferring between jobs is one thing. Young people who are sort of marginally in the labor force on a part-time basis, going in and out, are another thing. Neither of them are all in the same category as an adult, a head of family wage earner, who cannot get a job for 3 or 4 or 5 months, even though he tries. It is this last type of unemployment which I would say, and I submit this is a matter of value judgment, is socially intolerable. A decent system just ought not to have this. The first type, I think, is quite a different matter.

Some weights have to be attached and instead of thinking of an overall figure of unemployment, we should devise a measure of unemployment as a social problem. This relates to sustained unemployment of responsible heads of households—this is really the core of the social problem. After we have defined full employment in this way, then we ought to say, let us really be tough about this, this must be accomplished, and stick to it.

As long as we have only a very broad measure of unemployment, which nobody can take too seriously because so many people are in there who really don't pose a serious problem, we can't take a position.

On prices the problem is easier. It is just as bad if the price of milk rises as if the price of bread rises. What matters is how much the combined index rises. What we are really concerned with is the price of the consumer basket, while leaving it to the consumer to choose the composition of his basket. As you mentioned, there are many technical problems in the index as products and quality changes, but they are not as basic as those in defining full employment.

Representative CURTIS. Yes, with what you said on unemployment, I could not agree with you more, nor could I agree more with the fact that you put it first.

But in trying to cope with these problems I am raising the first question that we do have to analyze these changes a little better and set up our statistics so that we know what we are dealing with.

Now, just touching on unemployment, I have come to the conclusion that if you examine frictional unemployment, I believe you economists refer to it, when it is a transition from one job to another because of technological advances, it is almost axiomatic that the more rapid your growth the greater is going to be your unemployment.

Yet I cannot seem to get much agreement on that, either because people are not thinking about it or maybe it is not true.

Would you not agree that the more rapid growth, the more frictional unemployment?

Mr. MUSGRAVE. Yes I think this is almost axiomatic, especially if we define growth as being due to technological changes.

Representative CURTIS. Let us take a specific area. One is the farm segment of our economy where we have had such rapid technological advancement that it is really a revolution.

We certainly have unemployment here which is of the nature of frictional. Where we have people who are no longer required for agricultural pursuits and if they are going to be employed, have to be retrained or get into some other area.

Now, it does not fit your suggestion, I might say, possibly these things will be done within a week.

I think somewhere in your discussion of this you say, in posing the problem, if everyone changes his job once a year and a week is required for transfer, about 2 percent of the labor force will be unemployed on this account.

True, you are trying to bring out an idea, but when we are discussing frictional unemployment one of our big problems is that it is a great deal more than a week and it is a real serious question of just how we go about doing it.

Therein we reach political differences between the chairman and myself.

But your paper, and I am so pleased with it, distinguishes frictional unemployment from what we can call economic waste where it is a sheer inability of a man to get a job for other reasons, other economic reasons.

Mr. MUSGRAVE. You are quite right in the general point that if you have more technological advance you will have more frictional unem-

ployment, and you are also right in saying that it may well be such that it is not to be taken care of in 2 weeks.

The conclusion to be drawn from this is that there is a public policy problem in handling it. Some economists will argue, well, obviously as an economist you ought to be in favor of technological changes because, as we have seen through history, this increases output for everybody. Therefore, it is inevitable that people have to switch jobs.

Now this part of the argument is perfectly correct. But the economist, in saying that technological and other change is efficient, cannot lay down the law as to who should bear the cost of this transition. In our day and age the cost of technological changes is a serious problem for public policy.

Representative CURTIS: Yes, indeed, and we cannot even get into even public debate on the question until we agree on these fundamentals you have laid out.

Then we can have intelligent debate.

It makes it very difficult to have an intelligent debate on the farm program when the same people who were urging rapid economic growth refused to recognize that rapid economic growth has produced these other problems which we also have to solve.

But if we will treat the thing as you have in context here, in balance, that if you push too far you have to create problems in other areas, then we can go somewhere.

Now, to the third element again of measuring, and I was very happy to see you emphasize our limitations in measuring growth, because gross national product, which is just an annual product, is not probably the growth we are talking about, as I understand your paper.

You are suggesting, as I understand it, that the potential is probably more meaningful, but we don't measure it.

How do we measure, for example, education, which is so basic to future growth in the gross national product or in any economic series that we have now. That is the question I have.

Mr. MUSGRAVE. My general point on growth has been that it is a lot of fun to have grown fast, but it is not necessarily a lot of fun to try to grow fast.

Representative CURTIS. And you are pointing out, are you not, though, that growth for growth's sake is a rather foolish thing and you have to break it down as to what the growth has been because you can have uneconomic growth, as I see it?

Mr. MUSGRAVE. Yes. That is perfectly true. Our evaluation of growth has to be in the context of the international picture because that is what pushes us in the first place, as I see it, into recognizing the need for accelerated growth.

Now I agree that these points which you raise, of difficulties of measurement and the importance of getting proper measures, are very important.

The only point where I get a little afraid is that an overemphasis on the difficulty of measurement can very easily lead us to not being able to do anything about it in the meantime.

Representative CURTIS. I am not advancing it for that reason. I am advancing it for just the opposite reason so that we can do something about it.

If we will recognize the limitations of our measuring stick, we will find that a great deal of debate on this subject has been in this area of ignorance and we ought not to be debating in an area like that. We really should be debating in an area, first, of improving our measuring or setting it up in a way that we understood more what we were doing, and then, second, discussing in detail public policies that relate to these things.

Again, as I say, medicine is another area where there has been tremendous technological advancement which amounts to a revolution.

Posing the question of does not rapid growth produce an increased amount of frictional unemployment, so, too, rapid growth promotes additional cost due to obsolescence among other things, obsolescent equipment and obsolete skills.

Somewhere that cost is going to be reflected in the product and services in the area of rapid growth unless we have been able to take care of it through increased productivity, but in the medical field you don't have the increased productivity to any degree.

It is really just increased quality, people living 15 years longer.

Yet the people who argue for rapid growth are unwilling apparently to recognize that along with it will be created these problems of price increase, cost, not inflation, real cost.

I simply want to get this thing down, as I think your paper does, in an area where we can begin to have an intelligent public debate. That is what I emphasize, what I saw in your paper raising these points of these measuring sticks, as an excuse not to do something, quite to the contrary, but to bring out in the open what we might be doing.

Thank you.

The CHAIRMAN. Mr. Musgrave, I would like to start on this question of the irreducible minimum of unemployment.

Using your same estimate to which Mr. Curtis referred, you refer to 2 or 3 percent as probably the normal irreducible.

I would prefer to call this transitional unemployment. I would like to ask: What about reasonable unemployment in addition which, because of weather and because of changes in fashions and styles, probably is relatively irreducible? How much would you think that would add to the figure of 2 or 3 percent?

Mr. MUSGRAVE. Of course, you are dealing with weather in agricultural production, and this makes seasonal unemployment irreducible. Where you are dealing with fashions, a strong case can be made that this is an inefficient use of capacity.

The CHAIRMAN. Yes.

Mr. MUSGRAVE. I would hate to have to estimate the additional amount involved.

The CHAIRMAN. Do you not think it might come to 1 or 2 percent?

Mr. MUSGRAVE. If it were to run to 2 percent, then that would mean it would be for the average employed worker about a week a year.

The CHAIRMAN. Of course, in the case of others, as in the building trades, many weeks?

Mr. MUSGRAVE. Yes, on the average it may be higher.

The CHAIRMAN. Two plus two equals four.

Then you probably have, as Mr. Curtis referred to, and I agree with him, in a dynamic society changes in methods of production, shifts in consumers' demands, and this creates additional unemployment.

That is more or less outside the control of public policy; is that not true?

Mr. MUSGRAVE. The only thing public policy can do about it is to provide means by which people can make as rapid transition as possible. But, you see, better than raising the question of what is a reasonable total figure, allowing for these components, we should not look at the total. It is much more important for the public to read every week what is the number of heads of families who have been unemployed for more than 3 months.

The CHAIRMAN. I appreciate your desire for complexity and refinement, but in life we have to move pretty largely on simple figures.

I agree with you it is highly desirable to get the unemployment classified on the basis of duration.

I once experimented in counting men and women to reducing them to their male equivalents instead of to the terms of wages which they have received, and so forth, but this is a very real question of public policy.

We have at present an unemployment rate, seasonally adjusted, of 5.6 percent, plus something over another 1 percent, probably 1.2 percent which represents the full-time equivalent of involuntary part-time unemployment.

The total figure, bringing the two together, is about 6.8. It might possibly go as high even as 7.

I personally think that that is too high and that on the basis of the total figures one could pass judgment that it is too high.

Now, this rate could lead into the matter of growth. You spoke on page 6 of avoiding forced growth. But suppose we could reduce unemployment, the full-time and part-time variety, by, let us say, 1½ percent. That is modest.

From close to 7, that would be 5½ percent and on a full-time basis, from 5½ to a little over 4.

That adds 1½ percent to the growth rate, does it not, almost 1½ percent to the growth rate because we would then be utilizing a factor of production at present unused and the capital is presumably there with which they can work.

Mr. MUSGRAVE. It would put you on a higher plane initially because as these people get absorbed presumably your output would increase by 1½ percent.

But from then on, you only have a somewhat larger base on which the total growth—

The CHAIRMAN. You would be moving ahead at a rate 1½ percent greater than the present rate, not necessarily that 1976 would be 1½ percent greater than 1975, but it would be 1½ percent greater than 1959, if in the meantime no changes had been made.

It would seem to be obvious that a reduction in the rate of unemployment increases the real national income.

Mr. MUSGRAVE. Yes; but I am not so sure about the growth rate. What would happen is, now we have a GNP of a hundred which grows at a certain rate of 3 percent. If you get this reduction in unemployment your base would be immediately stepped up from 100 to 100½.

The CHAIRMAN. I would say 101½

Mr. MUSGRAVE. Yes; you would immediately get what otherwise would take 6 months to wait for and then this  $10\frac{1}{2}$  would again grow at 3 percent.

So the amount by which you would be greater in 50 years would be  $1\frac{1}{2}$  plus  $1\frac{1}{2}$  growing at 3 percent.

The CHAIRMAN. One and a half percent—

Mr. MUSGRAVE. Initially there would be a big gain.

The CHAIRMAN. On the present gross national product, say \$475 billion, it would be about \$7 billion in the first year.

Mr. MUSGRAVE. Yes; this is the amount of increase which you keep.

The CHAIRMAN. You say this is not a great increase, I point out if this is done over 50 years that would be \$350 billion or three-quarters of the gross national product for 1 year.

Mr. MUSGRAVE. This is perfectly correct. I was thinking of the percentage rate of growth.

The CHAIRMAN. Yes; I understand.

Mr. MUSGRAVE. The same rate would apply on a larger base.

The CHAIRMAN. Yes.

Now, we could finance a lot of things by this added \$7 billion a year; could we not?

Mr. MUSGRAVE. Senator Douglas, I am entirely in favor of this and I meant to make the point that I see no conflict between full-employment goals and absorbing resources fully.

The point which I had in mind is this: Many people argue, many people who think along liberal lines argue that higher growth is an important and urgent thing as a matter of social policy, not as a matter of necessity, but as a matter of social policy. I am rather inclined to think that if we were really to apply a policy of forced growth, that this would have quite a high cost in terms of social welfare policies and social objectives. Rapid growth is a tough business.

The CHAIRMAN. If we could get it through a reduction of unemployment without an increase in price levels that would be the best way. I value stability in price level somewhat more than you do, but it would be a net gain, it would seem to me.

Mr. MUSGRAVE. Yes.

The CHAIRMAN. Is it not also possible to increase the productivity of labor? I think you hinted at this in your desire for more education properly directed.

Mr. MUSGRAVE. Yes; this would be a very important factor.

The CHAIRMAN. And in developing abilities which lie in sections of the population which now do not have the full chance to develop; is that not true?

Mr. MUSGRAVE. Exactly.

The CHAIRMAN. Notably the Negroes, women, Mexican-Americans, in the Southwest, and so forth?

Mr. MUSGRAVE. Yes; right.

The CHAIRMAN. Finally could you not develop the productivity of medicine?

Mr. MUSGRAVE. By public research expenditures and by stimulation of private research outlays.

The CHAIRMAN. Is it not true that a larger degree of competition in the economic system would tend to result in a greater degree of

physical production? Is it not the general tendency of monopoly to have a restrictive effect upon production and some upward effect on prices?

Mr. MUSGRAVE. Yes, but one of my teachers, Professors Schumpeter, and you are familiar with the thesis, argued that technological change, that investment in technological change, may to some extent be encouraged by large business units.

The CHAIRMAN. We had some very interesting testimony on that a month ago to the exact opposite by a very able student of inventions at the University of Maryland who produced a great number of case studies to indicate that the big advances had come from smaller concerns and independent inventors and that the large companies had played a rather subordinate role.

I know it is hard to keep up with these things, but I would like to send you those papers when they are published and you can see if this does not revise the conclusions which Mr. Schumpeter drew.

Now, in view of all this, would you say that it would be forced growth if we could raise the national level of production by 2 percent a year, or, roughly \$10 billion a year by these methods?

Mr. MUSGRAVE. I would certainly not say that it is forced growth if we succeed in growing more by cutting reducible unemployment.

This is perfectly clear.

Secondly, I would think that the social repercussions of growth are much less burdensome if this growth can be generated by innovation, increased productivity, better education, and these things, than if it has to come out of increased capital formation at given productivity because it is this need for increased capital formation at given productivity which would require us to reverse our thinking in many lines of social policy.

So all these measures which you suggest certainly are highly desirable, I think, plus some concern for directing the innovating process along lines which are really significant for national defense.

I think one thing you can do is just put excise taxes on employment of physicists in the soap business, to illustrate my point.

The CHAIRMAN. I do not think that would be popular with the Secretary of Defense.

Now, we come then again to the question of the definition of the forced growth. On the labor side would you say that there was forced growth if some form of direct or indirect compulsion were used such as getting more old people or more young people, more women, employed. Would that be forced growth?

Mr. MUSGRAVE. Yes, forced growth would mean a combination of trying to increase the labor force on the one side and trying to increase the volume of investment on the other, thereby having to reduce consumption in order to release resources.

The CHAIRMAN. In other words, the choice you say as to whether one should work or not, or whether one should invest or not, should be left to the private decisions of individuals not to the compulsion of the Government or social authorities.

Mr. MUSGRAVE. To some extent the level of investment is inevitably tied in with your public policies, it is tied in with tax policies, it is tied in with monetary policy.

You have only so much resources to go around. If you push investment you have to cut consumption.

The CHAIRMAN. We are under constant pressure to devise tax policy which will stimulate investment as well as under great pressure to adapt tax policies so as to help middle class families better to send their children to college by tax reductions or credits.

I take it in the latter case you are somewhat adverse to these suggestions. I take it you did not want tax favors for those who send their children to college.

Are you in favor of tax measures which stimulate investment?

Mr. MUSGRAVE. My starting position on this is that the tax structure ought to be primarily an equitable tax structure. I am very hesitant to permit loopholes in this, both with regard to education outlays and with regard to investment.

Of course, the big problem on the investment side is the capital gains treatment.

The CHAIRMAN. I have some questions as to what you mean on that specific point, but I think I will waive those for the moment.

Representative REUSS?

Representative REUSS. Mr. Musgrave, will you refer to page 10 of your testimony where you are talking about a method of increasing flexibility of the tax structure.

You make the point that vesting power to make these changes within certain limits in the tax structure would be a good thing. You say—

it would be a most effective way of forcing integration of Federal Reserve with executive policy.

I wish you would spell that out.

Mr. MUSGRAVE. My thought was that if the executive branch had such a current tool of policy, which it was required to operate, it would then by its very operation of this tax rate have to take explicit positions, this quarter we think there should be an easing, this quarter there should be a tightening.

There would be a continuous pressure on the executive to take explicit positions, there could be no weasling on it and there could be no "Let us wait until the next Economic Report."

Representative REUSS. Do you not think this would be a valuable adjunct to our governmental economic machinery whether or not your tax flexibility device were adopted? Do you not think we should have a mechanization to prevent weasling by the executive branch.

Mr. MUSGRAVE. Yes, I think it would be helpful, but more important, if you had this flexible tax policy, and if the executive branch would really operate it, then the executive branch could not say, well, the Federal Reserve wants to tighten in this situation, we think this is wrong, but we believe in the independence of central banking and, therefore, we are not going to say anything. With the flexible tax policy, at the very time at which the Federal Reserve would engage in open market sales, the executive would have to cut the tax rate, and this would immediately show to everyone that there is a conflict in policies. Given any such conflict, divergent operations of two current policy tools would be so obviously intolerable that there would have to be integration between them. The two tools would have to be operated in a compatible fashion. This would in effect mean a coordination of central bank with executive policy and it is

really this coordination that matters, not whether the Federal Reserve is in a legal sense part of the Government, or just what its status is.

I think this would go very far in providing coordination and it would do it in a way which would avoid raising the whole bogey-man of what happens to the money supply when the Government gets hold of central banking and so forth.

Representative REUSS. Is the important thing not so much giving the executive branch the power and the duty of ordering the Federal Reserve what to do—I agree with those who say that the Federal Reserve should be independent of executive coercion—but the important thing is getting the executive, that is, the President, on record as guardian of the economy as to what he thinks is a sound monetary policy which ties it in with his fiscal policy, tax policy and all the other policies with which he is clearly vested and which he does not try to duck out of.

Mr. MUSGRAVE. We could say, then, that an arrangement of this sort would serve two functions:

One is the function which you now mention, of forcing the Executive to be continuously on record, as it were.

The other function is that of creating a new tool of control which we now do not have. We now have this flexibility in open market operations, but we don't have such a flexible tool on the fiscal side, and I think we should have it.

Representative REUSS. That, however, is a separate question from the question of the degree as to which the Federal Reserve should be brought in on a consultative idea sharing basis with the other organs of Government.

Mr. MUSGRAVE. Yes, it was just my feeling that my plan would be very helpful in this respect.

Representative REUSS. Passing on to another point where you say that, of course, when we have higher levels of employment earnings credit tightens, interest rates rise, but you have the impression, and this is the point I want to ask you to spell out, that the tools which the Federal Reserve has used are not precisely the cheapest.

Mr. MUSGRAVE. Yes.

Representative REUSS. Would you tell me more?

Mr. MUSGRAVE. If you rely on, let us say, restricting the money supply through open market sales within the framework of a bills-only approach, you will have to generate a very substantive overall degree of tightness in interest rates in order to restrict expenditures in those areas which will be sensitive, say, residential construction. This overall degree of tightness will be greater than the one needed if the policy was directed initially at increasing yields on the kind of claims which are held by people who supply funds for mortgages. Thus, a more selective use of the medium of open-market operations permits more control over what happens to the rate structure, and this makes the process of restriction more effective.

Another illustration is that of consumer credit restriction, and perhaps the same principle might be applied to mortgages. By regulating downpayments and period of repayment, you can, as it were, ration admission to the market on the buyers' side. This means that demand at any given price is reduced, and hence you may get your restriction with a lesser increase in the rate of interest.

The bills-only approach insists on the notion, which I think to a considerable degree is a fiction, that your money markets and capital markets are perfect markets, and that by going in on the short side, you get a reaction as between types of investments which is determined by the working of perfect competition and, therefore, is optimal in some sense. I feel that if you take this view, you are unrealistic because there are all sorts of rigidities in the market, there are barriers which may give you undesirable distortions in the way in which the restriction is allocated between sectors. Also, you sacrifice what would be a more direct means of going at it, and which would permit you to get your restriction at lower interest rates.

Representative REUSS. Is this a reasonable paraphrase of what you have been saying, that the built-in doctrine which the Federal Reserve has been pursuing for some years by concentrating on bills and allowing the effectiveness of that on other maturities and other aspects of the credit market to get out only in a diffused way as a pebble thrown out on the pond diffuses itself as the ripples go out, that this creates such unnecessarily high interest rates throughout the credit economy in order to assure a restriction where you want it to take effect; namely, in 20- or 30-year mortgages, that it is not the cheapest way from the standpoint of the borrowers and debtors of the country.

That is how you are using cheapest?

Mr. MUSGRAVE. Yes.

Representative REUSS. This is great stuff from the standpoint of the lender, they make more money because interest rates are higher than they would otherwise need to be. Is that not so?

Mr. MUSGRAVE. That would be the conclusion.

There is only one thing which I would add to your pond picture. This is that actually there are sticks sticking out in this pond all over the place, so that the pebble does not generate the nice even flow of waves which would result if you had really a purely competitive market and which would have considerable merit. Actually you get currents running out in different directions.

Representative REUSS. Let us call it a swamp.

Mr. MUSGRAVE. That is right.

Representative REUSS. So that by cheapest you mean in results in income transfers from borrowers to lenders?

Mr. MUSGRAVE. Yes.

Representative REUSS. Would you say that certain aspects of Federal Reserve money management are also not precisely the cheapest from the standpoint of the taxpayer who pays interest on Government bonds?

I am thinking, for example, of the practice that the Federal Reserve has had in the last 5 or 6 years at least of making necessary additions to the Nation's money supply, by reducing the formal reserve requirement of member banks rather than by purchase of U.S. securities, the latter method granting equal appreciation to the monetary supply having the advantage that it gives one-sixth or one-seventh of the advantage of the addition of the amount to the money supply due to the fact that the Federal Reserve pays back to the Treasury substantially all of its earnings.

Would you include that as an example of where Federal Reserve policy has not been precisely the cheapest?

Mr. MUSGRAVE. It might be put into this category; but I would be a little hesitant. For one thing, the Federal Reserve people are correct in pointing out that changes in the reserve requirement cannot be manipulated like open market operations because of the way in which individual banks will be affected by it.

It is inherently not as flexible a tool.

Representative REUSS. That is mostly true on the upside, though, is it not, when you are talking about raising the reserve requirements?

Mr. MUSGRAVE. This is mostly true on the upside, but of course, your point that using it would make the results cheaper also applies on the upside.

Now there is a question involved here, I think, of bank earnings. Reserve requirements, if you look at it coldbloodedly, are like forcing banks to hold Government securities at zero interest. This is what reserve requirements amount to from the earnings point of view. So the Federal Reserve, in choosing between the reserve requirement tool and the open market tool, has to make some sort of judgment on what is the proper level of bank earnings. This raises the difficult question of what is the appropriate level of bank capital and all that.

Representative REUSS. I do not quite follow you there.

Why does it matter one particle, the bank earnings, given a need to increase the money supply in the year X by \$1 billion.

Let us assume that. I do not see any difference in bank earnings between the Federal Reserve achieving the 1 billion increase in the money supply; that is, in bank credit capacity by lowering reserve requirements or by purchase of U.S. securities in the open market.

In both cases, bank credit trading powers increase the same amounts if they use that credit creating power instead of letting it rust unused; it is an earnings asset.

Mr. MUSGRAVE. Let us try to follow it through.

In one case, let us say we reduce reserve requirements.

Representative REUSS. By enough percentagewise so as to augment the money supply by a billion dollars.

Mr. MUSGRAVE. Yes.

We reduce reserve requirements by \$200 billion.

Representative REUSS. Let us say it is 5 for 1.

Mr. MUSGRAVE. Yes. So that then the banks can expand, the banks will then end up with additional—let me put it the other way around:

What we want to do is to look at the liability side of the balance sheet. Let us say we want to increase the liability side of the balance sheet by \$1 billion.

This is our objective. We want to raise the money supply by \$1 billion. Suppose we have done this. The liability side is now \$1 billion higher. In the case where reserve requirements are lower, the total of earnings assets will be higher than it would be in the case where the reserve ratio is higher. Therefore, with any given volume of deposits, the ratio of earning assets to money supply will be higher if reserve requirements are lower. Therefore, earnings position of banks will be better if we generate this expansion by reduction in reserve requirements than if we generate it by open market operations.

Representative REUSS. If you have the same expansion either way.

Mr. MUSGRAVE. Yes, I think this is correct.

Representative REUSS. I certainly am going to study this colloquy with interest. I still do not see why a billion dollars in the hands of the banks, which they can either use to lend to a businessman or buy U.S. securities with, why it makes more money one way or the other.

Mr. MUSGRAVE. Let us take this illustration: The banks have a billion dollars of deposits. Reserve requirements are 20 percent. So they have \$200 million of nonearning assets. They have \$800 million of earnings assets.

Now, if reserve requirement were not 20 percent, but if reserve requirements were only 10 percent, holding the billion dollars constant, they would have only a hundred million dollars of nonearning assets and \$900 million of earning assets.

Therefore, vis-a-vis any given volume of money the banks will be better off in the sense of having more earning assets if reserve requirements are lower.

Therefore, any policy which reduces reserve requirements improves this position and one which tightens them worsens this position.

Therefore, over the years, one of the factors in determining the appropriate level of reserve requirements would be what the Federal Reserve considers adequate bank capital, combined with what I take it are not excessive yields on bank stock.

Representative REUSS. Thank you, Mr. Musgrave.

The CHAIRMAN. Congressman Widnall.

Representative WIDNALL. Professor, do you believe the economy would benefit by a piecemeal settlement of disputes such as the steel strike or where the industry is of such vast national importance that it ought to be an overall settlement?

Mr. MUSGRAVE. You mean as between different steel companies, or the steel industry and other industries?

Representative WIDNALL. I am thinking particularly about what a major effect it has on the entire economy, whether in the end the best settlement might be an overall industry settlement, or a piecemeal approach as was suggested in today's paper?

Mr. MUSGRAVE. I was not aware that I was explicit on this question, whether the board would make recommendations for the entire industry or whether it would make different sets of recommendations for various individual firms.

As an economist I would say that the phenomenon of industrywide bargaining is not necessarily something to be too happy about, because it increases the power positions on both sides of the bargaining table.

Now I could imagine that my factfinding board would set some general guidelines for the industry, but that precisely the same thing should not have to apply for every firm.

This is a very important question which you raise. I really have not thought about it enough. I did not mean to suggest that the factfinding board should make recommendations to each steel company, as against giving a finding for an industrywide settlement.

Representative WIDNALL. Actually, when you referred to the wage-price controls brought up the matter of the public factfinding board, you devoted less space to that than some of the other things. I think it is one of the most interesting comments you made.

Did you have in mind that the factfinding board would fully weigh the potential impact of foreign competition as it would apply to these American industries?

When I ask you that question, I have in mind this:

I just had an experience this past week of talking to a taxpayer group and there are three steel strikers in the taxpayer group. I found, contrary to previous years, that these steelworkers were worried about the potentials of their jobs if prices continue to rise and actually if their own wages get out of hand so that foreign competition would really cause the loss of their jobs.

MR. MUSGRAVE. I think that by and large the factfinding board would be very hesitant to recommend wage increases which would result in price rises.

Now, if it were to take that position, this would meet the interests of both the American consumer and it would also meet the interest of the industry in terms of its foreign competition.

I think that such a factfinding board would recommend price rises only in industries where it would have justification for feeling that for very particular reasons wages have lagged badly and that the companies are unable to grant wage increases without raising price, but I could not imagine that in a case like the steel industry, the recommendation would provide for any price increases.

I think if the factfinding board were to feel that any wage increase would have to mean price increase, it would recommend against the wage increase.

Representative WIDNALL. I have found recently a new restlessness amongst labor that was not existing several years ago. I think we are all going to be faced with appeals on the part of labor for higher tariffs.

Up to this past year, the textile workers in this country have been the only ones that have seemed particularly disturbed about it, but recently the AFL-CIO on the coast took action at their convention out there and I find the auto workers also.

Incidentally, back in 1955 I spoke at a CIO breakfast and they ridiculed me when I told them they, the automobile industry, were affected by the competition. Today they have changed their minds about it. They evidently are doing that at the present time.

I think there are going to be some new pressures exerted within our own economy that will take a long, hard look at our export-import picture and a lot of the pressure will be exerted by labor.

MR. MUSGRAVE. I hope we can withstand it.

Representative WIDNALL. It is going to be a hard thing to withstand, because substantial pressure will be brought on that point.

I have just one other question. You made some comments about assuming earnings and savings rise with the price level an annual rate of inflation of, say 3 percent may shrink by 40 percent the real value of savings accumulated over his working life, talking about a small private saver. This is certainly something which has been faced by a lot of holders of series E-bonds, I think in the past few years.

Is your best recommendation in this regard that the Government try to put out something that will have a cost of living increase tied to the bond?

MR. MUSGRAVE. The general philosophy would be that the Government should do everything it can to avoid inflation generated by

the demand side, that it should do everything it can do to check, to the extent that it does exist, autonomous cost-push type of inflation. If beyond this there remains some degree of price rise, one good thing to do would be to provide a stable purchasing power bond.

The Treasury might well do this.

Representative WIDNALL. Unless you lock the barn door in advance you always have the problem of a person, who has invested as he thought prudently and then watched inflation take his investment away, coming down and petitioning Government to bail him out all the time.

We are getting into more and more programs trying to bail out people who have lost their savings.

Mr. MUSGRAVE. You would have to make a small start and you would have to issue these bonds in rather limited amounts. They would be available to small savers and they would be available in quite limited amounts.

I would certainly not throw them on the market and make them freely available to everybody.

Life insurance companies are beginning to take this approach. A few years from now we will find quite generally life insurance programs which are on an equity basis.

Representative WIDNALL. You are talking about the variable annuity programs?

Mr. MUSGRAVE. Yes.

Representative CURTIS. Is that not sort of admitting that we cannot handle this problem of price stability? That is the thing that would worry me.

Mr. MUSGRAVE. This is troublesome. If you go ahead and offer such bonds, then does not the Treasury not really say, do not buy my other bonds. Of course, one difference would be that these purchasing power bonds may well have practically a zero rate of interest. They would certainly have a rate of interest which, as long as expectations are for price rise, would be much below that of the fixed dollar obligations. It seems to me that purchasing power bonds could be issued without saying we don't care what happens about inflation; we don't care what the rate of inflation will be. I don't mean to take this position at all. However, even if we have a rigorous policy on inflation, and even if we check the types of inflation which can and should be checked, we might still be left with some price rise which, from the point of view of the small savers, would be quite a problem, and one that should be met.

Representative WIDNALL. That is all. Thank you very much.

The CHAIRMAN. Mr. Curtis.

Representative CURTIS. On the latter point, you make the point that one thing we have not been doing too well on is providing the investment for the small saver, and I think there is a lot of criticism, a lot of that criticism is well founded, but I would raise the point that we have done a great deal in other areas for the small investor by our guarantee in the FDIC and also your Federal guarantee for Federal savings and loan deposits.

Mr. MUSGRAVE. Yes.

Representative CURTIS. One of the reasons that we have created the market problem for our Government bonds is the fact that we have guaranteed these other programs.

Mr. MUSGRAVE. That is correct.

Representative CURTIS. Now, I did want to get back to one of the questions of Senator Douglas in the series that he raised about providing for forced growth through the labor sector or through the investment sector.

The question that comes to my mind immediately when anyone talks about that is who is going to determine what is growth and where we want the growth.

I presume that implied in the question is that the Federal Government or people in the bureaucracy are going to make that decision. That is what is worrisome.

Let me illustrate: For example, let us take these unemployed frictionally or otherwise, who is going to say what they are going to be retained for.

In St. Louis, Mo., we have had a need for tailors for sometime. In fact, there have been advertisements appearing in the paper constantly.

The only tailors we get apparently are those who come from abroad, some of the immigrants.

Now, are we to retrain a lot of these people to be tailors? Or take the question of stoop labor where the reason we have the Mexican labor come in is really because Americans don't want to do that kind of work.

In fact, that has been determined pretty well because our law is set up on the basis that Mexican labor can't come in unless the American labor has indicated an unwillingness to follow that pursuit.

So, again, in discussing forced labor from the outside, you in a humorous fashion referred to an excise tax on physicists in soap companies, but we have done the reverse. Instead of using the stick we have used the carrot in the certificates of necessity.

I have long been critical of that on the very basis of who is going to determine where we need these areas of growth and indeed is it really economic growth that we gain.

Mr. MUSGRAVE. It would seem to me that the Government should consider it its function to improve the knowledge of market possibilities. There may be many people who simply do not know that by taking training as a tailor they may get attractive employment opportunities.

Now, by bringing this to their attention and by providing them with a means of getting this training—

Representative CURTIS. You and I agree, that is the way I would like to see it.

Mr. MUSGRAVE. This clearly should be done. What you are doing here is to make the market work, and to cut rigidities.

Representative CURTIS. That is not exactly forced, I agree with you.

Mr. MUSGRAVE. This you want to do, but the more serious problem of national policy aimed at more rapid growth is in the context of our international position. Here the problem is not one of raising the overall index of GNP. The problem of growth is not a race in GNP between us and the Soviet world.

The problem is one of who, by guiding the structure of its growth, is going to be the more effective in dealing with the problems which are going to arise. I think here of economic aid and defense capacity. Our growth policy ought to be directed at advancing those lines of growth which will help most to do these things.

Education is probably a very good bet along these lines. When it comes to general investment you would want to have some thought as to where it is.

Representative CURTIS. That is the thing. I thought you felt that way.

Of course, it gets back to the basic statement you made that it is not a question of this absolute growth, but we have to get into the details of what the objectives of the growth are.

I might make a comment: We have an illustration of forced growth in one segment of our economy in agriculture. Whether they intended to do what they did, I am satisfied that the results of this tremendous technological revolution in farming comes from a combination of two things:

One, the tremendous sums of money the Federal Government has spent in research and development in agriculture which has been very good, but coupled with it the acreage control program where the incentive to use more fertilizer, use better seed, use better techniques so that you can get more per acre were so strong that it brought about this combination result.

Now, I think most economists I have heard point out the agricultural sector of our economy as the one that is creating serious difficulties and is not on a sound economic basis. There is an example, I would say, of governmental policy—whether intentional and I think it is mainly through ignorance—but nonetheless it was governmental policy that did it. I worry very much about these solutions that would turn over to a bureaucracy the power of making policy where they are dealing largely in ignorance, taking it away from the private sector where maybe there is not complete knowledge, but nonetheless there is possibly a little more knowledge.

Now, one other area that I would like to dwell on a little bit is the consumer credit area. I have been disturbed about what I regard as the failure to approach consumer credit in its overall aspect because it is a relatively new thing in our society. In analysis is it anything more than spreading purchasing power over the earning life of the individual and isn't there an automatic limit which we will sometime reach in the amount of consumer credit that is extended? We are in an era still of extremely rapid growth into this new idea, but as we approach some day there will be a tapering off.

Would you say that is a fair observation?

Mr. MUSGRAVE. Yes. As long as your income keeps growing you will continue to have growth in consumer credit, but you certainly will not continue to have it at the rate at which you have had it over the period in which it just became available.

Representative CURTIS. I have not been worried about this at all, really.

In fact, I have felt it has been one of the greatest things that has happened to our society. I urged lower downpayments in FHA. I have been one who has been instrumental in some degree in getting

consumer credit extended to education because it sounded to me like it was sounder to spread the earning capacity over a lifetime.

I mention it here, it usually has been used as a sort of whipping boy when other things are not going right.

Immediately when they talk about controls they talk about putting controls on consumer spending.

Mr. MUSGRAVE. Still, consumer durable expenditures are one of the volatile expenditures. And the availability of consumer credit makes it that much more volatile.

Representative CURTIS. If we were confronted with traditional inflation I would agree but it seems to me on analysis our classical inflation, if we can use such a term, has occurred in an area where we did not think of the item involved as being a goods or service.

I would regard that as investment capital. That is why the greater demand and the limited supply has been occurring over a period of several years and has produced to a large degree some of this traditional inflation of too much demand chasing too few goods; but I have not seen consumer credit or consumer demand as being the result of some of this unless you segmentize. I think you do see it in the services; there is greater demand for TV technicians and plumbers than there are plumbers and TV technicians; and services have continued to go up along those traditional lines; but there has not been much consumer credit in that area and granted for putting services on a consumer credit basis; it is more in the field of washing machines, houses, and so forth, which I don't think have been a source of this inflation.

Mr. MUSGRAVE. Speaking on the recession side, take the 1956-57 experience, if automobile demand could have been maintained—it certainly would have been an advantage.

Representative CURTIS. Let us take another, if you will. Take housing. The entire cutback in housing was in the Government-financed sector where I think it came because of the fact that we had this demand for investment capital and we did not take the ceilings over the VA's and FHA's.

There was no cutback in the private housing program which would indicate to me that the cause of it was something else.

Then in automobiles it was not just the people could not buy them. I think the people were getting fed up with Detroit's idea of what they wanted, which later came out in their continued purchase of the foreign small car and even now, in order to get a Volkswagen you have to be on the list several months.

Mr. MUSGRAVE. Nevertheless, it is still a fairly small part of the total mark.

Representative CURTIS. What would it be, though, if they were available? That is the point.

The demand is there. It is not a demand for the Detroit product. The demand is for another product.

Mr. MUSGRAVE. If the demand is that much greater, why don't prices go up?

Representative CURTIS. In the Volkswagen?

Mr. MUSGRAVE. Yes.

Representative CURTIS. I do not know, but it is showing itself in the fact that you have to wait 8 or 9 months. People apparently do

not need automobiles that badly and are willing to wait. But it indicates that there is something else in this area.

Mr. MUSGRAVE. Whatever it is, you certainly have cycles in durable consumer goods outlays. This is quite apart from the matter of whether people like the particular product. You have replacement cycles and you have had these for a long time. You have them in durables, you have them in housing. These cycles may be overpowered for a while by a general growth trend, but the basic fluctuations are there.

Now, if the view is correct, as brought out in some of your staff work, that one of the main problems of inflation in our kind of economy is inflation that comes about because of relative price changes, then we ought to be concerned with modifying violent fluctuations in particular sectors of the economy. In this case the problem of leveling out outlays on durables, both in the housing area and in such things as the automobile industry, becomes quite important. For that kind of thing consumer credit controls can be very useful and much more useful than general credit controls.

Representative CURTIS. On this I will just make a concluding remark that I certainly agree with your observations on the importance of fiscal policy in this area as opposed to monetary policy, not that monetary policy is not important, but we have not attempted to do an adequate job, at least in my judgment in the fiscal area. And until the Treasury bureaucracy get into their minds that taxes have economic effects, we are not going to go very far.

Mr. MUSGRAVE. So I say, let us take tax adjustments away from them and give it to the Executive.

Representative CURTIS. I think it is a good illustration to propose shifting the power there, but I think there is also need of some education.

The CHAIRMAN. There are only two questions that I want to ask. I think Congressman Widnall will pardon me if I seek to correct what I think is miscomprehension in the alleged change of policy in the AFL-CIO as regards the relative merits of freer trade and protection.

It is perfectly true that at the San Francisco convention there was greater exhortation for protection than at previous conventions. It is true that this extended beyond the textile workers. I am seeking to find the exact resolution which was finally adopted and I expect it at any moment. But it is my understanding, which is confirmed by the understanding of others, that the AFL-CIO did not modify, or did not appreciably modify its previous position in favor of expanded trade and in support of the Reciprocal Trade Act.

So that while we may be under pressure from individual unions in favor of protection to a greater degree than before, my understanding is that the general policy of the AFL-CIO is substantially the same as it has always been.

Now I will have to ask unanimous consent to have inserted in my comments the exact text of the resolution which has been adopted.

Representative WIDNALL. Will the Senator yield for a comment at this point?

The CHAIRMAN. I may say that I have now found the text of this resolution and I read from part of it.

We now reaffirm our support of the reciprocal trade agreement program and continued gradual reduction of barriers to trade among the free nations of the world.

That is a partial text. We will put the full text of the resolution in, but sometimes these newspaper accounts do——

Representative WIDNALL. Will you yield for a moment?

The CHAIRMAN. Certainly.

Representative WIDNALL. Representative Curtis just mentioned the Volkswagen. I think it is rather interesting for the record that the Volkswagen people were purchasing a factory in New Brunswick, N.J., that belonged to the Studebaker people. They canvassed their problems with American labor and costs and decided not to manufacture in the United States because they could compete by manufacturing in Germany and shipping over here.

The CHAIRMAN. I did not go into that question at all.

I felt that your statement that the AFL-CIO had changed its policy and was now protectionist, grossly overstated what had happened and that the full record should be shown.

Now, the two questions that I have relate to the exact meaning of the statement of Dr. Musgrave.

First, you say:

Similarly, it may well be desirable to extend some degree of monetary control to the field of financial intermediaries.

Do you mean by this insurance companies, building and loan associations, mutual savings banks?

Mr. MUSGRAVE. The thing which I had mostly in mind was the consumer credit area. But you may want to go further because such an overwhelming part of the loans and hence of capital expenditures, originate from these financial intermediaries. Leaving aside the quibbling about how money should be defined, some control over the intermediaries seems a logical extension of the principle of control over bank lending.

The CHAIRMAN. How would you do that?

Mr. MUSGRAVE. You might have some requirements as to the asset composition of these financial intermediaries.

The first thing one might think of is some kind of reserve requirement in terms of Government securities. Incidentally, this might considerably change the general picture of debt management——

The CHAIRMAN. You mean requiring insurance companies to maintain a certain percentage at fixed limits, of the percentage of Federal securities they should retain as assets?

Mr. MUSGRAVE. That they should retain as assets. This is essentially what you now do for commercial banks. Also, in the case of these financial intermediaries, where you do not have the factor of multiple expansion as in the case of the commercial banks, in order to be effective, you may want to have some further controls over the composition of their private assets, let us say ratio of mortgages to equity funds. This poses problems, but it is something we should think about.

The CHAIRMAN. In the field of consumer credit, would you extend controls beyond the percentage of downpayment and the duration payments?

Mr. MUSGRAVE. The downpayment and duration of payments would be the most important thing. Also, there is the problem of

getting some control over the flow of funds into the consumer credit market, quite apart from the terms.

The CHAIRMAN. What do you think of a provision that the interest rate, or better, the total cost of borrowing money, should be stated explicitly as a percentage upon the outstanding obligation instead of covered up as it frequently is, either not being mentioned or as a percentage on the original amount which loanwise is only half the amount of the actual rate if it is paid off on the installment plan?

Mr. MUSGRAVE. I think it would be a good idea. I hope that people would notice it. It would certainly be a good idea to bring it to their attention.

The CHAIRMAN. Now, you say:

If more is paid than this lowest cost, debt management does, in fact, become social security policy, and this should not be the case.

Being a somewhat dull and obtuse person I am not able to find out precisely what that means. If there is any irony, would you tell me what the irony is in that statement?

Mr. MUSGRAVE. I actually thought of the irony of it afterwards. What I meant when I wrote this was that if the Treasury pays the price for holding down liquidity through the sale of debt at a price which is required in the market, and if it pays the cheapest price which it can pay to get this liquid restriction, that then we have an efficient operation of debt management.

If, however, the Treasury were to make available its securities at terms which are more advantageous than those which could be achieved in order to get this—

The CHAIRMAN. May we boil that sentence down by saying if the interest rate is greater than need be; is that right?

Mr. MUSGRAVE. Yes.

The CHAIRMAN. This is social security, you say?

Mr. MUSGRAVE. You then engage in redistribution policy. We are then making gifts, we are making transfer payments. Instead of paying relief to the unemployed, we are making transfer payments to investors.

The CHAIRMAN. This is a social security program for investors?

Mr. MUSGRAVE. Yes.

The CHAIRMAN. I suspected that. I was not quite certain. I wanted to make it clear.

Mr. MUSGRAVE. The irony is that we would then have a social security policy for investors, while at the same time we continue to pay a low rate of return to the OASI reserve fund.

The CHAIRMAN. Well, you have opened up some interesting thoughts. Thank you very much. We will reconvene at 2:30 this afternoon.

(Thereupon, at 12:25 p.m., the committee recessed, to reconvene at 2:30 p.m., same day.)

#### AFTERNOON SESSION

The committee reconvened at 2:30 p.m., upon the expiration of the recess.

The CHAIRMAN. We will continue our hearings this afternoon with testimony from William J. Baumol, Princeton University.

We are glad to welcome you, Mr. Baumol.

## STATEMENT OF WILLIAM J. BAUMOL, PRINCETON UNIVERSITY

Mr. BAUMOL. Thank you, Mr. Chairman.

I suppose the procedure at this point is for me to start off by reading my formal statement.

The CHAIRMAN. Yes.

Mr. BAUMOL. Before getting down to the substance of my discussion it is necessary that I make the limitations of my professional qualifications perfectly clear. I am an economic theorist, and a mathematical theorist at that. While it is true that I have done a fair amount of applied work in industry, my knowledge and experience in the specifics of debt management and other detailed, but highly important matters of monetary and fiscal policy, is highly limited. The only advantage I can claim for my qualifications on this occasion is whatever increase in clarity of vision of the overall structure of the problems can be derived from ignorance of its details.

Though I will say something about the problems of employment and price stability, I propose to address myself primarily to the question of the means which can be devised to increase the rate of the nation's economic growth. Of course, all three issues are of fundamental importance for the economy, but it is the rate of increase of our national output which threatens to be crucial for our longrun international position.

There is no need to repeat in detail the statistics on the disparity between the rate of expansion of the Soviet economy and our own which have received so much attention recently. Granted that the available figures are vague and that their accuracy has been called into question, yet there seems little doubt that Soviet output is growing at a compound rate in the neighborhood of 7 percent or more while our own growth rate has recently perhaps even fallen short of its historical 3 percent. We can also be sure that the Soviets are devoting a greater proportion of their resources to the training of scientists and technicians.

We all know that the Soviets may be forced to slow down as they catch up with Western technology throughout their economy, and as they run into a variety of bottlenecks. Moreover, the output of an economy is by no means the sole determinant of a country's economic strength. Nevertheless, there are no grounds for complacency in these figures. They certainly indicate the possibility that the productive capacity, the technology and scientific know-how of the Soviets will surpass ours, and even leave us far behind, perhaps in a matter of decades. It is not pleasant to contemplate the prospect of the community of free nations becoming a grouping of only second- and third-rate powers.

At least partly because of these facts it has recently become fashionable to speak of a 5-percent rate of growth as the appropriate goal for our economy. I do not know how this, doubtless rather arbitrary, figure was adopted, but whatever reservations one may have about its magnitude, it cannot be dismissed lightly. For it represents a very real and well-grounded sense of the urgency of doing something indeed, something very substantial, to increase the rate of growth of America's national output.

Unfortunately, while this goal seems to have met with fairly widespread approbation among economists it has produced remarkably few concrete proposals for its implementation.

One has heard that the Government should plan its budget as though we had already achieved a 5-percent rate of growth, a proposal which, if I understand it correctly, seems to me to be both dangerous and ineffective. If public expenditure increases substantially in anticipation of a considerable increase in national output, the increased flow of Federal outlays would be met by no corresponding rise in output and serious inflation is the likely consequence.

Other proposals that I have come across have dealt with the details of our monetary and fiscal policy and have been directed primarily to the problems of maintaining a high level of employment and price stability. Of course, I agree that inflation as well as unemployment can be serious obstacles to economic growth. But from this statement we cannot leap to the converse proposition that if we take care of employment and price stability, economic growth can be left to take care of itself. I do not believe that, in the absence of very radical supplementary measures, any substantial increase in our rate of economic expansion will be achieved by policies which are directed primarily at employment and price goals.

The other suggestions—which I have come across—for stimulating growth have called for conferences or special projects designed to study the problem. I think these are best regarded simply as councils of despair rather than helpful ideas.

The major point is that we cannot expect revolutionary results from routine policy measures. If we believe that the need for increased growth is really urgent we must be prepared to give careful consideration to policy measures which represent radical departures from traditional practice, policy measures whose soundness is *prima facie* suspect because they are not rooted in long tradition and are therefore largely untested by experience.

Let us, therefore, consider what radical measures are available for accelerating the expansion of our economy. The number of broad alternatives is, in fact rather small. What is needed is a mechanism which channels economic activity into expansionary directions, which leads people to work for increased productivity and to increase the proportion of their incomes devoted to investment.

Three basic means for providing this sort of motivation or its results have either been adopted or at least considered elsewhere.

The first of these we may call education and moral suasion, attempts by means of exhortation and schooling to get the private sector to save and invest more, to work harder, to reduce featherbedding and resistance to innovation. The effectiveness of such an approach is questionable and, at best, its results are likely to be discouragingly slow. We can surely have little confidence in a growth policy which adopts moral suasion as its main instrument.

A second type of policy approach to the stimulation of growth involves the use of coercive measures to provide the motive for the cooperation of the public. What the Government cannot achieve by voluntary public action it may hope to accomplish by police methods. It can, for example, set up productive norms for management and labor and enforce them by means of severe penalties. There is some

question as to the extent to which even the totalitarian countries have been relying on undisguised coercion. In any event, whether or not such methods have been effective elsewhere, they are totally incompatible with the idea of a free economy and must, therefore, be rejected by us out of hand.

A third class of growth policy involves primary reliance on direct Government investment. What a government is unable to get its citizens to do it may have to do itself. Investment can be increased by direct or indirect Government expenditure for this purpose, out of funds obtained by borrowing and taxation. Here, again, is an approach which has been employed, and employed successfully, by the totalitarian countries.

We cannot afford to reject this last approach completely. In some areas public funds will have an indispensable role in any effective program for the stimulation of economic growth. In particular, I am referring to the urgent need for Federal-aid to education and to stimulate the flow of new ideas and men who are trained to produce them. I believe that the long run importance of this need can hardly be overstressed. Nevertheless, except in these and a few other specific and carefully selected fields, heavy reliance on governmental investment as a primary instrument of policy is incompatible with our economic ideals. For such a procedure must progressively reduce the role of the private sector in relation to that of the Government and is, therefore, inherently subversive of the system of private enterprise.

These standard approaches to the stimulation of growth all being unacceptable for one reason or another, we must look for further alternatives. To me it would appear that the line along which we must proceed is clear. Rather than adopting policies which seek to replace or circumvent private business, economic expansion can be stimulated by making full use of the growth potentialities of our economy, by harnessing more fully the ingenuity and enterprise of private management. This sounds suspiciously like a platitude, but the concrete proposals which it calls for are anything but routine and trivial.

So long as profits can be earned by business operations which involve relatively little expansion and, indeed, so long as expansion can subject the businessman to risks which he can avoid by more conservative policies, management will think twice before it undertakes policies which are designed to accelerate the growth of the firm. Under the circumstances, the extent and consistency of management's growth orientation must be considered remarkable.

How then can management's growth incentive be increased? It seems to me that the Nation's fiscal structure is the ideal instrument for this purpose. As we all know, the structure of taxes can have very profound effects on business incentives and, in particular, on the incentives for expansion. At present, for example, the preferential tax rate on capital gains increases a firm's incentives to retain and reinvest its earnings, and it is in this respect a stimulus to economic growth.

What I propose, therefore, is no less than a major overhaul of our fiscal structure, one which seeks to exploit to the full every possibility for stimulating expansion. Let me be more concrete by outlining a

rather extreme proposal which, I am well aware, is beset by a variety of practical problems and difficulties. Nevertheless, it is potentially capable of providing a very substantial stimulus to our economy. If we decide that the problem is sufficiently serious I think we will eventually be forced to consider some variant of this suggestion.

The purpose of the proposal is to tie the earnings of private enterprise closely to its contribution to economic growth so that whatever the firm does to help expand our output will be profitable to that firm and vice versa. Specifically, it calls for a combined system of taxes and exemptions which would be applied to all business firms. The taxes would be levied on any appropriate basis, very likely along the lines of current business taxes, but above their present levels. However, each firm would be eligible for an exemption from these taxes. The level of its exemption would depend on the percentage growth of the firm's sales in relation to those of the preceding year. A particularly powerful stimulus to growth would be obtained by making this exemption progressive; that is, by offering each company an exemption which increases more than in proportion with its percentage rate of growth.

Several features of this proposal should be pointed out:

(1) The proposal is not inherently inflationary or deflationary. It is compatible with standard fiscal and monetary measures which are designed to maintain a high level of employment and price stability.

In fact, the tax and exemption levels could be varied independently so as to produce a budget surplus when there was danger of inflationary pressure and a deficit if there was serious unemployment.

(2) Business would not have to end up paying more taxes under such a program. Its tax and exemption rates could, for example, be set at such levels that a firm which expands its output at, say, a 5 percent rate, or at whatever target rate is adopted, would break even; that is, it would pay no more taxes than it would in the absence of such an arrangement.

Senator BUSH. On that item 2, if a fellow breaks even at the 5 percent rate does he suffer a penalty if he does not get up to that rate?

Mr. BAUMOL. As compared to the present?

Senator BUSH. In other words, you penalize him for being beyond the procession, you reward him for being ahead of it.

Mr. BAUMOL. That is right.

Again, this is just one possible cutoff point. The cutoff point is flexible and could be adjusted according to the circumstances. I am merely suggesting one possible arrangement. But your interpretation of this variant is precisely correct.

Let me return now to my statement:

(3) The scheme is not a stimulus to monopolization by merger. Under its provisions a firm would gain nothing through an expansion by merger.

The combined firm would, it is true, acquire whatever sales expansion could be achieved by the two companies together. But since its tax exemption would be based on its percentage rate of growth, this increased growth would also be measured up against the combined sales of the two firms in the preceding year.

Finally (4) the proposal is designed to avoid the use of detailed central direction of the economy. It gives full scope to the ingenuity and enterprise of the private businessman.

He would be able to decide on the areas into which he could expand most effectively. A firm in a static industry would thus be driven to invest in more dynamic sectors of the economy. Since rate of growth would be measured by the value of overall company sales, sales of a new product could make just as much of a contribution as increased output of its current product line.

There is no purpose in going further into the details of this growth stimulation proposal. If such a scheme ever becomes a real possibility its provisos will doubtless be modified beyond recognition by practical considerations and political necessity. My purpose is merely to indicate that we are not helpless; that there is much which can be done within the framework of our economic system to increase its rate of growth.

I believe also, that even if the specific proposal is impractical or unpalatable, something at least distantly related to it will be required to achieve a substantial increase in the rate of growth of our economy. It was to indicate my reasons for this belief that I went into such detail on the available policy alternatives.

In sum, it is my view that this is the nature of the appropriate medicine. My only plea is that we do not let inertia or groundless optimism lull us into putting it aside without full consideration. We can only reject it with a clear conscience if we come up soon with a real and promising alternative or if, on careful examination, we are convinced that this cure is worse than the disease.

The CHAIRMAN. Senator Bush, will you begin the questioning?

Senator BUSH. Thank you, Mr. Chairman.

What you are talking about really, is some form of incentive taxation, if that is the proper phrase.

Mr. BAUMOL. That is correct.

Senator BUSH. What about the effect, assuming that it were possible—I am not proposing it necessarily as a real possibility any more than you are in your last suggestion—but what about the alternative of a general tax reduction such as has been called for recently in a bill which I think was the Herlong-Sadlak bill, which has not been before this Congress this year, but was last year, and before, which calls for a gradual scaling down of taxes so that the top rate on corporate taxes would be 42 percent rather than 52 percent.

Would that type of incentive tax reduction have the same effect or would that be as effective as the type of thing you present here?

Mr. BAUMOL. I would think that it would have a different function. First of all, a scaling down of taxes in general would tend to work in the inflationary direction.

I am not saying that this is necessarily bad. That depends on the situation at the time, but what it would tend to do is increase purchasing power in general. It need not motivate firms to expand their outputs and might only change the direction of their outlays, for example, to increase their advertising.

It is very difficult to see exactly what a general tax reduction would do to growth. But certainly there would not be a direct tie-in which says to management you get money by, and only by, expanding your output.

In other words, it leaves the firm with precisely the alternatives that it has now. It only gives it greater means to do what it is doing now. I don't mean to say tax reduction would not have some stimulation to growth effect, it might. On the other hand, if we were in an inflationary situation tax reductions could have a very serious effect in deterring growth.

Senator BUSH. I can see your idea, if a man goes along at the accepted growth rate; namely, 5 years, why, he is in neutral so to speak respecting his tax position.

But if he does better than that, then he would presumably get tax benefits that the others would not get.

How are you going to take care of the fellow who does not do so well? Are you going to increase his tax burden because he has not done well?

Mr. BAUMOL. That is right.

Senator BUSH. Have you thought about the possibilities of difficulty there? I just wonder how practical that is. I am not brushing it aside by any means, but it puzzles me very much as to how that would work.

You take a company that is in the ice business or, let us say, the railroad companies of today. They certainly are not coming up to the standard, so we are going to increase their tax burden for that reason, but as they get closer to bankruptcy due to the obsolescence of the industry so to speak, how are they going to meet this increased tax burden?

Mr. BAUMOL. There are really two answers to this question.

One is that, if as a matter of humanitarianism you feel that in some cases special aid is called for, it is, of course, still possible under such an arrangement, as a means of easing the way out of a declining industry.

But the fact is that precisely what you want to do, if you consider the growth problem serious enough, is to make it sufficiently unprofitable to stay in those industries, to get investment funds out of there and into the industries where there is room for growth. That is, you want to channel funds more rapidly out of those lines and into other lines.

Senator BUSH. I commend you for this suggestion. It is a new one to me and I think it is very interesting.

Offhand, I think it deserves a great deal of study. I am not quite clear at the moment that I think it is practical.

However, as I say, I congratulate you on making a constructive suggestion. That is what we are looking for.

Go back to your comments about education. In the middle of page 3 you refer to the urgent need for Federal aid to education. What do you have in mind? What type of Federal aid to education do you have in mind making that statement?

Mr. BAUMOL. One of the most effective forms of Federal aid to education would be scholarships, somewhat along the lines of the law which was just put into effect last year.

Senator BUSH. Would this be in the realm of higher education, then, or secondary education?

Mr. BAUMOL. I would say along both lines. That is, the scholarship aid would be primarily for college education.

Senator BUSH. At the college level or post-graduate.

Mr. BAUMOL. Both. In secondary education you need other forms because the bulk of education involves no tuition payments in any case.

Senator BUSH. Would you be specific about the areas in which scholarship would be offered?

In science, for instance, as against the humanities. What is your thought about that?

Mr. BAUMOL. In both. Let me indicate why I am pushing for scholarships. I would like to have money come into the universities and into the schools with as few strings attached as possible. The financial advantage of scholarships is that they permit the colleges and universities to raise fees for nonscholarship students, those who can afford to pay. No money is given directly to colleges by the Government. Thus private institutions go on operating on their own rather than with any specific instructions from the Government—after all, you can't simply grant funds and say "do with them as you like."

If you grant money directly to the universities you are almost forced to say "do with them so and so and such and such," whereas with scholarships you have more leeway.

Senator BUSH. Last year we passed a bill called the Defense Education Act of 1958 and the basis of that aid to education program was scholarships and fellowships for graduate work.

Mr. BAUMOL. Yes.

Senator BUSH. Did you think that was a constructive measure?

Mr. BAUMOL. I certainly did. There were some reservations about its provisions which a number of colleges and universities have raised.

For example, there is the provision there that there are special funds for new programs rather than for expansion of old programs and this, I think, had the unfortunate effect of leading institutions to look for gimmicks, to change names of departments, to cook up special deals so that they looked like new programs and sometimes to invent new programs which were not particularly needed rather than expanding programs which were really essential and could be used more effectively.

This is exactly the sort of situation in which I think it is for the best if there are as few strings attached to aid as possible.

Senator BUSH. I take it, then, that your suggestion does not go as far as the elementary and secondary field and that you weren't addressing yourself to a classroom construction bill or that type of aid.

Mr. BAUMOL. No. I would favor that as well.

Senator BUSH. You would?

Mr. BAUMOL. Yes; I definitely would.

Actually, there, again, I think the most serious problem from the point of view of economic growth—I am not talking about the virtues of education, per se, because this is not what I am addressing myself to just now—is really not so much the type of classrooms that we have and the size of the classes, although I think these are serious problems. The real difficulty stems from the nature of the teaching that is done there and, of course, in this respect very important changes are going on.

Teachers have been trained primarily in how to get messages across rather than in the content of the subject matter. The teaching of

mathematics, for example, has been designed primarily to minimize the student's traumatic experiences rather than to maximize the intellectual stimulus that is involved.

I think we are getting away from that now.

Senator BUSH. That is a very brilliant observation of the situation. I think that is all for the moment, Mr. Chairman.

The CHAIRMAN. Congressman Reuss.

Representative REUSS. Mr. Chairman, Mr. Baumol, I share some of the questions and doubts of Senator Bush about your proposal and in offering these doubts I do not mean to be a wet blanket.

Any new proposal such as yours naturally has to run the gamut of criticism.

I would be fearful that while it is true, as you say, in your first paragraph on page 5, that adoption of your scheme would not be a stimulus to monopolization by merger, it would, nevertheless, be a stimulus to monopolization.

After all, it does give an added incentive and added staying power to the company which enlarges its share of the economy, not by merger, but just by increasing its sales.

If excessive bigness is something that we have to take into account in our economy, as I believe it is, in the social standpoint as well as from the standpoint of efficiency, this is something which has to be weighed and I take it that part of the price we would have to pay for the adoption of your proposal is encouraging business.

Mr. BAUMOL. If I may comment on two grounds:

First of all, let me say that I share all of your questions, as I have indicated here several times, about the practicality of such a scheme and I recognize its naive overtones.

Let me just indicate in general terms how I nevertheless, arrive at my proposal and then I will come to your specific point. To me it follows almost by a process of elimination. If we are to do something about economic growth—by we I mean the Government—if the Government is to encourage economic growth it has either to do the job itself or it has to encourage others to do it. Doing it itself is the alternative of Government investment which I discussed.

The other two possibilities are the carrot and the stick and the stick is something which we are, to say the least, reluctant to use. So that almost by a process of elimination we are forced to consider a third cousin of my proposal, even if this proposal in all sorts of details is found unacceptable. I feel that there is almost no choice in the general nature of the approach.

Now, to come to your specific question. To some extent any stimulus to growth which works through private industry has got to encourage private industry, firm by firm, to grow. So there is that danger—very real danger—and I certainly agree with you that it is not entirely satisfactory.

But there is a curious feature to my proposal which might work the other way. Because the exemption is based on percentage rate of growth there is a special advantage given to the small firm which has a small sales base and, therefore, may be able to achieve a given percentage growth rate more easily than a larger firm, so that I am not sure that the advantage all lies on one side.

Of course, if such a proposal were ever to become a reality you would have to consider a whole variety of policy decisions along with it because its implications are very far reaching. One of the things you would have to be very careful of is enforcement of the antitrust laws. But what you would have to worry about is not so much prevention of bigness as prevention of some of the unfortunate effects of bigness.

Representative REUSS. On this percentage point why is it any easier for a small company to expand its sales from \$100,000 to \$200,000 a year than for a larger company to expand its sales from \$10 million to \$20 million a year?

Mr. BAUMOL. Because if they both happen to find similar investment opportunities for a certain amount of money and these yield them the same increase in sales, then percentagewise the gain is greater for the small firm than the large one. I am not saying this will always happen. I am saying that I can visualize circumstances in which it might happen.

Representative REUSS. I certainly think the way you go about your problem is the way anyone has to go about it, you have to examine alternatives and discard them.

As you say, this is what you say you ended up with.

Would it not be good for the country's growth if the economic authorities of the country relied less on high interest rates, monetary policy, as a method of avoiding inflation and more on fiscal policy, i.e., running at times of prosperity a surplus in the budget, both by adjusting taxes and policies.

Would not that low interest provision of the economy help those whom we want to help in the economy, i.e., the provider of capital equipment, a businessman who wants to borrow to build plant or equipment, the homebuilder who wants to build real estate construction, and isn't a lower structure of interest rates than that which the country is now enjoying or not enjoying, depending on which way you look at it, a sound noninflationary alternative, assuming we get our tightness by fiscal methods instead of under the present policy which relies upon slovenly fiscal policy and supertight money?

Did you pass by that alternative on your pilgrimage?

Mr. BAUMOL. I have some comments on that.

Representative REUSS. What about it?

Mr. BAUMOL. I apologize for going at this in a roundabout manner. I would like to begin by making my frame of reference clear. Whatever we do on these matters has importance in a variety of ways, but I do not believe it is going to make the difference, say, for a doubling of our rate of growth.

In other words, while the question of reliance on monetary versus fiscal policy is going to be important for a variety of reasons and can help somewhat in promoting growth, we cannot focus our attention exclusively on this question.

Representative REUSS. You agree that we should focus some on it?

Mr. BAUMOL. Now I come to your point. There my answer is: I would agree with you within limits. That is, I would favor somewhat more tightening of the budget and some reduction, some compensating reduction, in interest rates, but I would set very severe limits on this, because any one of these means for controlling inflation has

a cost and it is a cost which increases more than in proportion to the extent to which we use it.

For example, a very high level of taxes aimed at a large budget surplus also has effects which tend to slow down the rate of growth of business.

Representative REUSS. Although there again, how much it slows it down, or whether it slows it down at all, depends very largely on incidences, the type effects?

Mr. BAUMOL. That is right. If you try to get a cheap money policy and rely exclusively on fiscal policy to make up the difference you could get into serious difficulty.

I would be willing to go in your direction, but I would like to be fairly conservative in going in that direction.

Representative REUSS. Let me take you up on that word "conservatism." Is not the policy of an enlightened conservatism that the major part of national growth be borne by the private sector of the economy? Is it not good sense for such an enlightened conservatism to do just what we are talking about; namely, to soften a bit on super-tight money, superhigh interest rates, because, after all, it is the private sector of the economy which primarily is helped by a diminution of supertight money policies? And do we not, by having ever higher and higher interest rates, strike a pretty hard blow at private enterprise, and unwittingly, goodness knows, help statism enter private enterprise which can go ahead under loose fiscal policy and do things which private industry ought to do?

What about that?

Mr. BAUMOL. There, again, I would tend to go along with you to some extent, but one must remember the other side of the coin—if one tries to keep down inflation by tightening the budget, this also can reduce incentives in the private sector.

The fact is, of course, that we are talking somewhat from a position of ignorance. We do not know exactly what effect, say, a half-percent reduction in the rate of interest will have on private investment or exactly what an increase in the budget surplus of so much and so much will do to private investment.

My impression, on what evidence is available, is that we could stand some move in that direction, but again I would say we have to be careful.

Representative REUSS. Thank you very much.

The CHAIRMAN. Mr. Curtis.

Representative CURTIS. Mr. Chairman, I cannot sit idly by and hear a premise such as my colleague from Wisconsin is drawing upon without raising the question of where he gets his premise. I do not know how he figures that this administration or any administration relies on high interest rates to stop inflation.

That is like saying that someone relies on a symptom for a disease to correct the disease.

The point is that high interest rates are a disease. What creates the high interest rate, I suggest, has been fiscal errors and when we try to say you correct the results of fiscal errors through monetary policy or through further fiscal policies, I think it completely avoids the issue.

How do we get high interest rates? Maybe we ought to stop doing what we have been doing which produces them and which continues debt financing.

Representative REUSS. Will you yield?

Representative CURTIS. If the gentleman will refrain from imputing to this administration the deliberate policy of seeking high interest rates to achieve anything—I have never heard anyone advocate high interest rates for anything—yes, sir.

Representative REUSS. Under the conditions I guess I won't ask the gentleman to yield.

Representative CURTIS. That is the point because I hear the gentleman and others constantly trying to maintain. That it is a policy. It is a fact that there is a high interest rate. It is a fact that there is a tightness of money.

Representative REUSS. Is that not because of the high interest rate?

Representative CURTIS. Sure, it is the shortness of the supply of money. No one is trying to create high interest rates. In fact, no one wants them, I believe.

But I suggest that the very policies that the gentleman advocates are the ones which have produced the disease in the beginning.

So it is sort of beating around the bush.

Now, to get to the questions raised by this paper, I certainly am pleased to hear your conclusion that you feel that it is in the area of overhauling our tax structure where we might come out with a better alternative rather than the first three mentioned.

You refer to the carrot or the stick. I would like to carry the metaphor a little further and suggest maybe that all we need to do is to take the hobbles off the beast, and the hobbles are some of the things in our tax structure now.

I have tried in several speeches, in papers over a period of years, to point out the details in our tax structure which I thought impeded economic growth. If we continue with that kind of thing we are going to continue to have these difficulties.

Now, is it not possible that that might be right, that we have the hobbles there and all we have to do is take them off?

Mr. BAUMOL. I would go along only part way again. I seem to be in this position all the time. After all, we have lived through eras in which restrictions on business were much weaker and when taxes were much lower, particularly when taxes on business were much lower. So far as I know we have never achieved 8-, 9-, 10-percent rates of growth.

Representative CURTIS. We have had some pretty rapid growth periods.

Mr. BAUMOL. We have had some rapid periods of growth, but I cannot believe that simply reducing taxes and doing nothing else about it is going to get you anything like the spectacular sort of increase in rate of growth that we are talking about.

Representative CURTIS. Let me suggest some of the areas. First, I would like to take the very broad result of the impact of previous inflation, the inflation of World War II, on our present tax structure.

Take in the area of depreciation allowances. The impact of inflation on that was actually a capital levy because you only had in reserve capital accounts half of what it cost just to replace.

Now, that is bound to have an impact on structure.

Take the problem of locked-in investment which is solely the result of inflation, where equity stock is worth twice in money what it was before and there has been no actual gain, yet you pay a tax on that.

That has actually been under this a levy on capital, not on earnings.

Take the area of community and school facilities where our local taxes are based almost entirely on real estate and the impact of inflation on real estate appraisals and the goods and services that have to be bought by the community and structures have to be paid in inflated dollars. All the tax rates were made on the basis of the present inflated dollar.

Those are some of the hobbles that I suggest exist here.

Take, also, the double taxation on equity investment as opposed to borrowings or bond issues or bank borrowings.

These are the kinds of things that seem to me to very badly affect this situation, and, I have suggested, have actually created this tight money situation to a large degree because it has tightened the investment capital area.

There is greater demand for investment capital than we have supply with all the deterrents on savings that exist not only in our own tax structure, but by the political action of many people in public life today.

Mr. BAUMOL. I certainly must agree again that a great deal can be done by reducing or eliminating various special types of taxes which impede or reduce private investment and I would be all in favor of it. I would just like to point out one difficulty you have here, that if you are going to work in the direction of an increased budget surplus which is among the possibilities that were raised before—

Representative CURTIS. Or stay within the budget and simply gain from the increased economic growth for the budget increase; yes.

Mr. BAUMOL. In any case, you would have the problem of replacing the reduction in the taxes in question by something else, unless you actually reduce expenditures.

Representative CURTIS. Oh, yes.

Well, if the economy has grown, then you, percentagewise, have increases?

Mr. BAUMOL. Surely, but a lot of your expenditures grow with the increase in your economy, too.

Representative CURTIS. That is true. I would certainly look at both ends of the thing.

Incidentally, I think I am going to introduce your paper in the Ways and Means Committee hearings because it advances the very theory of the Curtis-Ikard bill. There the bill is to give a tax credit on a percentage base for plowback into the economic growth measured by increased investment in the capital structure of the business, which in turn is measured in three alternatives: One by physical-plant increase, the other two in inventory or accounts receivable by giving attention to the service and distributive field of endeavor where most of our small businesses are and where, incidentally, most of the increase in price index seems to occur.

Of course, the Curtis-Ikard bill is just a moderate beginning on that theory, but any tax relief or adjustment there would certainly have to go into investment.

One thing you did not mention. I was wondering, what about our patent laws. I have often wondered whether our patent laws are adequate to enable companies today investing in research and development to recoup the amount they put into research and development. If they are inadequate, that would be one reason, a deterrent on private enterprise putting money into research and development.

Mr. BAUMOL. I can only say I have wondered about the same question.

Again, there are two sides to it. That is, if you tighten patent protection too much that reduces the use of new ideas by other firms. If you loosen it too much, it reduces the incentive looked for then in the first place.

Representative CURTIS. The major good lines we have used would be that which would enable them to recoup. Then the other area which I think is so important for increasing growth is a real look at our antitrust laws, I would say a look not toward loosening them in my judgment, but toward tightening them.

I think we would gain some economic growth in that area.

Now, one final thing, and this is the reason I like your presentation for economic growth and not the three alternatives that you list, I wonder about what is economic growth. I don't believe that GNP is a meaningless statistic, but it does not really measure what we are ultimately talking about in economic growth. How do we ever measure this thing of economic error and economic waste.

I think right now a tremendous amount of economic error is being made in the attempts to rehabilitate the vertical growth in the center of our large cities, which seem to me to be a peculiar phenomena which came as a result of the development of steam power and the dependence on labor on surface transportation. Then when electrical power and automobiles came in, I think you could almost foresee the suburbanization that has gone on. Yet if we tie our cart to the star of trying to maintain this thing that grew up under economic conditions that are no longer in existence, aren't we indulging in a great deal of waste?

We have to go behind and start evaluating what is economic growth and consider what things are good. To some extent you have; you have mentioned education. I think it needs to be done a great deal more.

Mr. BAUMOL. Absolutely.

The CHAIRMAN. I have just a few questions. First, let me congratulate you on the boldness with which you reason. Do I understand that you would make the norm, above which you would reward, and below which you would penalize, not the present longtime average rate of growth but the target which you said is roughly 5 percent, so that it would not be 3 percent but 5 percent?

Mr. BAUMOL. That is right.

Again, I don't take the 5 percent literally.

The CHAIRMAN. Have you thought of the similarity between your plan and the so-called wage-incentive plans of H. L. Gatt, Bedeaux, of setting norms in excess of the previous output, rewarding workers if they went—

Mr. BAUMOL. As a matter of fact, it was out of these that this idea grew up originally, when I saw the results of some of these programs.

The CHAIRMAN. Do you measure your growth in terms of fiscal output or in terms of dollars?

Mr. BAUMOL. I have only a crude suggestion here, but my first thoughts on the matter—I have only been working on this about a year—but my first thoughts on the matter are that growth would have to be measured in terms of fixed purchasing power dollars, whatever that means.

There are two reasons. On the one hand, you want to permit a multiproduct firm to move out of one area into another, and in order to introduce comparability, you must have dollar rather than physical growth criteria.

On the other hand, you don't want firms to become eligible for exemptions simply by increasing the value of their outputs through rising prices so that you have to have some sort of fixed purchasing power value measure.

The CHAIRMAN. That means one difficulty; namely, the problem of the general rise and fall of the price level.

Would you compensate a company in a monopoly position to increase revenue by increasing prices because this would not be affected by an index of the general price level?

Mr. BAUMOL. No.

The prices would have to be adjusted item by item. That is, you would measure growth in shoe production by shoe prices as of a certain date.

The CHAIRMAN. That would entail quite a lot of bookkeeping?

Mr. BAUMOL. Yes; there is no question about that. Still, these are figures that would be available in most sets of books.

The CHAIRMAN. Now, have you thought of the fact that this might intensify recessions and depressions and stimulate prosperity periods in this way; that when economic demand fell off and physical output of a plant or industry or of the economy fell, the tax rate for the enterprises would go up and you therefore would be taxing more in a period of recession and depression than in periods of prosperity.

Conversely, in a period of prosperity, when the demand is rising, you would tax them less?

Now I think there is fairly general agreement, so far as fiscal policy is concerned, this is exactly wrong.

Mr. BAUMOL. Yes, sir.

The CHAIRMAN. If taxes should be reduced, they should be reduced in periods of recession; if they are increased they should be increased in periods of pronounced revival. Yet your plan would work in the opposite way.

Mr. BAUMOL. I could not agree with you more on what is desirable here, but I think in the proposal I at least tried to get around that issue. Some figure like 5 percent is only taken as an average for a cycle. You can vary the overall tax collections and exemption levels independently so that in periods of depression you get a reduction in the tax collections and liberalization of the exemptions and vice versa in inflationary periods.

The CHAIRMAN. You could either give them a minus 2 or 3 percent, anyone whose business fell off less than 2 percent or 3 percent would be rewarded.

Mr. BAUMOL. Precisely.

In other words, you are still left with the options and methods you have today for contracyclical policy. You are not straitjacketed any more than today. The proposal does not help you in this respect, but it does not hinder you either.

The CHAIRMAN. A professor at the University of Wisconsin, in formulating his unemployment compensation proposals, concluded that unemployment is the fault of the employer. If you made it to his economic advantage to do something about it, he would do so. If you penalized him when his unemployment went up and you rewarded him when his unemployment went down, he would try to cut it.

Is this not a too puritanical code of ethics for business in ascribing too much individual responsibility?

Is it not true that our success in business is partially due to individual effort and ingenuity, and so forth? It is partially due also to tides of demand and the nature of the specific industry.

For instance, people who manufacture television sets were lucky when the demand for television came in. They did not originate the demand, but they were there at the proper time.

Similarly, the producers of high tensile steel have a very hard time in a depression because the demand for capital goods falls off far more rapidly than the demand for consumers goods.

So are you not really sitting on a moral seat of judgment and passing sentence upon those who fail to grow and rewarding those who do grow when, as a matter of fact, it may not be the fault of either of them? It may not be the fault or to the credit of either of them.

Mr. BAUMOL. First of all, I am not saying it is anyone's fault or passing judgment or blaming anyone. Guilt is not a question at issue.

Secondly, I would say that it still remains the responsibility of all of us to see what can be done about periods of lack of demand and inflation. I am not trying to pass that off. In fact, it would be extremely urgent, in order to prevent the breakdown of the proposed system, to make sure that, say, the ratio of taxes and exemptions or whatever other fiscal variables you had were kept at levels aimed to keep the demand in step with whatever increased production is achieved.

This is a responsibility which such a plan does not permit anyone to duck. What I am suggesting is, that if these favorable conditions are established it is appropriate, to reward whatever it is we are trying to get the system to produce. Let us then stimulate these people who have the experience and ingenuity to grab at those markets which are opened up by the demand that is provided.

Certainly you could not just let businessmen sink, weighted down by inflexible norms saying, "well, it is tough, we have a depression now, it is entirely up to you to find demand someplace."

The CHAIRMAN. Now I have one final question.

Would you give the same rewards for expansion in output in the field of cosmetics, chewing gum, pornographic pictures, as you would in flour, milk, and steel?

Mr. BAUMOL. Yes, sir. I think I ought to explain that.

First of all, I believe it would be a rather dull world if we had nothing but flour and steel to live with, but that is neither here nor there. I am not trying to pass judgment one way or another.

What I am getting at is this: Consider the needs of our international position—the financing of missile research and of general military preparations and so on. If we had a more rapid rate of economic growth, one could increase Government expenditure on these items, and yet maintain present levels of consumption in the private sector, or even have somewhat increased levels of consumption, with the flow into these other things increasing as needed. In other words, we could then more easily direct the allocation of resources between the consumption sector and the sector of defense and whatever else is absolutely necessary; we would have more leeway to get funds into those areas without hurting the consumer sector.

But once you have gotten that allocation question settled simply through Government budgeting for these purposes, I would certainly not like to direct which way consumers spend their money. I would like to have the consumers decide for themselves where the remainder of the national output goes.

The CHAIRMAN: Those are all the questions I have. Congressman Widnall?

Representative WIDNALL. I have no questions.

The CHAIRMAN. Any other questions?

Senator BUSH. I want to ask one more.

Going back to the question of incentive taxation which is basically in your paper, have you any comment to make about the capital gains tax at this point?

Mr. BAUMOL. In what respect?

Senator BUSH. It has been frequently suggested by proponents of reduction in the capital gains tax that it would stimulate speculative investment, increase corporate investment, and expand industrial activity and job opportunities. That is what some of its proponents say it will do.

Mr. BAUMOL. Certainly it is a distinct possibility but I would hate to see tax revision done piecemeal; that is, one little spot at a time, because it is very likely to be unfair and ineffective.

If one is serious about this problem, and I think one has to be serious about it, one should not look at one little piece here and another little piece there and take action on them one at a time. It is necessary to look over the whole tax structure and ask what effect does each tax have on growth incentives; one must seek an overall reorientation of the tax system which can maximize or increase growth incentives subject to whatever limitations we want to impose.

I just do not feel that we are going to get anywhere by taking care of little bits and pieces and then feeling that we can sit back and relax.

Senator BUSH. I guess that is a very good answer to it.

But as a counter to that, I ask this question: Congressman Curtis has mentioned discretionary depreciation allowance as being one incentive. You have just indicated that in a reduction of capital gains tax there might be another incentive.

In other words, if you take those two and possibly two or three more, you would have a package of incentive changes in the tax laws which might have the effect of stimulating investment, expansion, and so forth.

I agree with you about this selective tax reduction business, I think it is very dangerous and I am not in favor of it. I just wonder, due

to what I think are inherent difficulties in your suggestion, it is a very bold suggestion and a thoughtful one and I am very much interested in it, but I just do not believe it is practical and I wonder, as an alternative, whether you could think favorably of a package of selective tax reductions that would have the same invigorating effect on investment and expansion in industry and commerce.

Mr. BAUMOL. I have two reservations.

First of all, tax reductions by themselves, unless they happen at just the right time, are likely to result in inflation rather than increased economic growth. And inflation, despite what has been said about the need for a 2 percent rate of inflation, is, I think, likely to impede economic growth rather than stimulate it. In fact, what I believe inflation does is to give us Potempkin Villages. We are led to believe we are increasing output when we are not really doing so.

If I may, I will expand on that presently.

The second thing is, that this is one of these possibilities which would work in the right direction, but by itself is not likely to produce the sort of spectacular increase in growth that is really in question. I still offer this basic proposition, which is not intended as an argument for my proposal. We are not going to get sufficiently spectacular results out of anything that does not scare hell out of us because ours is a serious problem which calls for very serious measures, measures which are revolutionary, before we can really hope for real results.

I would just like to comment on this question of inflation and economic growth since I think it is quite relevant to all of the matters here at hand.

I would like to argue that people have tended to neglect the ways in which inflation can actually inhibit economic growth.

One gets increased output figures during the course of an inflation, but these output figures are themselves inflated. We all know we get decreased quality in production during inflation; this is one way of disguising price increases. Figures may indicate an increase in the number of houses built but the fact is that these houses will last perhaps 20 instead of 50 years, so that when you look at the total number of house-years that have been produced, you may actually get a smaller number when you are all the way through.

A chronic inflation also decreases the motivation for efficiency, the pressure on firms and labor to use more effective technology, more efficient means of production, because if you have always got a market for what you are doing there is no need to work very hard to keep ahead of the market.

What evidence we have indicates that it is right after a recession, when you have little inflationary pressure, that you have gotten the main increases in productivity. I am not arguing that we need more and better recessions. What I am arguing is that we certainly don't need more and longer inflation.

The CHAIRMAN. Are there any further questions?

Representative CURTIS. I would like to make a comment.

I appreciate your remarks on the effects of inflation on products. I could not help but be reminded of a friend of mine who had a business created because of that, making a little cardboard base for wrapping 5-cent candy bars because they could put the candy bar

on this hunk of cardboard and wrap it and make it look as big as it was before, but with a reduced amount of candy. I certainly had not thought of that before.

The question I had down here to ask you, you have partly answered.

When we have rapid economic growth, above 3 percent or whatever it might be, or whatever rate we have, do we not aggravate the problem of frictional unemployment and do we not aggravate the cost aspects, real cost, resulting from obsolescence, and from increased investments in research and development? These two assumptions are correct, we have the problem then of having to assume we pay these penalties in these other areas.

Would you say that is correct?

Mr. BAUMOL. I would certainly agree.

All of these things are not free. There is a price you have to pay for any objectives that you want to achieve. The real question one has to decide is, are we prepared to pay the price?

In normal circumstances I might even say that it is a very real question whether we should be prepared to pay the price. Just why is one so anxious to increase the Nation's rate of economic growth? There may be better things to do with our time. Representative Curtis, in this morning's panel I illustrated both of those with two different examples which I think are good examples.

One, on the question of frictional unemployment increase: I referred to agriculture where we have had tremendous technological advancement resulting from what some people regard as really a revolution and the result is that we have had considerable frictional unemployment there.

Now, there is one aspect of the penalties that we have paid for, knowing how to produce and actually being able to produce more agriculture per man-hour than we have before.

I suppose if we could have, through productivity, by marketing all this additional food and fiber we were growing, reduced the unit cost, we might have been able to have taken care of the thing, but here we not only created an unemployment situation, we also created a fiscal problem.

Representative CURTIS. The second area is related to cost.

Again, we have had tremendous technological advancement in the field of medicine where quality improved so much that people live 15 years longer and people who were not able to get around now can walk. Along with that, however, have been considerable cost increases, real cost. An analysis will show that there are real honest-to-God costs involved in it and the critics are the very ones who keep saying we need more growth in this area.

The reason I point it out is because of the problem we have to meet in the political arena. I felt this morning's paper was so good, and yours, too, in that they call attention to the fact that those who want this increased economic growth and I, myself, am one who thinks that we want it, must refrain from being negatively critical about the problems that it creates in the field of frictional unemployment and increased cost.

Mr. BAUMOL. I could not agree more with that.

The CHAIRMAN. Congressman Reuss.

Representative REUSS. On the question of a proper mix of fiscal and monetary policy, I would like to ask you one question.

Is it not a fact that the money managers, the Federal Reserve System, by their control over the money supply, by their ability to expand it, contract it, keep it constant, do have an indirect control over the interest structure of the economy?

Mr. BAUMOL. Very definitely.

I think there is no question that the Federal Reserve System could by its actions now increase to some extent or lower the rate of interest.

Representative REUSS. I am not asking you the question whether this would be desirable or not or whether, if accompanied by other measures in the fiscal field, that which might not otherwise be desirable would be desirable, but I just wanted to get clear in my own mind the fact that Federal Reserve action does very remarkably affect the interest rate.

Mr. BAUMOL. Sure. The real question again is not can they do it, but what does it cost to do it, and there is still the problem of balancing the cost against the benefits.

The CHAIRMAN. Congressman Widnall.

Representative CURTIS. Before he proceeds, may I respond?

I want to make clear that I was not at any time arguing that the Federal Reserve did not have the power to regulate. I was trying to point out that they were responding to an economic phenomena when they did; however, they fixed the interest rates, and it is now in proper context.

Representative REUSS. You do agree that they do fix interest rates?

Representative CURTIS. No; I do not.

I say they can influence interest rates. Essentially the interest rates, as I see it, are created by the marketplace, but certainly the Federal Reserve can influence them and can certainly do what they did do before 1951, set interest rates as far as Government bonds are concerned.

Representative REUSS. And also what is being done today by means of Federal Reserve policies, the interest rate is higher than it would be if the Federal Reserve pursued a different policy than it is now pursuing.

Representative CURTIS. Yes; they can do something in that area.

All I am trying to point out is that they are reacting to an economic phenomenon, economic pressure. As I think the witness has pointed out, you can have a lower interest rate but you pay for it in other areas if you do. So it is a question of where you strike your balance.

Representative REUSS. Of course they could go to the administration and say, "See here, we think our supertight money policy, super-high interest rate policy is not in the best interest of the economy and we therefore urge the President in his next economic report to set up a budget which provides for the national needs and still shows at this stage of the game a surplus which will enable the Federal Reserve to work toward lowering the interest rate."

They could do that, could they not?

Representative CURTIS. You are losing me again.

When you get into epithets—

Representative REUSS. What epithet did I use?

Representative CURTIS. That this is a high interest rate policy.

What I was trying to say is that the high interest rates come from the economic situation, not because they are set that way. It is how they react to the economic situation. We could have lower interest rates than we do have but the premise that you go on when you direct this question to me is that it is their policy to have it that way.

I am saying that the phenomena, the pressures, created this situation and they are reacting to what is in the marketplace, brought about largely by deficit financing over a period of years.

Representative REUSS. But they do not try to change the phenomenon by developing an across-the-board administrative monetary fiscal position which would make high interest rates unnecessary in order to have a stable economy.

Representative CURTIS. You are going to pay for it one way or another. They kept interest rates down to some degree, I would say, under the crisis that exists. They have a definite policy.

Representative REUSS. You say the Federal Reserve is keeping the interest rates down?

Representative CURTIS. We are talking relatively.

I said this: that if they had not pursued certain policies, the interest rates would be even higher than they are. So to that extent they have reacted to these pressures to get it down.

Certainly the crisis is so strong that we have what are properly described as high interest rates right now and tight money, but it is not their policy which created it.

The CHAIRMAN. Congressman Widnall.

Representative WIDNALL. First of all, recently the New York Times carried an editorial about an address of Director General David A. Morse. In that he showed a change of approach on the part of the ILO problems. I would like to get your comment on this. He said:

The overriding problem is the race between the galloping increase in the number of people in the world and jobs that are available to them. Employment as a central issue of social policy in the world today, especially the creation of new jobs, is lagging behind the population growth.

He went on to say that:

Long run improvement in employment depends mainly on increased production which calls for technological progress which in turn requires wise capital investment and manpower development. The ILO intended to deal more and more with concrete situations and to rely less on generalities.

Do you think that this is a wise approach?

Mr. BAUMOL. There is certainly a lot of agreeing with virtue in this statement. I have reservations about it in a number of respects.

First of all, I would say that at the moment the problem certainly is not uniformly one of employment, although this can be a serious difficulty in some areas at some times and in most areas also at some times, but I don't think that your only problem is that of providing employment for the increased population, and in fact, the very increase in population provides an increase in demand or can provide an increase in demand which in turn can increase the need for employment.

The difficulty will vary from country to country, from area to area. That is, in the United States when we have problems of employment and problems of living standards, these are likely to arise, or have in the past arisen, not so much from low productivity, from inferior technology, but they have arisen from shortages in demand.

In some other areas the problems are of an entirely different nature.

The fact is that there the state of technology, of productivity, of skills, of capital equipment, has been such that production has been unable to keep up just with the sheer increase in the population, the sheer mass of the births. Methods which are appropriate for dealing with one of these cases are totally inappropriate in dealing with the other. Where your low level of production, your low level of employment is a phenomenon of shortages of demand, you need approaches which would simply be inflationary in cases where it is technology that is preventing you from satisfying your demand.

Representative WIDNALL. I was interested in what seemed to be a change in focus on the part of the ILO. I had brought into the testimony this morning my own remarks about what I felt was a change of position of the AFL-CIO with respect to the foreign trade policy.

Mr. Chairman, I would like to ask you at this point, if in inserting into the record the resolution which was passed this year by the AFL-CIO in September 1959, I believe at their San Francisco convention, do you intend to also in the record place evidence or previous resolutions in other years to show that this merely affirms the previous position and does not change it materially?

The CHAIRMAN. If the gentleman from New Jersey wishes to have those other resolutions introduced, that will be quite agreeable with me.

Representative WIDNALL. I would like to have those introduced.

The CHAIRMAN. We will do that.

I would like, since the gentleman raises the question and since for the second time he has insisted that the AFL-CIO has changed its position, I again wish to call attention to the first paragraph under Resolution 111:

AFL-CIO will continue to support the reciprocal trade agreement program with whatever modifications may be necessary in the basic legislation or in its administration to insure maximum benefits and minimum injury to workers in the United States as well as other nations of the free world.

I think this cannot be represented, as it has been, as a reversal of policy. I think it is a substantial continuation of the same policy of broad international trade.

I do not like to have the record unintentionally muddied up in this fashion.

Representative WIDNALL. I did not introduce this in the record with any desire at all to muddy up the record, but I did want to call attention of the American people to what I thought was the beginning of a material change on the part of the AFL-CIO labor organization.

Now, within the section of the resolution which you just read, you said:

With whatever modifications may be necessary in the basic legislation or in its administration to assure maximum benefits and minimum injury to workers in the United States as well as other nations of the free world.

Then you read further in the resolution:

In view of this objective of the Trade Agreements Act, we urge the administration to propose a procedure whereby maximum effort be placed on safeguarding absolute historical levels of production so as to prevent production cutbacks, displacement in domestic industries as a result of sudden large influxes of competing imports.

I think these are material changes from previous positions. Maybe I am wrong. I would certainly be willing to be shown that.

Representative CURTIS. I believe, and this will stand correction if I am wrong, I believe the CIO fought the escape clause and peril point provision. That was the issue over the extension of the reciprocal trade in the Pacific.

The CHAIRMAN. In 1946?

Representative CURTIS. No, not 1946. I think it was 1951 and 1953.

The CHAIRMAN. I want to point out primarily that the measure to which the AFL-CIO resolution refers deals with aid to industries which are injured by the reciprocal trade program. It is illustrated in subparagraph 4 on page 2.

In these instances where, despite the above measures, increased imports have adversely affected American industry, the President should be authorized to provide various types of assistance to workers and communities involved. In addition, where necessary, consideration should be given to develop specific programs tailored to the specific industries for aid to affected industries.

This is precisely what many of us have been contending for a long time, both in the form of aid to distressed areas, also in the form of specific compensation for workers in industries adversely affected by imports.

Representative CURTIS. Will the gentleman yield?

The CHAIRMAN. Certainly.

Representative CURTIS. I think the gentleman is correct.

Mr. MacDonald, when he was a member of the Randall Commission, made recommendations along those lines, but as I recall it, his position was not accepted and adopted by the AFL-CIO.

As I recall the testimony before the Ways and Means Committee, I believe they did not support that position.

The CHAIRMAN. I have not been a member of the Senate Finance Committee for as long as the gentleman from Missouri has been a member of the House Ways and Means Committee, but I know in testimony before the Senate Finance Committee this last time when reciprocal trade was up, the AFL-CIO testified in favor of the Kennedy bill for aid to industries which were injured by extension of reciprocal trade.

My memory goes back to the previous renewal of reciprocal trade when we had a floor fight on this very point and Senators Humphrey and Kennedy led the fight for compensation and aid to industries thus affected.

I know the AFL-CIO was active in its support and it received the support of what is loosely known as the northern liberal Democrat bloc with very little support from my friends on the opposite side of the aisle.

Representative CURTIS. I would say on the point of issue, I would not rely on my memory on it other than to tell you what I think; I would like the record to correct whatever is the correct situation. I shall be glad to put it in there.

Representative WIDNALL. I just wanted to get in the record what is the historic position.

The CHAIRMAN. I will be very glad to have you do that.

Representative WIDNALL. I will be the first one to admit I am wrong.

The CHAIRMAN. I did not raise this point contentiously, but since you made the statement as an accepted fact this morning that there has been a reversal of policy in the AFL-CIO, I felt that the actual resolution should be introduced. That was not done for the purpose of putting you on the spot proving you were wrong or anything of the kind, but in the interest of accuracy.

(The resolutions of the AFL-CIO previously referred to follow:)

#### RESOLUTION 111—INTERNATIONAL TRADE<sup>1</sup>

Organized labor has traditionally supported sound expansion of international trade among democratic nations. Widened opportunity for exchange of goods and services can help to assure prosperous economic conditions and higher living standards in the nations of the free world and thus enhance the economic and political strength of the forces of freedom and democracy in the worldwide struggle against Soviet totalitarianism. Recognizing the benefits which can be achieved through gradual reduction of barriers to international trade, the trade union movement has supported the reciprocal trade agreements program since its very inception 25 years ago.

We now reaffirm our support of the reciprocal trade agreements program and of continued gradual reduction of barriers to trade among the free nations of the world.

In reiterating our support for gradual reduction of trade barriers, we insist, as we have in the past, that measures to accomplish liberalization of trade be developed in such a way as to assure maximum benefit and minimum injury to workers both in the United States and in the countries of our trading partners. We insist that the tariff and trade policies of the United States should be a positive instrument in helping to raise living standards of workers throughout the world. We also call attention to the fact that the reciprocal trade program was conceived as a middle-of-the-road approach to liberalizing international trade without seriously injuring American industries or American workers. To meet these objectives requires incorporation of these fundamental principles in tariff and trade policy.

(1) Every possible effort must be made within the framework of trade policies and procedures to promote fair labor standards in international trade. Mushroom growth of sweatshop industries in exporting countries employing workers at unconscionably low wages under sweatshop conditions must be discouraged by foreign governments as well as through the tariff and trade policies of the United States. The creation of such industries is not only contrary to the best interests of the workers in the exporting countries, but it is detrimental to the living standards of workers in the United States as well as the other free nations of the world.

(2) Trade liberalization should be achieved as rapidly as feasible but not at a pace which would result in serious injury or the threat of serious injury to American industries with consequent large-scale displacement of American workers.

(3) Should a reduction of output and employment in certain industries result from the impact of competing imports, and effective trade adjustment program should be designed to provide appropriate measures of assistance to the affected workers, industrial enterprises and communities: Now, therefore, be it

*Resolved*, (1) The AFL-CIO will continue to support the reciprocal trade agreements program with whatever modifications may be necessary in the basic legislation or in its administration to assure maximum benefits and minimum injury to workers in the United States as well as in other nations of the free world.

(2) We urge incorporation of the principle of fair labor standards in international trade as an essential feature of U.S. trade policy in both its legislative and administrative aspects. Our Government should seek to encourage acceptance of the principle and practice of fair labor standards by exporting countries in the forthcoming multilateral tariff negotiations beginning in 1960. We should also urge that U.S. representatives to the International Labor Organization and the General Agreement on Tariffs and Trade make every effort to assure that these organizations, as a matter of top priority, undertake cooperative efforts to pro-

<sup>1</sup> This resolution was adopted at the third convention of the AFL-CIO.

mote fair labor standards in international trade. In making these recommendations, we recognize that the level of wages that can be paid in exporting countries will necessarily be limited by the degree of their economic development and the productivity of their industries. But we insist on adherence to the principle that the wages and working conditions in the exporting countries increasingly reflect the productivity and technological advances of the industry and the national economy.

(3) The Trade Agreements Act (as amended) states that "upon application of any interested party, the U.S. Tariff Commission shall promptly make an investigation \* \* \* to determine whether any product \* \* \* is \* \* \* being imported into the United States in such increased quantities \* \* \* as to cause or threaten serious injury to the domestic industry producing like or directly competitive products. Should the Tariff Commission find \* \* \* that a product \* \* \* is \* \* \* being imported in such quantities \* \* \* as to cause or threaten [such] serious injury to the domestic industry \* \* \* it shall recommend to the President the withdrawal or modification of [tariff] concession(s) \* \* \* or the establishment of import quotas, to the extent and for the time necessary to prevent or remedy such injury."

In view of this objective of the Trade Agreements Act, we urge in the administration of the escape clause procedure that maximum emphasis be placed on safeguarding absolute historic levels of domestic production so as to prevent drastic production cutbacks or employment displacement in domestic industries as a result of sudden large influxes of competing imports. In such cases, the domestic industry should be required to make a positive showing of serious injury or threat of serious injury.

(4) In these instances where, despite the above measures, increased imports adversely affect American industries, the President should be authorized to provide various types of assistance to the workers, firms, and communities involved. In addition, where necessary, consideration should be given to development of specific programs, tailored to the requirements of specific industries, to aid adjustment of affected industries.

(5) We urge adoption of Government policies to assure that no American industry shall be subject to the unfair competition resulting from the American Government's selling raw materials, such as cotton, to foreign users, at a price below what the U.S. domestic user must pay.

(6) We call upon the executive council to give continuing study to the development of recommendations for measures designed to promote the expansion of international trade on a sound basis with adequate safeguards for American industries and American workers.

(7) We reiterate our support for the establishment as soon as possible of appropriate machinery to administer the General Agreement on Tariffs and Trade, such as that proposed in the Organization for Trade Cooperation (OTC). Such an organization would not affect trade policies or tariff levels, but it could provide effective administrative machinery for multilateral trade negotiations as well as a forum for discussion of important international trade issues.

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AFL-CIO RESOLUTION ON INTERNATIONAL TRADE ADOPTED AT SECOND  
CONSTITUTIONAL CONVENTION, DECEMBER 1957

RESOLUTION 129—INTERNATIONAL TRADE

Organized labor has been among the staunchest supporters of the reciprocal trade program from its very inception nearly 25 years ago. The trade union movement has recognized that the fundamental principles of this program—expansion of international trade and gradual removal of restrictions upon the exchange of goods among nations—are fully consistent with and promote the national interest of the United States and the economic and political strength of the entire free world.

Our international trade policy must be considered as an integral part of our overall foreign policy. Our economy, as well as our national defense, depends in part on a considerable number of materials and products which we must import from abroad. Likewise many of our industries export a sizable proportion of their output to other countries. Therefore, expansion of foreign trade is essential for our national welfare.

Even more important, we must recognize that many nations of the free world depend for their very existence upon foreign trade. Our markets must remain open to them if they are not to turn in desperation to trade with the Soviet bloc. Thus continuance of the reciprocal trade program and gradual reduction of tariff barriers are essential to the economic strength and welfare of the entire free world.

International trade is, to a considerable extent, dependent upon the level of economic activity in the various countries. A decline in full employment and general business activity in the United States certainly will affect the overall level of international trade. Conversely, prosperity in America will increase trade opportunities.

The reciprocal trade program, now scheduled to expire in mid-1958, should be extended for a period long enough to assure a reasonable measure of stability in international trade. In extending the program, moreover, Congress should reinforce the basic goal of the reciprocal trade program, the gradual reduction of barriers to trade without undue hardship to American industries or American workers. The achievement of this goal must be sought, however, in the light of present day conditions in our own Nation and in the nations allied with us in the common struggle for the preservation of freedom and democracy.

In order to facilitate this objective the President of the United States must be granted additional negotiating authority. However, such liberalizing steps must be accompanied by adequate protection of the interests of U.S. workers and firms that may be adversely affected by import competition. We, therefore, favor continuance of the basic principles of the peril point and escape clause procedures. The present authority of the President to pass on the Tariff Commission's recommendations in escape clause proceedings should not be altered.

We urge that positive programs be adopted directed toward the dual objective of expanding trade and safeguarding the welfare of American labor and industry.

Establishment of the principle of fair labor standards in international trade would afford one significant way of accomplishing this objective. In multilateral tariff negotiations, the United States should make every effort to seek effective action by exporting countries to establish and maintain fair labor standards in their exporting industries consistent with productivity levels in exporting industries and the economy at large of the exporting country. We should also seek to obtain acceptance of this principle in the ILO and among the contracting parties to the General Agreement on Tariffs and Trade. Our aim in these efforts should be not to provide an excuse for restricting trade, but to secure improvement of labor standards in exporting countries as a means of equalizing competition in international trade.

In addition, it is essential that an effective adjustment program be established to meet the problems resulting from import competition. The President should therefore be authorized to provide various measures of assistance to workers, industrial enterprises, and communities to adjust to the problems created by increased imports. In certain instances, it may also be desirable to develop specific programs aimed at alleviating deteriorating conditions in specific industries.

The whole program of multilateral trade negotiations will be made more effective by establishment of the Organization for Trade Cooperation. This would provide a much needed permanent international organization for the administration of the General Agreement on Tariffs and Trade. While it would not affect trade policies or tariff levels, it would provide necessary administrative machinery for multilateral trade negotiations as well as a forum for discussion of important international trade issues: Therefore be it

*Resolved*, That the AFL-CIO reiterates the traditional support of the labor movement of the reciprocal trade program and urge the Congress to extend the Reciprocal Trade Act for a period of at least 5 years.

Consistent with both domestic and international economic requirements and within the framework of continued application of the peril-point concept, the President should be given additional authority to negotiate changes in existing staffs.

The escape clause procedures should also be retained and the President should be authorized to provide various types of assistance to workers, firms, and communities adversely affected by increased imports. In addition, where necessary, consideration should be given to development of specific programs, tailored to the requirements of specific industries, to aid adjustment of affected industries.

It should be a fundamental part of our national trade policy to foster the principle of fair labor standards in international trade through multilateral trade negotiations and commercial agreements and in the ILO. In particular, the United States should seek to obtain efforts by exporting countries to establish and maintain fair labor standards in exporting industries consistent with productivity levels in such industries and the economy at large of the exporting country.

Congress should, at the earliest possible date, authorize U.S. membership in the Organization for Trade Cooperation.

The CHAIRMAN. Are there any other questions? Any other passage of arms between members of the committee?

If not, thank you very much and we will recess until 10 o'clock tomorrow morning.

(Thereupon, at 4:05 p.m., the committee recessed, to reconvene at 10 a.m., Tuesday, October 27, 1959.)

## EMPLOYMENT, GROWTH, AND PRICE LEVELS

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TUESDAY, OCTOBER 27, 1959

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, at 10 a.m., pursuant to recess, in the old Supreme Court chamber, the Capitol, Hon. Paul H. Douglas (chairman of the committee) presiding.

Present: Senators Douglas and Bush; Representatives Reuss, Curtis, and Widnall.

The CHAIRMAN. Dr. Machlup, we are glad to have you this morning. You may proceed in your own way.

### STATEMENT OF FRITZ MACHLUP, THE JOHNS HOPKINS UNIVERSITY

Mr. MACHLUP. Thank you, Senator.

Let me first say I am greatly honored by the invitation to come here and give my views to the committee.

Perhaps I should offer my prepared statement for the transcript because I prefer not to read it, at least not in its entirety, and instead I shall paraphrase some of the things I have written down and perhaps even make some changes and additions.

The CHAIRMAN. Now we will print the statement as it is submitted and then if you would like, we can also print your informal remarks.

Mr. MACHLUP. That is very kind of you, Senator.

(The statement referred to follows:)

#### STATEMENT BY PROF. FRITZ MACHLUP, THE JOHNS HOPKINS UNIVERSITY

Maximum employment, a recordbreaking growth rate, and a stable price level are generally regarded as three important goals of economic policy—though by no means the only goals. Our question is whether they conflict with one another and, if so, whether we can establish priorities or preferences in the sense that we should be unwilling to strive as hard as possible for one of them if this were to impede us much in our attempts to attain the others. The answer is not just a matter of personal tastes, about which one could not fruitfully argue. For none of the three goals is ultimate; they all are instrumental to higher values on which there might be agreement. In order to make good sense, a discussion of the comparative importance of the three goals must first establish which higher values they are supposed to serve.

#### FAST GROWTH

Many of us say modestly that we want an "adequate" rate of growth. But this does not commit us to anything. What most people mean is a dazzling growth rate, a recordbreaking growth, or at least a growth faster than the growth of most other economies. Some want the fastest possible growth.

Why does anybody want fastest possible growth? Why is it that so many of us get excited about whether the annual rate of growth is 3.5 or 4.1 or only 2.9 percent, when most of the growth-rate fans are not even clear just what it is that is growing at these rates? Assuming, provisionally, that they mean the annual rate of increase of total national product, measured at constant prices, I can see several very different reasons for which people may want that rate to be as high as possible:

- (1) To make sure that our children will be better off than we are.
- (2) To do for the next generation as much as, or more than, the previous generation has done for us.
- (3) To make it possible that what we now regard as poverty will eventually be eliminated in our society.
- (4) To make it possible for us to help other nations more generously in future years.
- (5) To help other nations, not through direct aid, but through the normal emanations of growth, which benefit the less advanced by way of trade, investment, and the flow of information.
- (6) To be stronger in a possible military contest with an enemy of our Nation.
- (7) To impress other nations with the fine performance of our economic system.
- (8) To win an economic race as if it were a sports contest, and to be able to smile condescendingly at the outdistanced rival.
- (9) To please our ego and become increasingly self-satisfied.

Of these reasons those that seem to motivate most growth-rate fans most strongly happen to be least valid from an economic or from an ethical point of view. I find it hard to approve of the last two reasons, satisfying the propensity to boast. Regarding point 6, military preparedness is not a function of an increase in total income, since more TV sets, better houses, more and better washing machines, etc., do little or nothing to strengthen our capacity to win a war or to avoid destruction in a war. If the growth rate refers to total income rather than per capita income or per capita consumption, that is, if it disregards the increase in the number of people who have to share in the income increase, it is not directly relevant to points 1 and 3, the improvement of the living standard of the next generation and, still less, the elimination of poverty. On point 7, I am afraid, we shall not be doing so well, compared with some Communist countries which have only recently started to develop their industry. The strongest reasons are probably in point 4 and in point 5, but those have the smallest support from the people.

Perhaps it will not be considered academic pedantry if I draw more attention to the multiplicity of meanings of economic growth. One may mean, to mention only a few such meanings, the continuing increase in—

- (a) Total net national product;
- (b) Net national product per head;
- (c) Net national product per worker;
- (d) Net national product per labor-hour;
- (e) Net national product per unit of factor, labor and capital;
- (f) Total consumption;
- (g) Consumption per head;
- (h) Consumption per head of the poorest third (or quarter, half, etc.) of the population.

The annual rate of growth of each of these magnitudes is interesting, and the various rates may differ substantially from one another. Apart from these distinctions the different causes of growth are also worth distinguishing. Total net national product may increase as a result of:

1. An increase in labor input—

- (a) Because the population (of working age) has increased, that is, there are more people who need jobs;
- (b) Because the labor force has increased relative to the working-age population, that is, a larger percentage of the people want jobs;
- (c) Because employment has increased relative to the labor force, that is, a larger percentage of those who want to work have found jobs, unemployment being reduced; or
- (d) Because average weekly hours have increased, that is, people work more hours.

## 2. An increase in capital input—

(a) Because thrifty people have saved some of their income and financed new investment—without being forced to do so and without any Government measures restricting consumption;

(b) Because income was redistributed from people who would have liked to consume it to others who saved some of it, for example, when real income is switched from the poor to the rich, by means of certain kinds of credit inflation;

(c) Because income that would have been consumed has been taken away by taxation and used for constructing productive facilities;

(d) Because, in a centrally planned economy, the authorities have reduced the part of total product made available for consumption and have increased plant and equipment.

## 3. An improvement in the use of productive resources—

(a) Because better production methods previously known but not yet utilized have now been introduced;

(b) Because better production methods have been discovered without cost and have been introduced;

(c) Because better production methods have been derived from costly research and development work and have been introduced;

(d) Because inefficient ways of allocating productive resources to different uses have been eliminated, e.g., certain monopolistic distortions of the cost structure have been removed or reduced, which has permitted the shift of labor and capital from less valuable to more valuable lines of production.

Some of these "growth factors" work only for relatively brief periods, others work steadily; some yield an income increase without cost, others presuppose a sacrifice. It would, therefore, be rather naive to wish for the "maximum rate of growth" that might be achieved now no matter what it costs and regardless of whether it is a steady growth or only one for a few years followed by a necessary retardation that would make the long-run rate of growth less than it would be without the "fillip." Especially distasteful to many of us is a demand for faster growth even if it could be had only by means of authoritarian dictation.

The greatest "advantage" which a communistic economy has over a free society—if it is regarded as an advantage—is the ease with which, under the plan, consumption can be held down for the sake of capital accumulation. A large part of the potential savings of a free economy cannot go into capital formation because the investible funds have to be used for higher wages and thus go into increased consumption. (This is the so-called Wicksell effect: an increased supply of capital funds raises the marginal productivity of labor and thus bids up wages with the result that a large part of the funds is diverted into consumption, leaving less for the formation of real capital.) In an authoritarian economy the increase in wages and in consumption per worker can be prevented and accumulation can therefore proceed at a faster pace. I for one prefer the slower accumulation of a free society to the faster accumulation of a Communist society.

I reject the "maximum rate of growth" as a goal of economic policy unless it means something other than the fastest possible growth regardless of cost. I can accept it if it means fastest possible long-term growth compatible with the institutions of a free society and consistent with the free choices of income recipients concerning their consumption and their saving, and without confiscatory taxation. By confining my acceptance to long-term growth I have also rejected the forcing up of investment and employment by means of monetary inflation—because such forcing up is apt to be of relatively short duration and not conducive to a high rate of continuing growth.

## MAXIMUM EMPLOYMENT

Similar difficulties exist with regard to the employment goal of economic policy. If maximum employment is to mean the highest possible number of jobs no matter for how long and regardless of social cost, then I doubt that many of us would want it.

Few advocates of the maximum-employment goal want it as an end in itself. Most of them take it for granted that the national product will be the higher the larger the number of employed; and perhaps also that the rate of growth will be the greater. This assumption is often not justified, for there

may be a range within which employment and output vary inversely. This range may be rather wide in economies that are poorly endowed with natural resources and capital. In such economies maximum output may be obtained with a labor input far below the actual labor supply. (In cases of this sort, disguised unemployment usually is preferred to the lower output that would go with larger employment.) In economies richly endowed with resources, natural and manmade, the critical range may be quite narrow, extending perhaps only over the last 1 or 2 percent of the labor force. (This "perverse" range may be due partly to the limit set by plant capacities under the law of factor proportions, partly to such things as reduced labor mobility and the "hoarding" of labor, and possibly also to reduced effort, in times of labor scarcity.) Thus, it is possible that with the employment of, say, 98 percent of the labor force total national product in real terms may be greater than with 99-percent employment.

To produce the highest possible output that can be produced in a single year may not guarantee the fastest growth of output (given the stock of capital and its accumulation); indeed, growth may be faster with even more unemployment than is consistent with maximum output. Growth usually implies change in the composition of output, the "structure" of industry. Such change requires transfers of labor between industries, regions, and occupations; the existence of some pools of unemployed may facilitate the movements of labor. (One may also express this by saying that frictional unemployment will be greater in a progressing than in a stationary economy.) Thus, while 98 percent employment may yield maximum output in a given year, 95 percent employment may yield a faster growth of output and, hence, maximum output over a period of several years. These figures are, of course, merely illustrative, to help explain possible relationships between employment, annual output, and growth, and to show that in the range of the highest percentage figures of employment, the relations may well vary inversely.

Of course, one may prefer higher employment for other reasons, for example, in order to avoid the hardship and suffering of the unemployed and their families. This is a very important reason. Much depends, however, on the rate of turnover in the pools of unemployed. Three million unemployed most of whom are jobless for only a few weeks is, in my opinion, less disconcerting than chronic unemployment of only 2 million.

Some measures widely prescribed for achieving "full employment" may secure higher employment for a time, but not in the long run. Indeed, average employment over several years may be lower when employment is forced up by inflationary policies than if such policies are eschewed. I submit that the label "full employment policy" for expansions of effective money demand by means of monetary and fiscal methods is deceptive. I believe that better results in terms of longrun growth of employment have been achieved by countries that have rejected the so-called full-employment policies and have allowed higher levels of employment to be achieved in the more orthodox way through capital formation based on thrift and through the establishment of cost-price relations based on competitive supply and demand.

Full-employment prescriptions of money injections are especially ineffective, or even harmful, when unemployment is not general but is concentrated in declining industries and "distressed areas." If in such circumstances the demand for goods and services in general is increased through the finance of additional spending by Government, industry, and consumers, prices will be pulled up and wage rates will be both pulled up and pushed up, while the pockets of unemployment will not be removed. To prescribe increased doses of effective demand to cure all sorts of unemployment is like prescribing the same strong medicine for all sorts of illness; in some instances this can be very dangerous.

Monetary and fiscal policies to bolster effective demand may be perfectly sound if they are designed to offset genuine deflation, that is, to avoid a decrease in aggregate demand. They may also be justified as means of providing the additional money supply needed to avoid reductions in the price level when productive resources and total real output increase. But, while it is true that deflation may cause unemployment, it is surely not true that all unemployment is due to deflation. There is, especially, one kind of unemployment that raises one of the most serious problems of our time: The unemployment that would arise if wage rates were pushed up too fast without a simultaneous demand inflation supporting an increase in the general price level. Thus we come to the third of the three policy objectives; a stable price level.

## STABLE PRICE LEVEL

To consider stability of the price level as an end in itself is no more justifiable than to take full employment and fast growth as ultimate ends—or even less so. Some economic puritans treasure a stable price index “as a matter of principle” just as they treasure an A for good behavior or deportment in the report cards of their offspring. But this is not a reasonable position. To be worth striving for, price level stability must be a means toward some important social objectives. And this it can be shown to be, at least in my judgment.

One of these objectives is justice or fairness to large groups of people, especially pensioners, holders of savings accounts and Government bonds, and all other recipients of money incomes in fixed amounts, who are being deprived of some of their real incomes when the price level rises; but also recipients of incomes that are not easily adjusted to inflated price levels, such as the salaries of teachers and civil servants. But justice in economic life is often rated below prosperity and I doubt that one could successfully defend price level stability on the ground of justice alone if such stability interfered with greater prosperity.

The main issue is how price level stability is related to the size and growth of national product. One contention is—and I support it—that a stable price level will secure a better performance of the economic system and thus promote the attainment of a larger product in the long run; and consequently that we must maintain a stable price level in order to obtain and sustain as large a product and as fast a growth as is compatible with the institutions of a free society and the sovereignty of the consumer. But this contention is denied by others, who hold that stability of the price level will depress productive activity and retard economic growth; that only a policy of demand expansion will secure high employment and fast growth; and that we should accept creeping inflation of prices as a small price to pay for greater prosperity.

Can historical evidence decide the argument? Historical evidence is rarely convincing, because one can always hold that circumstances have changed so much that the experience in one country or at one time would not apply to another country or another time. Otherwise one could quickly and decisively dispose of the assertion that growth involves, requires or engenders a rising price level. Measured by the index of wholesale prices, the United States between 1800 to 1940 had more years of falling prices than years of rising prices, and the price index was about the same in 1940 as in 1840, and lower than in any year between 1800 and 1819. Yet the growth rate during the 140 years was remarkable. The national product of the United States has never again grown as fast as it did between 1875 and 1890, when the price level not only failed to rise but actually declined by almost 30 percent. In other words, a “price deflation” accompanied the fastest long-period growth this country has had in the last hundred years. In recent times, Western Germany is the country in which employment and production has had the highest growth rate of all industrial nations in the free world, while at the same time its record regarding price level stability was one of the best in the world. But if my colleagues tell me that the United States today is not like it used to be 75 years ago, and not like present-day Germany either, I cannot contradict them.

If crucial differences exist between these economies, they lie probably in the size and strength of trade unions, in the size of corporations that bargain with them, and in the acceptance of monetary and fiscal policies to force up employment when it flags. A constant wage push, boosting money wage rates by more than 2 or 3 percent a year, is in fact not compatible with high employment at a stable price level. If the wage push persists, you can either have price level stability with more unemployment than you like, or high-level employment with more price inflation than you like. If both high-level employment and price level stability are wanted, then the constant upward pressure of money wage rates has got to be stopped.

There is a question whether the wage push would persist if society resolved to avoid inflation at all cost, that is, face the unemployment that would follow the overdose of wage increases. But to try this might be an expensive experiment, and not many would be prepared to propose it. Is there any other way to alleviate inflationary wage pressures? If we could find a way and thus maintain stability of the price level, the benefits for the economy would be great. Much waste and inefficiency would be avoided and also a higher rate of voluntary saving and productive investment would be attained by a people able to count on a stable dollar. One of the greatest economies of price

level stability would consist in the redirection of effort from purely speculative activities and risk-reducing hedging policies to actions designed to increase the productivity of resources.

#### THE CAUSE OF INFLATION

What I have said or implied concerning our recent failure to maintain a stable price level seems to contradict the opinions of many who have testified here about the causes of our inflation. I believe, however, that some of the differences of opinion are more apparent than real.

There are probably two dozen different meanings of the word "inflation." Let us agree that this morning "inflation" shall mean "continuing increase in the general price level," especially the level of consumer prices. Then let us understand what may be meant when some economists distinguish cost-push inflation from demand-pull inflation, and other economists deny that such a distinction is workable or meaningful.

In our economy many wage rates and many prices are "administered" in the sense that an increase or decrease presupposes some administrative actions—decisions, agreements, announcements. All of these wage rates and many of these prices are cost elements. One may conclude that there can hardly be a price inflation without administered wage and price push.

In our economy most prices and wages involve payments to be made by somebody who has the money or can get the money and is prepared to spend it. One may conclude that there can never be a price inflation without expansion of demand and rarely one without expansion of the money supply.

Thus both cost boosts and demand expansions must be present. But it is possible for one of these to start the procession and the other to follow and catch up. For purposes of analysis it is necessary to distinguish between stimuli and responses, causes and effects, disequilibrating and equilibrating changes. Let us thus speak of an "autonomous" wage or price increase when the increase is independent of demand, that is, when it would also be made in the absence of an increase in demand. Likewise, let us call autonomous a demand expansion that is independent of costs, that is, one that would occur also if costs were not raised.

By sheer coincidence it could happen that autonomous cost boosts and autonomous demand expansions occur at the same time. Then both could be regarded as prime causes of the price inflation. More likely, however, one or the other would initiate the process.

An autonomous demand expansion may take the form of increased Government spending, increased business spending, or increased consumer spending. At given wage rates and prices, an excess demand for goods and services would arise and prices and wages would rise in response to it. In some markets the "responsive" wage or price increases will be attributable only to anonymous market forces, in others they will be "administered." Thus, even an "administered" increase can be regarded as "responsive" or "competitive" if it would also have occurred in the absence of any price-making powers of the sellers or wage-setting powers of labor unions. A test for the responsive or competitive nature of an increase might be seen in the existence of an excess demand, i.e., a shortage of the goods or services in question. As long as there is idle excess capacity or unemployment, increases of prices or wage rates cannot well be regarded as responsive, i.e., as the result of a competitive bidding-up on the part of buyers and employers. (But one may reject this test because there can be "induced administered" increases even in the face of excess capacity and unemployment, increases which might not have been made if demand had not expanded.)

Autonomous wage or price increases may have three possible effects: (a) Reductions in production and employment, (b) "induced" expansions of private demands, (c) "supportive" expansions of demand by means of fiscal and monetary measures. Any one or two of these effects, or all three, may eventuate. Supportive demand expansions are designed to prevent the reduction in employment that would tend to result from the wage and price increases: Under some sort of full-employment commitment, the fiscal and monetary authorities take measures to compensate for the employment-reducing effects of increased costs and to support a higher level of product prices that permits industries to maintain or restore employment despite the higher costs. If the authorities play their instruments well, they will resort to this compensatory or supportive expansion of effective demand only to the extent that the induced expansion of demand is insufficient to absorb the excess supply of labor

created by the wage and price increases. I call induced the demand expansions that are direct consequences of a cost increase, as either those who receive the increased cost-prices or those who pay them make larger disbursements than they would have made otherwise. For example, industrial firms yielding to union pressure for a wage increase may borrow from banks (or dig into cash reserves) in order to pay the higher wage bill; or individuals receiving bigger paychecks go into more ambitious installment purchases of durable consumer goods.

The proposed concepts help in a simple description of the two basic "model sequences" of inflation.

*Demand-pull inflation.*—An autonomous demand increase is followed by responsive (competitive) wage and price increases.

*Cost-push inflation.*—Autonomous wage or price increases are followed by induced and/or supportive (compensatory) demand increases.

Perhaps I should mention that these two are not the only models of price inflation; there can be price inflation which is neither of the demand-pull type nor of the cost-push type. I had much fun constructing a model to demonstrate that in an economy where wage rates are never reduced and where prices can only go up but never go down, and where technological unemployment is treated with remedial demand expansion, every cost reducing technological innovation will lead to price inflation, even in the absence of wage rate increases. And another model has recently been presented to demonstrate that, in an economy as just described, a shift in consumer demand from some products to other products will lead to price inflation, likewise in the absence of wage rate increases. Both these models are quite ingenuous and they may even become applicable, but I doubt that they do explain our experience of past years. While it is surely interesting to know that there can be price inflations without autonomous expansions of demand and without autonomous increases in wages or prices, and even without any increases in wages, we know that the picture presented by the real world has contained a great deal of demand expansion and a great deal of wage increase.

The trouble with the real world is that things do not happen in the neat order in which we describe them in our theoretical models. For example, an autonomous demand expansion may in actual fact be followed by administered wage and price increases more drastic than merely competitive increases would be; thus, the increases would be partly responsive, but partly autonomous, requiring further demand expansions, induced or supportive, if unemployment is to be avoided. Or, autonomous wage and price increases may be followed by excessive demand expansions, perhaps because an excessively nervous government rushes in with overdoses of supportive injections of buying power; some of the effective demand thus created would then be in the nature of an autonomous expansion, resulting in further (responsive) upward adjustments of costs. Complications of this sort make it difficult to arrive at interpretations of an observed course of events that are acceptable to all observers, even impartial ones. That the real world is too messy to fit our neat theories more closely does not vitiate the theories. They must bring some imaginary order into the real mess if they are to do their job of explaining a perplexing jumble of events.

#### THE POSTWAR INFLATION

Another source of difference of opinion among your past witnesses lies in the failure to identify precisely the phenomena to be interpreted. A reference to postwar inflation as the subject of inquiry is much too vague. Some may have been thinking of the period 1946-52, others of 1955-59. If some tried to give one explanation for the entire period, 1946-59, they could only deal in the most general of generalities.

It is my impression that the price increases from 1946 to 1952 should be interpreted chiefly as a demand-pull inflation. The increases in wage rates and material prices during that period can be explained as the effect of the derived demand for labor and materials. These increases were of the responsive type; they would have come about also if there had been no trade unions and no big corporations in the country.

On the other hand, I believe one should interpret the price increases from 1955 to 1959 largely as a cost-push inflation, especially a wage-push inflation. The expansions of demand that occurred in these years were partly induced (borrowing by business and consumers in consequence of wage increases) and partly supportive, though the expansions were not sufficient to absorb all the unemployment created by increasing wage rates. A more generous creation of

supportive demand would probably have produced more employment, but would surely have produced more price inflation.

Let me propose another distinction which may be helpful in interpreting the inflationary process, a distinction regarding the magnitude of autonomous (disequilibrating) wage or price increases. If such an increase is designed merely to restore real earnings which the group in question had long been enjoying, I call it "defensive"; if it is designed to raise real earnings above that level, I call it "aggressive." The specification of a "long time" is necessary in the distinction, so that one avoids calling "defensive" what really is a battle to defend the ground just gained in an aggressive action. For example, aggressive wage rate increases by 10 percent are likely to be partially eroded within less than a year through the resulting cost-push inflation (financed by induced and supportive expansions of demand). If the same trade unions then demand "cost-of-living raises" to restore their real wages, it would be somewhat ironic to call these new wage adjustments "defensive."

A defensive wage rate increase is different from a responsive one in that the exercise of bargaining power is needed to bring it about; that is, it is not just a response to an excess demand for the type of labor that obtains the raise. Thus, it is an autonomous increase; but the increase is just enough to compensate for a rise in the cost of living which has reduced the wage rates these workers had been enjoying for years. Defensive increases play a role in the inflationary process—in the notorious "wage-price spiral"—in controlling its speed. But the initiating causes of the cost-push inflation must be found in the aggressive increases.

Much discussion has been devoted to the role of administered prices in the cost-push inflation. Prices of materials and other intermediate products are cost items in the production of other goods, and autonomous increases in these prices may be either of an aggressive or of a merely defensive nature. Partisans of organized labor have argued that the price policies of business have been responsible for most or all of the inflation, a view which in a sense was forced upon them by the positions they had to take for rather obvious reasons. They must reject the wage-push diagnosis because, understandably, they do not wish to take the blame for the inflation. But they also must reject the demand-pull diagnosis, because this diagnosis would militate against the use of fiscal and monetary policies to bolster employment. They want effective demand to be increased at a rate fast enough to permit full employment at rapidly increasing wage rates; but they do not want to attribute the increase in prices either to the increase in demand or to the increase in wage rates. The only way out of this logical squeeze is to blame the consumer price increase on the increases of prices "administered" by big business.

Representatives of industry have denied that their price increases were responsible for the inflation, and insisted that they merely adjusted for increases in their cost. One might think that statistical evidence could settle this issue in a hurry. This is, however, made difficult by conceptual complications, especially regarding the choice of the relevant data from among several possibilities: (a) the absolute profit margin in dollars per physical unit of output, (b) the same in constant dollars, (c) profits per sales dollar, (d) profit rates per investment dollar, (e) profit rates on the replacement cost of total assets, (f) profit rates on the replacement cost of the assets required for the production volume actually produced. An industry that could show that none of these six profit indices had increased over the 4 years of cost-push inflation could hardly be accused of aggressive price increases. But if some of the indices had increased, the controversy would not be settled.

The logic of the situation, as I see it, would support the contention that the autonomous price increases for industrial products were of the defensive, not of the aggressive type. A businessman who attempts to maximize his profits but, in the absence of increased demand (since we are talking about cost-push inflation) and in the absence of increased cost (or beyond the amount needed to cover increased cost), decided to raise his prices and expected thereby to increase his profits, either was a fool in doing so or had been a fool in not having done so long before. If we assume that most businessmen are no fools, we must at least provisionally conclude that they have not resorted to aggressive increases of their prices. (The same reasoning does not apply to trade union leaders, who do not try to maximize either the total wage bill, or the total wage bill net of any sort of cost, or total employment, but just try to get increased wage rates and fringe benefits.)

One may point to exceptional instances where businessmen for some reasons had been charging lower prices than was good for their profits and then corrected this situation by raising prices, or took the occasion of a wage rate increase to raise prices more than would be necessary to cover the increased cost. Or one may point to the possibility that businessmen do make errors and may raise prices higher than is good for them, so that their action, though taken in the quest for increased profits, actually results in reduced profits. Neither of these hypotheses is good enough to support the contention that the series of increases of administered prices in industry were aggressive in the sense that every increase was designed to raise profit rates higher than the year before. I am prepared to argue that steel prices were too high from many points of view, and that a reduction of steel prices would have been a wise and beneficial move; but I cannot argue that the increases in steel prices were initiating a post-push inflation. The theory of cost-push inflation based on "administered pricing with periodically raised profit targets" is, I believe, untenable.

To avoid misunderstandings let me repeat that I should expect profit rates and margins to increase in the course of a demand-pull inflation, for there prices are pulled up by excess demand before costs have increased. But in a cost-push inflation, it seems to me, increases in administered prices of strategic materials are typically of the defensive type—"defending" profit rates and margins against encroachment, not pushing them up to new record levels. A successful strategy of Government policy aiming at price-level stability will have to be centered on avoiding autonomous expansions of demand and on avoiding or mitigating aggressive increases of wage rates.

#### THE STRATEGY OF INFLATION CONTROL

To avoid autonomous demand expansions is a responsibility of our fiscal and monetary authorities. Our present knowledge of these matters is sufficient to carry out this task satisfactorily, provided unwholesome political pressures can be neutralized or withstood. If I do not say more about this, it is not because I underrate the importance of fiscal and monetary sobriety. Almost all inflations in the history of this and other countries were demand expansions, chiefly through Government spending, and I expect that most inflations in the future will be of the same sort. But there is no need to discuss here this familiar story. Let us assume that demand-pull inflations will be avoided by sound fiscal and monetary policies. And let us note that fiscal and monetary controls can be exercised without resort to prohibitions, commands, sanctions, or coercive actions of any sort, that is, without direct controls.

Are direct controls perhaps indispensable if we want to avoid autonomous increases of wage rates of the aggressive type? If so, I am not ready to recommend such a policy of control, for, much as I fear the consequences of inflation, I fear even more the consequences of direct controls of wages and prices. Let us then think of other methods of avoiding aggressive increases, not by prohibiting them but merely by discouraging them. Either the trade unions can be made more self-conscious and squeamish about demanding aggressive raises, or employers can be made more reluctant to grant them.

For the Government to refuse supportive demand expansions would be the simplest method from an economic point of view, but the hardest from a political point of view. In the absence of supportive fiscal and monetary policies, businessmen would find it impossible to sell their output at increased prices and they would quickly learn that granting higher wages would be economic suicide. Unions do not strike for higher wages when they are certain that there is no money to pay them. But it would probably be political suicide for a government to adopt such a course. Business and labor leaders would not believe that the Government would remain unyielding when loud cries are raised about unemployment being "wantonly created" by the "hiredlings of Wall Street" working for "banking interests" and other "enemies of the poor people."

An alternative policy for discouraging businessmen from raising prices and granting higher wages would be to reduce or abolish protective tariffs. This would, of course, be effective chiefly in industries now protected. Competition through imports from abroad has in several countries been the most effective safeguard against price inflation and, Congress willing, it could become so in this country. I am afraid, however, Congress is not willing; it will not use this simple, efficient, and economic safeguard against inflation.

If neither supportive nor protective policies are abandoned, exhortation and the pressure of public opinion remain as the only possible courses of action short of direct controls. Exhortation alone, without strong public opinion behind it, can be written off as worthless. Public opinion cannot be aroused against aggressive wage increases as long as the people do not clearly understand the issues. And they will not understand them as long as we go on confusing them with the ability-to-pay argument for wage increases. You, the Members of Congress, and we, professional economists, have obscured the issue by careless talk about the ways of distributing the fruits of increased productivity. It is our paramount duty to clear up the confusion on this matter.

Real national product per worker may increase either because more capital becomes available per worker or because improved technology and organization allow more output to be produced with given capital and given amounts of labor. Apart from a few modifying influences, such as a whittling down of the real claims of recipients of contractual incomes or a lucky improvement in the terms of trade, real wages per worker cannot increase faster than product per worker. If money wage rates are raised faster than productivity and if the monetary authorities supply the money needed to pay the increased wages without unemployment, prices will rise enough to keep real wage rates from rising faster than productivity. To say that the price inflation has the "function" of keeping the increase in real wages down to the rate at which productivity increases may help some to understand the mechanism. But it is not really an appropriate expression, for nothing has to "function" to prevent from occurring what cannot occur anyway. Either prices rise (with the help of a supportive expansion of demand) and cut the real wage rates to the level made possible by the productivity increase, or unemployment occurs (if inflation is prevented or restrained) and cuts total real wages even lower.

If money wages were not increased at all and all increments to the net national product that are due to technological progress were distributed to consumers in the form of lower prices, all income recipients—wage earners, owners of businesses, and fixed-income recipients—would share in the increased product. If money wages all over the economy are increased approximately by the rate at which average productivity has increased, prices on the average will neither fall nor rise and hence the fixed-income recipients (bondholders, landlords, pensioners, perhaps also civil servants, teachers, etc.) will be cut out of their share in the increment. Thus, aggressive money wage increases which, on the average, equal the average increase in productivity in the economy will improve the income share of labor at the expense of the receivers of contractual income.

It is now an almost universally accepted "rule" that both price stability and full employment can be maintained if all money wage rates are increased by the same percentage by which average productivity has increased in the economy as a whole. This "rule" is frequently misunderstood and mistakenly applied to advocate increases in money wage rates in individual firms or industries by the same percentage by which productivity has increased in these firms or industries. In other words, the rule is perverted to the proposal that the benefits of advancing productivity should accrue to the workers in the industries in which the advances take place. It is twisted into a proposition justifying "union demands in those industries, which, because of improved technology and consequent cost reductions, can afford to pay higher wages without charging higher prices for their products. This proposition is thoroughly unsound. It misses completely the economic function of prices and wages; its realization would sabotage the economic allocation of resources without serving any purpose that could be justified from any ethical or political point of view."<sup>1</sup>

A sensible allocation of resources requires that the same factors of production are offered at the same prices to all industries. It causes misallocations if industries in which technology has improved are forced to pay higher wages for the same type of labor that rates lower pay in industries where technology has not changed. Wage rates should be temporarily higher in fields into which labor is to be attracted, not in fields where labor is released by labor-saving techniques. It is economic foolishness to advocate that wage rates should be forced up precisely where labor becomes relatively abundant.

<sup>1</sup> Fritz Machlup, "The Political Economy of Monopoly" (Baltimore: Johns Hopkins Press, 1952), p. 403.

"One might accept an economically unsound arrangement if it were ethically much superior. But no one could claim that the proposition in question satisfied any ethical norm. If five industries, let us call them A, B, C, D, and E, employ the same type of labor, if any of them, say industry A, develops a new production process and is now able to make the same product as before with half the amount of labor; then this industry A could afford to raise its wage rates without raising its selling prices. Should now workers in industry A get a wage increase of 100 percent while their fellow workers in industries B, C, D, and E get nothing? Should the coincidence that the technological advance took place in A give the workers there the windfall of the entire benefit, raising them above the rest of the people? I can see no ethical argument that could be made in favor of such a scheme."

"But as a matter of practical fact, apart from economics and ethics, the scheme could never be consistently applied, because the workers in other industries would not stand for it \* \* \* similar wage increases would have to be given in all \* \* \* firms and industries regardless of their ability to pay, regardless of whether their selling prices would remain stable or go up slightly or a great deal. It simply would not be fair if a favored group were to be the sole beneficiary of progress while the rest of the population would have to sit back and wait for better luck."<sup>2</sup>

No fairminded person would ask them to sit back and wait; every labor union with any power at all would go to bat for its members, and where no unions exist workers would eventually appeal to their employers and to the public to end the injustice. Yet, any "equalizing" wage increases would be clearly of the cost-push type and would, if unemployment is prevented, lead to consumer price increases which take away from the originally privileged worker groups some of the real gains they were first awarded with the approval of shortsighted politicians.

This spillover of money wage increases and the cost-push inflation which it produces (with the help of a supportive demand inflation) serves to redistribute the productivity gains first captured by the workers in the industries where the gains occurred. This redistribution by means of consumer-price inflation cuts back the real wages of the first-successful labor groups, whose unions will then complain about the corrosion of their incomes and will call for seemingly defensive wage increases to regain the ground lost through inflation.

In short, a policy that condones wage increases in industries which, thanks to increased productivity, can afford to pay increased wages without charging increased prices, is actually a policy that accepts a rising cost-price spiral without end. It is not significant in this respect how big are the profits of the industries that are the first to be forced to grant the increased wages; it is irrelevant how well they can afford to pay these wages, and it is not essential whether these firms shift the incidence of the increased wages onto the consumers by raising the prices of their products or whether they absorb the wage increase. For obviously the spillover wage increase will hit industries which could not possibly absorb the increased labor cost; in addition, the spending of increased wages, financed by induced and supportive demand expansion, will pull up prices all over the economy.

When a labor union demands annual wage rate increases of 4 percent or more and points to substantial increases in productivity and profits in their industry, it is unsound to ask for a factfinding board to establish by just how much productivity has increased in the industry in question and how large are its profits. It is unsound because these facts are not essential and we are apt to confuse the public about their relevance. The relevant fact is whether or not the demanded increase in wage rates (or employment cost) is in excess of the average increase in productivity in the economy as a whole, which has been something like 2 or 2½ percent a year.

This is then what the public should learn to understand: Whenever any group in the economy wants to raise its real earnings faster than the rest of society, there will be other groups who will insist on similar raises; since they exceed the increase in total output, these claims can be satisfied only at the expense of the rest of the people, who will be deprived of parts of their real incomes by means of price inflation. Whether the profits of the industries where wages are raised first have been exorbitant or moderate does not make much difference to the outcome. An immoderate wage increase—immoderate in that it exceeds the

<sup>2</sup> *Ibid.*, pp. 404-405.

average increase in productivity in the economy as a whole—will result in inflation and will take income away from those who have no bargaining power or are not equally aggressive in its exercise.

If most people understood this, public opinion would be aroused whenever a labor group, already having secured special advantages in previous years and earning much more than others of similar training, skill, and industry, should come forward with additional demands for pay increases. They would have little sympathy with these demands if they understood that not the profits of rich corporations but their own modest real incomes would be reduced as a result of the ambitions of the aggressive group. Conversely, if every group demanding a raise of more than the average improvement rate felt that public opinion is solidly against it and that people considered the move a selfish attempt to gain at their expense, aggressiveness would probably be diminished. Past experience seems to indicate that public opinion is an important factor in wage settlements.

This hope of mine, that improved understanding will eventually lead to an alleviation of the aggressiveness in wage demands and will thus act as a check on cost-push inflations, does not make me sanguine about monetary restraints becoming dispensable. The monetary brakes on credit and demand expansion cannot be relaxed, they remain the only reliable instrument of inflation control. They are especially indispensable as long as public opinion still condones substantial increases in money wage rates and large parts of the public still believe that higher and higher money wage rates are good for the national economy.

#### CREEPING INFLATION AND EMPLOYMENT

The conclusion that it would be well to avoid aggressive wage increases exceeding the average increase of productivity in the entire economy does not yet dispose of the questions whether there is a conflict between the goals of full employment and stable price level, whether one of them should be given priority, and how much of one should be sacrificed to approach the other more closely.

The thesis that a creeping inflation will permit higher levels of employment than could be secured under a stable price level must be rejected, at least in the form stated. A creeping wage-push inflation, surely, does not increase employment, but can at best help avoid a reduction of employment; that is to say, it may prevent some or all of the unemployment that would be brought about by immoderate increases of wage rates. Assume that, at an employment level of 95 percent of the labor force, some labor groups secure increases in money wage rates which spill over to other labor groups and cause average money wage rates in the economy to rise by some 6 percent. If productivity has increased on the average by only 2 percent, unemployment would be substantially increased unless induced and supportive demand expansions permitted a rise of the price level by roughly 4 percent. Assume now that a mild restraint of the monetary expansion holds the price inflation down to 3 percent. As a result, the employment level would be reduced. In other words, the 3-percent creep of the price inflation would be associated with a fall, not a rise, in employment.

A creeping demand-pull inflation may succeed in raising the level of employment as long as responsive wage increases are delayed. The power of an autonomous expansion of demand to create employment depends strictly on the existence of a lag of costs, and hence also a wage lag, behind the new spending. The length of the wage lag is apt to diminish as trade unions become familiar with the working of price inflation and insist on renegotiations of wage contracts to adjust to increased costs of living, or even on escalator clauses linking wage adjustments automatically to increases in the consumer price index. As the wage lag diminishes or disappears, the effectiveness of a demand expansion in raising employment diminishes or disappears.

Some economists have spoken of the money illusion in this context. A demand expansion that leads to increased prices will promote employment only as long as the money illusion works. If the illusion is gone and wage rates catch up and keep pace with product prices, demand expansion will not do anything for employment.

Hence, one cannot say correctly that there is a conflict between a stable price level and full employment. The maintenance of full employment does not require a rising price level, nor is it, in the long run, aided by a rising price level. This statement must be qualified by the longrun clause in order to allow for the possibility that brief spurts of demand-pull inflation raise employment temporarily to a level sometimes called overfull employment. Maximum employment,

mentioned earlier in this statement, is such a level of employment, reached temporarily under the impact of a lead of demand prices over costs. If institutional arrangements facilitate faster adjustment of cost prices, chiefly by reducing the intervals between successive wage increases and between successive increases of administered prices, only a further speedup of the demand expansion can keep employment at the maximum level. The day of reckoning comes sooner or later and, as the price inflation is slowed down or stopped, the employment level falls back, usually below the full-employment level, however defined, and leaves us with considerable unemployment.

At that point the monetary authorities are usually criticized for creating unemployment or for allowing employment to fall. It is true that perhaps another acceleration of the demand-pull inflation might have postponed the recession of employment, but probably only at the expense of more serious consequences, especially a more drastic depression of employment at a later time.

On the basis of these considerations I conclude that, while there is a conflict between short-run maximum employment and price-level stability, there is no conflict between the latter and a high level of employment in the long run, usually referred to as full employment.

#### CREEPING INFLATION AND GROWTH

What has been said about demand-pull inflation and employment level can be carried over to a discussion of accelerated growth, but only in part because there is more to the relation between inflation and growth than just the temporary flip to employment and output. I believe three possible effects have to be mentioned, of which the employment effect is the first:

1. The lead of demand expansion and of increases in demand prices over increases in cost will, as long as it can be maintained, stimulate employment and output, and an increase in output will imply a higher annual growth rate, though not a continuing one, regardless of whether the demand expansion is in Government spending, business spending, or consumer spending.

2. To the extent that the demand expansion is concentrated on investment, which will be the case chiefly if most of the newly created funds are first spent by business for newly built plant and equipment, the ratio of investment to consumption is increased. This involves capital accumulation and, if the choice of investment projects is sound, this may contribute to a lasting growth of productive capacity.

3. To the extent that the demand-pull inflation of consumer prices deprives some consumers of parts of their real incomes and to the extent that this is not offset by increases in the incomes of other consumers, the resulting squeeze on consumption may give an extra opportunity to the production of capital goods.

Of these factors forcing up either total production or the capacity to produce, or both, none is likely to last for anything but a brief period if cost increases follow quickly the demand expansions and if the price inflation has to be slowed down eventually or stopped entirely as is likely to be the case in many developed countries. In addition, it is very unlikely that the choice of investment projects will be a sound one, contributing to a lasting increase in the productive capacity of the Nation, if it is made in anticipation of rising prices, partly as a hedge against inflation. In any case, the whole thing will not last long and the temporary acceleration of growth achieved through demand-pull inflation will have to be paid for, in due time, by a retardation of growth. The long-term rate of growth will hardly be aided by the inflation, and may even be lowered.

When some of the critics of an anti-inflationary monetary policy point to a poor growth rate and recommend a more active, expansionary policy, they usually do not consider the possibility that the poor growth rate may be a consequence of an earlier artificial speedup of growth. There are some who believe that it is always possible to create a little more effective demand and thereby give another push to economic growth. This looks to me, forgive the analogy, as if someone thought you could always energize a man into greater activity by giving him another shot of whisky and, when the stimulus wears off, recommend more of the same medicine. Unfortunately the stimulant, continually administered, will reduce his activity and perhaps debilitate him for a long time. If I find a man drowsy after prolonged stimulation, I shall not prescribe to revitalize him with more stimulants. I recommend sobering him up for steady work.

Mr. MACHLUP. Let me begin first by saying that the three objectives that we are discussing before this committee are certainly not the only objectives of economic policy, though they are important objectives.

However, the one concerning the adequate growth rate, I would say, I look upon with some suspicion. "Adequate" means anything or nothing. What is adequate to one man is not adequate to another. I believe that these growth-rate fans of recent years are confusing the public. I tried in my paper to list the reasons that people may have for wanting a maximum growth rate. I believe we should probably reject most of them; and perhaps the one or two reasons that are acceptable from an economic and from an ethical point of view are probably not acceptable to the majority of the people; namely, that we desire to get so much stronger and richer that we can help others more generously than we have been doing.

The CHAIRMAN. Including those within our own country, or merely those abroad?

Mr. MACHLUP. Including our own. But I listed this as a separate reason.

The CHAIRMAN. You would not exclude helping people within the United States?

Mr. MACHLUP. Absolutely not. But I would say that the growth rate as it is usually measured would not by itself indicate that the unprivileged third of the people are getting better off. You could have a fast growth rate leading to more and more national income, or even national income per head, without the poorest third of the people getting better off. Hence the growth rate may not be what you really want to measure.

To want a faster growth rate for the purpose of military preparedness is a phony reason. In order to get stronger and prevent being second best in the war you do not just try to grow, but you do certain other things which may not at all be the same thing as achieving the fastest growth rate. I believe that this business has been much exaggerated by many economists and by many political writers and I think that we would do well to deemphasize the goal of a maximum rate of growth.

I personally would endorse a platform that we should grow as fast as we could provide there are some limitations stated. Let me emphasize now a point to which I may return later; namely, that a speedup of the growth rate has usually to be paid for by a deceleration, by a retardation, of growth at a later time. I think the forced-growth medicines that are being peddled around are not healthy for the body economic.

I come to the goal of maximum employment. I doubt that we really want the maximum employment that can possibly be achieved in a short period of time, for I doubt that the Nation is helped by that.

The goal of full employment, though the definitions are usually poor, is perhaps better than the goal of maximum employment. Full employment is not the maximum employment that can be achieved at any given time. Needless to say, we do want a high level of employment.

But it should be noted that employment and output, employment and real national product are not always moving in the same direction. Sometimes you can have rising employment and falling output. This is perhaps less important for the United States especially if we are only between 95 and 98 percent employment, not above that.

I should like to say a word or two about the so-called full-employment policy. This trade name, "full employment policy," is a deceptive trade name. It is as if someone were inventing a medicine and calling it the perfect health medicine. If a patient refused to buy it, one might be tempted to charge that he is opposed to perfect health. As a matter of fact, the perfect health medicine is only one kind of medicine and it may not be conducive to perfect health, indeed it may be injurious to health.

I would say that what usually is meant by full-employment policy is not necessarily conducive to a very high level of employment in the long run. It would be different if we meant by full-employment policy any kind of policy that will lead to better employment. But this is not what most people mean by full-employment policy, I am afraid. They mean expansions of demand by means of fiscal and monetary policy.

I believe that some nations that have repudiated the particular prescription called full-employment policy have actually obtained a better rate of employment and a greater increase in total employment than other nations that have bought the prescription.

Perhaps I should warn especially against the use of full-employment policy if unemployment is concentrated in certain pockets, in so-called distressed areas. In such cases full-employment policy, so-called, leads merely to inflation and hardly to an increase in employment in the long run.

I now come to the stable price level. Needless to say, this, again, is not a final objective, an ultimate end. It should be a means to an end. There could be no point in wanting a stable price level just because it looks so nice to have a stable price level.

There is a real purpose to it. That purpose can be expressed partly in terms of fairness and justice, but more importantly in terms of the economy's performance. I believe that an economic system with a continuing rise in price levels will not do so well as an economic system where people can count on the stability of their monetary unit. The economy will be less efficient, less productive; people trying to hedge against inflation will do all sorts of things other than increase their productivity and efficiency.

Thus a stable price level is considered an objective of economic policy chiefly because it is a means for higher employment and faster growth in the long run than could be had with a rising price level.

I know full well that in saying so I am probably contradicting a number of other economists who have written or have testified before this committee.

Concerning the causes of inflation, I should say that we can, as economists, construct a number of different models explaining why the general price level has been rising. We are free to construct all kinds of model except that, in order to be useful, it should fit reality, it should fit our observations.

Unfortunately, different alternative theoretical models could explain the same set of observations and, therefore, economists may disagree when they talk about the causes of inflation. There is that famous quarrel about the cost-plus inflation and the demand-pull inflation. Let me explain why experts, equally well trained, with excellent minds, can disagree on this issue.

In an economy, especially in ours, many prices are administered; so are many wages. Now, if it takes an administrative decision to raise prices and wages, then one can, of course, conclude that there would be very little inflation unless people make these administrative decisions to push up prices and wages. Hence one may correctly say that administered prices and administered wages have caused the inflation. In short, it is a cost-push inflation.

On the other hand, in order to pay higher prices you have to have money and you have to spend it. No one can spend money that he has not got. In order to permit people to pay higher prices there must be a creation of demand, and usually a creation of money. That is to say, without that creation of demand there could not be any inflation. Hence, one may correctly say, that demand expansion has caused the inflation. In short, it is a demand-pull inflation.

Now, I submit that we can't get out of this quibble unless we redefine our terms. I have tried to do this by introducing some adjectives which perhaps don't sound pretty, but they are useful for making necessary distinctions.

One of the adjectives is autonomous. The question is whether demand is increased autonomously, that means independent of any change in cost, or whether the increase in demand is really induced by a rise in cost or engineered in order to support employment in the face of a rise in cost. This distinction between an autonomous increase in demand and an induced or supportive increase in demand is essential.

The same distinction applies to rising costs. It makes a difference whether the cost increase is an autonomous one, as when we start with raising cost prices or raising wages rates and then help demand to catch up, or whether the cost increase is merely responsive, that is, a response to a previously increased demand.

If adjectives of this sort were used, I believe there would be much less controversy about the role of demand and cost in the price inflation.

As I have written in my prepared statement, autonomous wage or price increases may have three possible effects:

- A. Reductions in production and employment;
- B. Induced expansions of private demand; and
- C. Supportive expansions of demand by means of fiscal and monetary measures.

Any one or two of these effects, or all three, may eventuate.

Supportive demand expansions are designed to prevent the reduction in employment that would tend to result from the wage and price increases: under some sort of full-employment commitment, the fiscal and monetary authorities take measures to compensate for the employment-reducing effects of increased costs and to support a higher level of product prices that permits industries to maintain or restore employment despite the higher costs.

If the authorities play their instruments well, they will resort to this compensatory or supportive expansion of effective demand only to

the extent that the induced expansion of demand is insufficient to absorb the excess supply of labor created by the wage and price increases. I call "induced" the demand expansions that are direct consequences of a cost increase, as either those who receive the increased cost prices or those who pay them make larger disbursements than they would have made otherwise. For example, industrial firms yielding to union pressure for a wage increase may borrow from banks—or dig into cash reserves—in order to pay the higher wage bill, or individuals receiving bigger paychecks go into more ambitious installment purchases of durable consumer goods.

The proposed concepts help in a simple description of the two basic model sequences of inflation.

**Demand-pull inflation:** An autonomous demand increase is followed by responsive—competitive—wage and price increases.

**Cost-push inflation:** Autonomous wage or price increases are followed by induced and/or supportive—compensatory—demand increases.

Well, these are only two models of inflation, but we can have more. For example, I, myself, have only recently constructed what looks to me as a very nice model. It can demonstrate that even without autonomous demand expansion and without any wage increase one could have inflation merely if every industry refused to lower prices in the face of reduced cost or reduced demand.

If prices were always kept stable or increased but never lowered, this would necessarily lead to price inflation, even in the absence of wage increases, when productivity increases and technological unemployment is removed by supportive demand expansions.

I think this model deserves the attention of economic theorists, and also of the Congress, but it is not necessarily the explanation of what we have had in the last few years. After all, in the last few years we did have wage increases. Thus, you will hardly be interested now in a model showing how prices could rise without any wage increases. Reality has included wage increases; the model does, therefore, not include one of the observations made during the last years.

Another model has recently been presented in a staff document published by this committee, a model showing inflation as an effect of a mere shift in demand.

Under the assumption that prices can only rise but not fall, a mere shift in demand from one thing to another—supported by monetary or fiscal policy to prevent unemployment—will lead to price increases even in the absence of wage increases. This, again, is a very fine model, just as fine as my other one, but neither of these models is relevant in an explanation of what we have experienced in the past. Both of these models may become highly important for the future and, therefore, I would not want to disparage them. They show us that certain new policies will have to be devised to make prices flexible in the downward direction. To keep prices from rising should not be our only concern. If we want to avoid price inflation we have to see that some prices have downward flexibility; otherwise we cannot avoid inflation.

Now, to come back to the two models of the inflation that are more relevant to our past, namely, the cost-push and the demand-pull inflation, the trouble is that it is very hard to say which applies where and when. As I say in my prepared statement, an autonomous de-

mand expansion may in actual fact be followed by administered wage and price increases more drastic than merely competitive increases would be; thus, the increases would be partly responsive, but partly autonomous, requiring further demand expansions, induced or supportive, if unemployment is to be avoided.

The same is true with autonomous wage increases.

In other words, we may see a sequence of events which is a little bit different from the sequence described in our models. It is too bad that the real world is too messy to fit our neat theories more closely. But this does not vitiate the theories. They must bring some imaginary order into the real mess if they are to do their job of explaining a perplexing jumble of events.

Regarding the postwar inflation, so-called, I believe it is most confusing to speak of a "postwar" inflation and to mean the entire period from 1946 to 1959. I do not believe that every part of this period can be explained by the same theory.

It is my hunch, though of course I have no proof for this; that the period from 1946 to 1952, was more in the nature of a demand-pull inflation. If there had not been any unions at all, we would have had the same inflation; and if there had been no administered prices at all, we would have had the same inflation. On the other hand, the period from 1955 to the present, I believe has had some of the characteristics of a cost-push inflation.

Senator BUSH. Was the 1946-52 inflation, which was really the shorter period, the inflationary part of that, due to the Korean war in large part?

Mr. MACHLUP. You are quite right. The rate of inflation was not the same during that entire period. The rate of inflation was very strong during the Korean war, you are absolutely right. But also in the earlier years, let us say from 1946 to 1948, we definitely had symptoms of a demand-pull inflation. Here it is my inclination to explain the whole period until 1952 as a demand-pull inflation. Not so, however, the period since 1955. Of course, there were also symptoms of increased demand in this later period, but I don't think most of this demand increase was of the autonomous type; I believe that the larger part of this demand increase was induced or supportive.

There is another distinction which I propose for different kinds of administered cost-price increase. I believe some of these administered wage and price increases are of an "aggressive" type, designed to raise the real income of the group in question, and others are of a more "defensive" type. That means trying to bring the real income up to the customary level after a price inflation has reduced it.

I believe the distinction between "aggressive" and "defensive" is expedient to explain, if we want to do so, the major responsibility for the inflation. We would probably say that a merely defensive increase is less responsible for inflation than an aggressive increase which really raises the real income of the group concerned. But this should not mean that the defensive increases have no role to play in the inflation. Indeed, they speed up the rate of inflation very much. But from some point of view to distinguish between impulse and propagation, it may be important to make the distinction.

Perhaps it will now be best to read the last pages of my paper, beginning at the bottom of page 17 of my mimeographed version, where

I speak of the "Strategy of Inflation Control": To avoid autonomous demand expansions is a responsibility of our fiscal and monetary authorities. Our present knowledge of these matters is sufficient to carry out this task satisfactorily, provided unwholesome political pressures can be neutralized or withstood. If I do not say more about this, it is not because I underrate the importance of fiscal and monetary sobriety. Almost all inflations in the history of this and other countries were demand expansions, chiefly through Government spending, and I expect that most inflations in the future will be of the same sort. But there is no need to discuss here this familiar story. Let us assume that demand-pull inflations will be avoided by sound fiscal and monetary policies. And let us note that fiscal and monetary controls can be exercised without resort to prohibitions, commands, sanctions, or coercive actions of any sort, that is, without direct controls.

Are direct controls perhaps indispensable if we want to avoid autonomous increases of wage rates of the aggressive type? If so, I am not ready to recommend such a policy of control, for, much as I fear the consequences of inflation, I fear even more the consequences of direct controls of wages and prices.

Let us then think of other methods of avoiding aggressive increases, not by prohibiting them but merely by discouraging them. Either the trade unions can be made more self-conscious and squeamish about demanding aggressive raises, or employers can be made more reluctant to grant them.

For the Government to refuse supportive demand expansions would be the simplest method from an economic point of view, but the hardest from a political point of view. In the absence of supportive fiscal and monetary policies, businessmen would find it impossible to sell their output at increased prices, and they would quickly learn that granting higher wages would be economic suicide. Unions do not strike for higher wages when they are certain that there is no money to pay them. But it would be probably political suicide for a Government to adopt such a course. Business and labor leaders would not believe that the Government would remain unyielding when loud cries are raised about unemployment being "wantonly created" by the "hirelings of Wall Street" working for "banking interests" and other "enemies of the poor people."

An alternative policy for discouraging businessmen from raising prices and granting higher wages would be to reduce or abolish protective tariffs. This would, of course, be effective chiefly in industries now protected. Competition through imports from abroad has in several countries been the most effective safeguard against price inflation, and, Congress willing, it could become so in this country. I am afraid, however, Congress is not willing.

The CHAIRMAN. Is Congress the only group that is not willing to do this?

Mr. MACHLUP. No, indeed, but the only group that could do it.

The CHAIRMAN. Have you not noticed any great demand for tariff increases in the field of business?

Mr. MACHLUP. Unfortunately, I have, and I congratulate those Congressmen who resist those demands.

The CHAIRMAN. You mean you have noticed a great tendency on the part of business for reduction in tariff?

Mr. MACHLUP. Unfortunately, I have not seen that tendency. I wish there were more businessmen enlightened enough to see that this would be one of the most efficient—

The CHAIRMAN. I join you in this desire.

Mr. MACHLUP. Thank you, Senator.

I say, as it looks now, Congress will not use this simple, efficient, and economic safeguard against inflation.

If neither supportive nor protective policies are abandoned, exhortation and the pressure of public opinion remain as the only possible courses of action short of direct controls. Exhortation alone, without strong public opinion behind it, can be written off as worthless. Public opinion cannot be aroused against aggressive wage increases as long as the people do not clearly understand the issues. And they will not understand them as long as we go on confusing them with the ability-to-pay argument for wage increases.

You, the Members of Congress, and we, professional economists, have obscured the issue by careless talk about the ways of distributing the fruits of increased productivity. It is our paramount duty to clear up the confusion on this matter.

Real national product per worker may increase either because more capital becomes available per worker or because improved technology and organization allow more output to be produced with given capital and given amounts of labor. Apart from a few modifying influences, such as a whittling down of the real claims of recipients of contractual incomes or a lucky improvement in the terms of trade, real wages per worker cannot increase faster than product per worker.

If money wage rates are raised faster than productivity and if the monetary authorities supply the money needed to pay the increased wages without unemployment, prices will rise enough to keep real wage rates from rising faster than productivity. To say that the price inflation has the function of keeping the increase in real wages down to the rate at which productivity increases may help some to understand the mechanism. But it is not really an appropriate expression, for nothing has to function to prevent from occurring what cannot occur anyway. Either prices rise, with the help of a supportive expansion of demand, and cut the real wage rates to the level made possible by the productivity increase, or unemployment occurs, if inflation is prevented or restrained, and cuts total real wages even lower.

If money wages were not increased at all and all increments to the net national product that are due to technological progress were distributed to consumers in the form of lower prices, all income recipients—wage earners, owners of businesses, and fixed-income recipients—would share in the increased product. If money wages all over the economy are increased approximately by the rate at which average productivity has increased, prices on the average will neither fall nor rise and hence the fixed-income recipients—bondholders, landlords, pensioners, perhaps also civil servants, teachers, et cetera—will be cut out of their share in the increment.

Thus, aggressive money wage increases which, on the average, equal the average increase in productivity in the economy will improve the income share of labor at the expense of the receivers of contractual incomes.

It is now an almost universally accepted rule that both price stability and full employment can be maintained if all money wage rates are increased by the same percentage by which average productivity has increased in the economy as a whole. This rule is frequently misunderstood and mistakenly applied to advocate increase in money wage rates in individual firms or industries by the same percentage by which productivity has increased in these firms or industries.

In other words, the rule is perverted to the proposal that the benefits of advancing productivity should accrue to the workers in the industries in which the advances take place. It is twisted into a proposition justifying—

union demands in those industries, which, because of improved technology and consequent cost reductions, can afford to pay higher wages without charging higher prices for their products. This proposition is thoroughly unsound. It misses completely the economic function of prices and wages; its realization would sabotage the economic allocation of resources without serving any purpose that could be justified from any ethical or political point of view.

This is a quotation from my book, "The Political Economy of Monopoly"—Baltimore: Johns Hopkins Press, 1952, page 403.

A sensible allocation of resources requires that the same factors of production are offered at the same price to all industries. It causes misallocations if industries in which technology has improved are forced to pay higher wages for the same type of labor that rates lower pay in industries where technology has not changed. Wage rates should be temporarily higher in fields into which labor is to be attracted, not in fields where labor is released by labor-saving techniques. It is economic foolishness to advocate that wage rates should be forced up precisely where labor becomes relatively abundant.

One might accept an economically unsound arrangement if it were ethically much superior. But no one could claim that the proposition in question satisfied any ethical norm. If five industries—let us call them A, B, C, D, and E, employ the same type of labor; if any of them, say industry A, develops a new production process and is now able to make the same product as before with half the amount of labor, then this industry A could afford to raise its wage rates without raising its selling prices. Should now workers in industry A get a wage increase of 100 percent while their fellow workers in industries B, C, D, and E get nothing? Should the coincidence that the technological advance took place in A give the workers there the windfall of the entire benefit, raising them above the rest of the people? I can see no ethical argument that could be made in favor of such a scheme.

But as a matter of practical fact, apart from economics and ethics, the scheme could never be consistently applied, because the workers in other industries would not stand for it \* \* \* similar wage increases would have to be given in all \* \* \* firms and industries regardless of their ability to pay, regardless of whether their selling prices would remain stable or go up slightly or a great deal. It simply would not be fair if a favored group were to be the sole beneficiary of progress while the rest of the population would have to sit back and wait for better luck.

This again was quoted from my book, pages 404–405.

No fairminded person would ask them to sit back and wait; every labor union with any power at all would go to bat for its members, and where no unions exist, workers would eventually appeal to their employers and to the public to end the injustice. Yet any equalizing wage increase would be clearly of the cost-push type and would if unemployment is prevented, lead to consumer price increases which take away from the originally privileged worker groups some of the real gains they were first awarded with the approval of shortsighted politicians.

This spillover of money wage increases and the cost-push inflation which it produces, with the help of a supportive demand inflation, serves to redistribute the productivity gains first captured by the workers in the industries where the gains occurred. This redistribution by means of consumer-price inflation cuts back the real wages of the first successful labor groups, whose unions will then complain about the corrosion of their incomes and will call for seemingly defensive wage increases to regain the ground lost through inflation.

In short, a policy that condones wage increases in industries which, thanks to increased productivity, can afford to pay increased wages without charging increased prices, is actually a policy that accepts a rising cost-price spiral without end.

It is not significant in this respect how big are the profits of the industries that are the first to be forced to grant the increased wages; it is irrelevant how well they can afford to pay these wages, and it is not essential whether these firms shift the incidence of the increased wages onto the consumers by raising the prices of their products or whether they absorb the wage increase. For obviously the spillover wage increases will hit industries which could not possibly absorb the increased labor cost; in addition, the spending of increased wages, financed by induced and supportive demand expansions, will pull up prices all over the economy.

When a labor union demands annual wage rate increases of 4 percent or more and points to substantial increases in productivity and profits in their industry, it is unsound to ask for a factfinding board to establish by just how much productivity has increased in the industry in question and how large are its profits. It is unsound because these facts are not essential and we are apt to confuse the public about their relevance.

The relevant fact is whether or not the demanded increase in wage rates, or employment cost, is in excess of the average increase in productivity in the economy as a whole, which has been something like 2 or 2½ percent a year.

The CHAIRMAN. May I ask a question there?

Mr. MACHLUP. Yes, indeed.

The CHAIRMAN. I wonder if we could not define this statement of 2 or 2½ percent.

Roughly 2½ percent per man-hour, is it not; 2 percent per capita?

Mr. MACHLUP. Exactly; you are quite right.

I did not want to go into technicalities.

This is then what the public should learn to understand: Whenever any group in the economy wants to raise its real earnings faster than the rest of society, there will be other groups who will insist on similar raises; since they exceed the increase in total output, these claims can be satisfied only at the expense of the rest of the people, who will be deprived of parts of their real incomes by means of price inflation.

Whether the profits of the industries where wages are raised first have been exorbitant or moderate does not make much difference to the outcome. An immoderate wage increase, immoderate in that it exceeds the average increase in productivity in the economy as a whole, will result in inflation and will take income away from those who have no bargaining power or are not equally aggressive in its exercise.

If most people understood this, public opinion would be aroused whenever a labor group, already having secured special advantages in previous years and earning much more than others of similar training, skill and industry, should come forward with additional demands for pay increases. They would have little sympathy with these demands if they understood that not the profits of rich corporations but their own modest real incomes would be reduced as a result of the ambitions of the aggressive group.

Conversely, if every group demanding a raise of more than the average improvement rate felt that public opinion is solidly against it and that people considered the move a selfish attempt to gain at their expense, aggressiveness would probably be diminished. Past experience seems to indicate that public opinion is an important factor in wage settlements.

Senator BUSH. May I ask a question there?

The CHAIRMAN. Certainly.

Senator BUSH. How would you recommend that public opinion be aroused, informed, or educated to this very important point you are making?

Mr. MACHLUP. By an occasion such as this today, Senator. By a congressional committee hearing an economist propounding these views and perhaps by the Senators and Representatives themselves then discussing them and repeating them and having them in publications and in newspapers.

Senator BUSH. That is very sound. That is a very slow and laborious process, is it not?

Mr. MACHLUP. Yes, sir.

Senator BUSH. It is not something you can do within a few months unless you have a crisis or something?

Mr. MACHLUP. Yes. I believe that any crisis as the one that unfortunately is now upon us would be a good sounding board. I think this is exactly the time to spread this important truth.

This hope of mine, that improved understanding will eventually lead to an alleviation of the aggressiveness in wage demands and will thus act as a check on cost-push inflations, does not make me sanguine about monetary restraints becoming dispensable.

The monetary brakes on credit and demand expansion cannot be relaxed; they remain the only reliable instrument of inflation control. They are especially indispensable as long as public opinion still condones substantial increases in money wage rates and large parts of the public still believe that higher and higher money wage rates are good for the national economy.

The conclusion that it would be well to avoid aggressive wage increases exceeding the average increase of productivity in the entire economy does not yet dispose of the questions whether there is a conflict between the goals of full employment and stable price level, whether one of them should be given priority, and how much of one should be sacrificed to approach the other more closely.

The thesis that a creeping inflation will permit higher levels of employment than could be secured under a stable price level must be rejected, at least in the form stated. A creeping wage-push inflation, surely, does not increase employment, but can at best help avoid a reduction of employment; that is to say, it may prevent some or all of

the unemployment that would be brought about by immoderate increases of wage rates.

Assume that, at an employment level of 95 percent of the labor force, some labor groups secure increases in money wage rates which spill over to other labor groups and cause average money wage rates in the economy to rise by some 6 percent. If productivity has increased on the average by only 2 percent, unemployment would be substantially increased unless induced and supportive demand expansions permitted a rise of the price level by roughly 4 percent.

Assume now that a mild restraint of the monetary expansion holds the price inflation down to 3 percent. As a result, the employment level would be reduced. In other words, the 3 percent creep of the price inflation would be associated with a fall, not a rise, in employment.

A creeping demand-pull inflation may succeed in raising the level of employment as long as responsive wage increases are delayed. The power of an autonomous expansion of demand to create employment depends strictly on the existence of a lag of costs, and hence also a wage lag, behind the new spending.

The length of the wage lag is apt to diminish as trade unions become familiar with the working of price inflation and insist on renegotiations of wage contracts to adjust to increased costs of living, or even on escalator clauses linking wage adjustments automatically to increases in the Consumer Price Index. As the wage lag diminishes or disappears, the effectiveness of a demand expansion in raising employment diminishes or disappears.

Some economists have spoken of the money illusion in this context. A demand expansion that leads to increased prices will promote employment only as long as the money illusion works. If the illusion is gone and wage rates catch up and keep pace with product prices, demand expansion will not do anything for employment.

Hence, one cannot say correctly that there is a conflict between a stable price level and full employment. The maintenance of full employment does not require a rising price level, nor is it, in the long run, aided by a rising price level.

This statement must be qualified by the longrun clause in order to allow for the possibility that brief spurts of demand-pull inflation raise employment temporarily to a level sometimes called overfull employment. Maximum employment, mentioned earlier in my statement, is such a level of employment, reached temporarily under the impact of a lead of demand prices over costs.

If institutional arrangements facilitate faster adjustment of cost-prices, chiefly by reducing the intervals between successive wage increases and between successive increases of administered prices, only a further speedup of the demand expansion can keep employment at the maximum level. The day of reckoning comes sooner or later and, as the price inflation is slowed down or stopped, the employment level falls back, usually below the full-employment level, however defined, and leaves us with considerable unemployment.

At that point the monetary authorities are usually criticized for creating unemployment or for allowing employment to fall. It is true that perhaps another acceleration of the demand-pull inflation might have postponed the recession of employment, but probably only

at the expense of more serious consequences, especially a more drastic depression of employment at a later time.

On the basis of these considerations I conclude that, while there is a conflict between short-run maximum employment and price-level stability, there is no conflict between the latter and a high level of employment in the long run, usually referred to as full employment.

What has been said about demand-pull inflation and employment level can be carried over to a discussion of accelerated growth, but only in part because there is more to the relation between inflation and growth than just the temporary fillip to employment and output.

I believe three possible effects have to be mentioned, of which the employment effect is the first:

(1) The lead of demand expansion and of increases in demand-prices over increases in cost will, as long as it can be maintained, stimulate employment and output, and an increase in output will imply a higher annual growth rate, though not a continuing one, regardless of whether the demand expansion is in Government spending, business spending, or consumer spending.

(2) To the extent that the demand expansion is concentrated on investment, which will be the case chiefly if most of the newly created funds are first spent by business for newly built plant and equipment, the ratio of investment to consumption is increased. This involves capital accumulation and, if the choice of investment projects is sound, this may contribute to a lasting growth of productive capacity.

(3) To the extent that the demand-pull inflation of consumer prices deprives some consumers of parts of their real incomes and to the extent that this is not offset by increases in the incomes of other consumers, the resulting squeeze on consumption may give an extra opportunity to the production of capital goods.

Of these factors forcing up either total production or the capacity to produce or both, none is likely to last for anything but a brief period if cost increases follow quickly the demand expansions and if the price inflation has to be slowed down eventually or stopped entirely, as is likely to be the case in many developed countries.

In addition, it is very unlikely that the choice of investment projects will be a sound one, contributing to a lasting increase in the productive capacity of the Nation, if it is made in anticipation of rising prices, partly as a hedge against inflation.

In any case, the whole thing will not last long and the temporary acceleration of growth achieved through demand-pull inflation will have to be paid for, in due time, by a retardation of growth. The long-term rate of growth will hardly be aided by the inflation, and may even be lowered.

When some of the critics of an anti-inflationary monetary policy point to a poor growth rate and recommend a more active, expansionary policy, they usually do not consider the possibility that the poor growth rate may be a consequence of an earlier artificial speedup of growth. There are some who believe that it is always possible to create a little more effective demand and thereby give another push to economic growth.

This looks to me, forgive the analogy, as if someone thought you could always energize a man into greater activity by giving him another shot of whisky and, when the stimulus wears off, recommend

more of the same medicine. Unfortunately the stimulant, continually administered, will reduce his activity and perhaps debilitate him for a long time. If I find a man drowsy after prolonged stimulation, I shall not prescribe to revitalize him with more stimulants. I recommend sobering him up for steady work.

Thank you. This is the end of my prepared statement.

The CHAIRMAN. That statement of yours is very thoughtful. I see that you retained your pungency of phrase.

There are certain questions I would like to ask you, if I may.

You define action as aggressive if it is designed to raise real earnings above the level which the group in question has long been enjoying.

Mr. MACHLUP. Right.

The CHAIRMAN. That would seem to imply or mean constant real wage, but later you seem to indicate that aggression means if the wage earners received more than the average increase in productivity in society as a whole.

Which is your definition, a constant real wage and any action to increase the real wage even though it is no greater than the average increase in productivity?

Would you define that as aggression?

Mr. MACHLUP. The difference lies in the fact that an aggressive wage increase is not a response to demand. An aggressive wage increase is an autonomous one; it means one that is not responsive to an increased demand, but instead constitutes a wage push upon prices.

The CHAIRMAN. Let us assume for the time being that these long-time growth figures are approximately correct, 3½ percent for the economy, 1 percent increase in population, 2½ percent increase per man-hour and 2 percent increase per capita. Assuming a constant state of returns between labor and capital, now would you say that if labor would demand an increase of 2 or 2½ percent; would you regard this as aggression?

Mr. MACHLUP. I would not, sir, because it could well come about also as a mere response to demand.

The CHAIRMAN. If that is so, do you not want to revise your wording:

If such an increase is designed merely to restore real earnings, I call it defensive; if it is designed to raise real earnings above that level, I call it aggressive.

Mr. MACHLUP. I don't think, sir, it is necessary to revise this, because I said in the first sentence of that paragraph:

I am introducing a distinction regarding the magnitude of autonomous (dis-equilibrating) wage or price increases.

The CHAIRMAN. Then is it true or not true, that you used the term "aggressive action" in different senses; in one sense and in another sense later when you are saying that the increase should not be greater than the average increase in productivity in society as a whole, rather than in individual industry?

Mr. MACHLUP. The word "aggressive" is used only for one kind of the type which I call "autonomous."

Now, the increases in real wages, Senator, would come about even without any aggressive wage increase at all. Or even without any

autonomous increase; it could come as a response to demand. The real wages would increase even if there were no union at all and there were never a worker asking for a raise.

The CHAIRMAN. In a perfectly competitive society, that might be true, but not necessarily in the society which we have.

Mr. MACHLUP. Well, this is a question of judgment.

I personally believe that our society, while permeated with a lot of monopoly, is still competitive enough to make it almost certain that increases in productivity would be distributed in the form of increased real wages.

The CHAIRMAN. Now suppose a group of men would not have the same faith that you have in the competitive features of society and asked for a 2-percent increase in wages, would you accuse them of being aggressive?

Mr. MACHLUP. No; I would not.

The CHAIRMAN. Then I would like to have you reconsider as to whether you are not using these two terms in different senses in different parts of your paper?

Mr. MACHLUP. I shall be glad to do so on rereading. If I feel that a reformulation is necessary, I shall be very happy to submit it.

(The following was subsequently received for the record:)

Senator Douglas raised the question whether my definition of an "aggressive" wage increase is consistent with the propositions set forth later concerning the inflationary nature of "immoderate" wage increases. An increase is "immoderate" only if it exceeds the average national rate of productivity growth, say 2 percent, but it is "aggressive" if it is designed to raise real rates of earning above the level the group in question had long been enjoying.

Real wage rates may rise (a) without any increase in money wage rates, through declining consumer prices, (b) through "responsive" increases in money wage rates, when the same increases would also come about without any trade union pressure, as a result of increased demand for the kind of labor; (c) through "aggressive" increases in money wage rates, when mere responses to market demand would have led to smaller increases or none at all, and (d) through "immoderate" increases, that is, aggressive increases in excess of the average national rate of productivity growth. Thus, aggressive wage increases need not always be inflationary. They would be compatible with a stable price level if they did not exceed the average increase in productivity in the economy as a whole. They would, in this case, deprive the recipients of fixed money incomes only of their participation in the fruits of progress, but not of any part of their accustomed real incomes.

The CHAIRMAN. It seems to me on the first reading that it would be desirable.

Now, the next question I want to ask is this:

Do you accept in fatalistic fashion the inevitability that the growth rate in the future is to be no more than the growth rate in the past? Is this the law or history that it should be only  $3\frac{1}{2}$  percent per year,  $2\frac{1}{2}$  percent per man-hour, 2 percent per capita?

Must the future absolutely repeat the past in this respect?

Mr. MACHLUP. No; I would certainly not say that it must. But I would say that experience is a pretty good guide of what is likely to happen.

Now I assure you, Senator, we could get a faster growth rate. For example, we merely have to abolish free society and introduce communism. I am sure that if you and I are the dictators we can raise the growth rate to 7 percent.

The CHAIRMAN. May I say I have no more desire to be a dictator than I think you have.

Mr. MACHLUP. That is right. So I don't think we really want a growth rate that fast.

The CHAIRMAN. We do not want a growth rate higher than 3 percent?

Mr. MACHLUP. Let me say I am satisfied with the growth people indicate they want by means of their own thrift and effort. If people want a faster growth rate and are willing to get it by greater thriftiness and greater effort, they will have it.

The CHAIRMAN. What about the military factor?

Mr. MACHLUP. Do you mean the contribution of the military expenditures to the growth rate?

The CHAIRMAN. No; I mean the necessity for considering our growth rate in relationship to Soviet Russia as a means of national security.

Mr. MACHLUP. Let us distinguish here between two things. One is armament and defense and the other is prestige and propaganda.

With regard to armament and defense, I do not believe that for this the growth rate is crucial. After all, the growth rate is measured in all sorts of income, including the TV sets and bathtubs and washing machines, and so on, and a very fast acceleration in growth by putting out more of those things would not make us any stronger in a military sense. Indeed, it is possible to get stronger from the military side and at the same time reduce the growth rate.

The CHAIRMAN. Assume that we keep the present proportion as between purposes which some of us would regard as socially desirable and others regard as socially undesirable, but they all purport to be in the same ratio, so as an increase of 4 percent would cause the military hardware to go forward in that ratio, would that be desirable?

Mr. MACHLUP. I am sure that would be desirable. The question is what is the cost?

The CHAIRMAN. That is right.

If it could be obtained with substantially stable prices.

Mr. MACHLUP. It would be splendid. It would mean that many people decided to become thriftier than they now are and some people to become more efficient than they now are, and to make greater effort and work harder.

The CHAIRMAN. It might be that the rate of unemployment could be decreased?

Mr. MACHLUP. That is very possible.

I fully believe that all this would be highly desirable, only that the usual means of trying to achieve these goals, I am afraid, are fallacious.

The CHAIRMAN. I think you have been reading wrong books, or wrong articles, Dr. Machlup.

Mr. MACHLUP. I am afraid everybody who reads a lot reads much that is wrong.

The CHAIRMAN. Now may I ask a question with reference to your statement:

A sensible allocation of resources requires that the same factors of production are offered at the same price to all industries.

This is a consideration which leads you to say that you should not consider productivity increases in individual industries as a test, but productivity increases in all industries. I would like to ask if this is true of all the factors of production?

Mr. MACHLUP. I would say so, sir.

The CHAIRMAN. Does this mean then that the rate of profit should be the same in all industries or rate of return on capital?

Mr. MACHLUP. I would not legislate it to be the same nor would I legislate the rate of wages to be the same. I would say that an economy in which there is a good deal of mobility and flexibility would achieve that.

The CHAIRMAN. You mean if there is complete freedom of entry?

Mr. MACHLUP. That is right. If you refer to the fact that the rates of return are higher in some monopolistic industries, I would grant you that immediately. You probably know that at least three of my books were devoted to exactly that subject.

The CHAIRMAN. Then under those conditions, under that principle, it would follow that conditions of entrance into an industry should be as free and unimpeded for capital as for labor?

Mr. MACHLUP. That is right, absolutely.

The CHAIRMAN. Do you think that is true now?

Mr. MACHLUP. It is not true now. It is certainly not true in all industries, and economists are quarreling about the extent to which it is true in various industries. It is not easy to come to a sound judgment if we look at particular industries, but we can probably agree that a great many large industries do not provide the conditions under which it is easy for a new firm to enter.

Of course, we have to distinguish between the entry of new firms and the entry of more capital. It is of course possible that an industry will attract and get more capital even if there is not an entry of new individual firms.

Personally, I would favor an increase in the number of firms. But the mobility of capital is not necessarily restricted or eliminated by entrance difficulties for new firms.

The CHAIRMAN. Is it not true, with the possible exception of some economic curiosities, that the development of monopoly and oligopoly results in smaller quantities being produced in the industries characterized by these conditions, and that production is less with higher unit prices than would otherwise prevail under competition?

Mr. MACHLUP. I agree, this is my view.

The CHAIRMAN. I welcomed your support, as I did when I was fighting the basic point system and I appreciate it very much, it is a great aid to us. We fought a long battle with United States Steel and with the cement people and a number of others and I hope that you will return in due time with very proper enthusiasm.

Mr. MACHLUP. I don't think I have ever stopped my enthusiasm in my fight against monopoly.

I agree fully that prices in many monopolistic industries are too high and that their reduction would be a blessing for them and for the economy as a whole. My point is only that the fact that they are monopolistic and charge excessive prices is probably not the right explanation of a continuing price inflation.

The CHAIRMAN. What evidence do you have to support that? Is that your judgment or do you have solid statistical evidence? Is this an insight which has been granted to you, or is this based on solid figures and an examination of the wage movements, the cost movements, the rates of return and rates of investment and so forth in the steel industry?

Mr. MACHLUP. Well, as most economists do, I use both. We look at the data and hope that they will tell a story, which they usually don't, and then we try to invent or find a model that satisfies us, gives us the feeling that this is it, that it explains the data before us.

The CHAIRMAN. And which meets some internal test which you have?

Mr. MACHLUP. Not only internal. But you are quite right, the internal test—I call it the feeling of “Aha”—is very important. But in addition, there ought to be something objective, namely, that the actually observed data should be explained in the sense that they should conform to the course of events depicted by the theoretical model.

The CHAIRMAN. I have been reading a little popular modern physics. I find that some of the students of physics think the condition of the subject determines something in the nature of the external physical phenomena and if this is true in the field of physics and the electron, it would certainly seem to be even more true in the field of economics.

Mr. MACHLUP. Yes, sir.

The CHAIRMAN. I thought possibly your esthetic judgments have led you to think that the evil comes from the increase in the wage rates rather than from the administered prices.

Mr. MACHLUP. If you speak of the evil merely as the cost-push inflation, which, incidentally, in the United States has not been so long and not so terrible, then I am more afraid of the wage-push inflation than of the push from administered product prices. It is chiefly a look into the future which makes me apprehensive. I don't think we can say that these past 3 years in which we have had a cost-push inflation have been so terrible. But our proper concern is that this may go on or even become stronger and may become the chief factor in a continuing inflation.

The CHAIRMAN. You speak of the period 1955-59; it is really the period of 1955-57, is it not? Because since the winter of 1958 wholesale prices have been relatively steady.

Mr. MACHLUP. I believe that is correct.

The CHAIRMAN. In other words, it is not the past that is evil, it is the feeling for the future.

You will forgive me when I say this, when I came down here I was given the honor of debating with Senator Taft many times. He also described the terror which would ensue if we adopted a given policy. When I questioned him about the policies which had been adopted in the past and whether they turned out so badly, he said “No.” But then I went back and found that each and every time when changes had been proposed by people of the same complex I had, he would say they were extremely dangerous, but after they had gone into effect they were found not to be so bad.

Now this does not prove they will be good necessarily but it does indicate that the country, in your judgment, has not gone to the dogs as yet. Is that not true?

Mr. MACHLUP. That is quite true, Senator. But if a doctor predicts that a man is going to die or may commit suicide, he cannot point to the past and say that the man has already died several times or committed suicide several times.

The CHAIRMAN. You know what Mark Twain said, the reports of his death were grossly exaggerated.

Congressman Curtis.

Representative CURTIS. I want to join the chairman in expressing appreciation for this very thoughtful paper. I am going to reread it and do a lot more thinking on many areas.

One point you do not touch on and I wish you would help me on it—in all of this discussion about economic growth there does not seem to be any attention paid to what I would regard as uneconomic growth or waste, and yet it is usually measured as economic growth. Also rapid economic growth does produce considerable obsolescence, a tearing down or tearing away to rebuild even if there had not been a mistake. And I think that factor becomes more important the more we grow and the more technological change there is.

How do we weigh those values in here?

Indeed, it seems to me that that is where the free competitive society has a tremendously long-range advantage over the dictatorship that we mentioned. They can get this rapid growth perhaps, but how do we know it is substantial growth. I wondered if you would comment on that.

Mr. MACHLUP. I shall be very happy to.

There are two points you made. Let us first see how those two points relate to the measurement of growth.

To the extent that rapid growth leads to rapid obsolescence, it would also lead to a writing down of capital values. We would say, therefore, that the net capital formation is smaller than it would otherwise be. Hence this obsolescence would be reflected in the measured growth rate.

The first point, however, is very important, for this really would vitiate or falsify our growth rate measurements. If a society did things that are pretty useless to anybody and nevertheless counted them in in the measurement of their national income, this would show up in an exaggerated growth rate.

Let us imagine, for example, that society decided that every unemployed should start some useless paper shuffling, and be paid for it, one might count it as income produced and this would look as if it were fast growth.

Now, this was possibly a rather odd example. I merely wanted to show that what is counted into national product does sometimes not pass the test of the market, especially in an economy where income is not measured by market price, but simply by factor cost, where everything that a factor does is considered income. In such an economy, the measurement of growth may be quite misleading and they may come out with figures that really do not mean much.

Representative CURTIS. Using an analogy, you could have a machine such as the first internal combustion machine probably which required considerable more man-hours and weighed a great deal.

I remember the first self-starter; that was a tremendously cumbersome thing. It probably measured more in terms of growth, the actual cost and the economic growth that resulted from it, than the present very small mechanism which is called a self-starter.

How can we evaluate those things in an economy?

Mr. MACHLUP. We have no statistical way of evaluating technological progress before it is actually introduced. If inventions are made of new things which definitely contribute to the increase of the welfare

of the people, the production of these new things would hardly show up in the national income at all.

There is one statistical device by which it does show up; namely, when new products are first introduced they are usually sold at a very high price. After a few years, the cost is reduced, the price is reduced. If the national product is corrected for price reductions, then we shall see that the reductions in cost of those recently introduced commodities are reflected in an increase in the national product.

Sir, this is a very technical point and I am afraid I have not succeeded in making it clear.

Representative CURTIS. You have the context I wanted.

I was going to ask this question but in the interrogation by Senator Douglas I think you cleared up the question. I was going to ask how wages, in your opinion go up in a proper fashion.

I think I understand it to some degree. But I would like to ask this:

In your statement you made the remarks that you did not see that there would be any justification at all for the industry where the productivity increase occurred having their wages go up.

I was wondering whether or not the incentive factor is not sufficient reason for having the wage go up in that industry to some degree as long as it did not go beyond what you call the national average of increased productivity.

Mr. MACHLUP. This is quite right.

If the rate were not going up by more than, let us say, 2 percent, this would be all right. There is, of course, the possibility that a lot of labor is set free in such an industry so that it would be desirable for that labor to move into other industries. This is not a necessary but a possible occurrence.

In this case it would really be better if the rate did not rise there at all, but rose only elsewhere.

Representative CURTIS. You do not object, though, to that, and you do think there is a value of some incentive being in there?

Mr. MACHLUP. Of course.

Representative CURTIS. That answers that question.

Now then, of equal importance, in this presentation how in your judgment could price go down in a proper fashion?

Because it would seem to me you have been saying that in these areas of increased productivity, and taking your model on the basis that prices do not go up—in the period you referred to in the great economic growth in 1875-90, the prices went down—surely prices can go down in the areas where you have had increased productivity.

Mr. MACHLUP. Right.

Representative CURTIS. Is that your judgment as to where they should be going?

Mr. MACHLUP. They can go down and they should go down.

Now, if there are industries that are reluctant to lower prices, something might be done to make these industries more ready to reduce prices, to encourage these industries to lower prices. With regard to this point, I might say, since I see Congressman Reuss here, I believe that the device that he once favored; namely, the device of making it harder for industries to raise prices, would boomerang.

If you make it harder for firms to raise prices, you make them more reluctant ever to lower prices.

Representative REUSS. I will be seeing you shortly.

Mr. MACHLUP. Good.

Representative CURTIS. Thank you, Mr. Chairman. I have exceeded my time.

The CHAIRMAN. Do you have other questions?

I took more than my share of time.

Representative CURTIS. I prefer to yield, and then I will come back.

The CHAIRMAN. Mr. REUSS.

Representative REUSS. I want to get right to the meat of the coconut in your constructive suggestion for attaining the three goals we are after.

Is it a fair interpretation of your statement that you feel that in many branches of industry, productivity increases are not reflected in lowered prices, indeed sometimes they are reflected in higher prices?

Mr. MACHLUP. Yes.

Representative REUSS. That labor in those successful industries bargains for, and frequently gets, wage increases in excess of the national productivity increase, although not perhaps in excess of the company or industry productivity increase; that these spill over to other industries less able to meet them; that these cause price increases, and this causes consecutive inflation which is harmful to the attainment of these goals.

Mr. MACHLUP. I am delighted. That is a fair and excellent interpretation of my views.

Representative REUSS. You throw out as a solution a Draconian monetary-fiscal policy for political reasons, and a policy of drastic reductions in tariffs and international trade restrictions for other reasons, and you say then that:

Exhortation and the pressure of public opinion remain as the only possible courses of action short of direct controls—

which you have thrown out for philosophical reasons.

Mr. MACHLUP. Yes.

Representative REUSS. Fair enough so far.

Mr. MACHLUP. So far. I don't know that "philosophical reasons" is the right expression, but I accept it.

Representative REUSS. You say that exhortation without the benefit of public opinion is batting the breeze, and you make a few points about public opinion.

This is where I want to start in with you, because we are now getting into political science as well as economics.

Mr. MACHLUP. That is right.

Representative REUSS. In response to a question from Senator Bush you mentioned that merely holding a hearing like this is valuable, and that sounding off on the subject matter by Members of the Legislature is also valuable.

I would certainly agree. However, I point out that there are some 535 Members of the National Legislature, that the political parties are somewhat puckishly organized, to say the least, and this is not really a very good forum for educating the public.

Would you agree that the legislative branch is not particularly apt for this?

Mr. MACHLUP. They are not particularly apt, but they are the best we have. I know that several hearings of Congress have served

this purpose admirably. Indeed in some instances the intended purpose, though perhaps not the announced purpose, but the purpose in the mind of the legislators, has been to sound off and use this as an educational device.

Representative REUSS. Let me ask you this to get down to brass tacks: This is the suggestion that the executive branch should be doing much more in this field than it has done and that it is indeed a better instrument for getting at this problem than the Congress, though Congress, of course, has to play its part.

In your opinion, would it not have been useful had the President last March, or April, or May, before the steel strike erupted, set up a national fact-finding board of inquiry, staffed by men of unimpeachable integrity, to take a look at the entire wage-price productivity-profit picture in the steel industry; and had this board then come up with a study which would have been made public, possibly with recommendations for a wage pattern and a price pattern in the steel industry which in the opinion of the President, acting through the fact finders, would have served the public interest?

I suspect that, had that been done, the analysis and recommendations would probably have been that steel wages were doing quite well vis-a-vis the rest of the economy and that, therefore, a very, very moderate wage increase, or perhaps no wage increase at all, but certain fringe benefits, accompanied by a meaningful price reduction, would have been in the national interest.

In your opinion, would or would that not have been a useful device, and calculated to deal meaningfully with the problem which you have pointed out is essential?

Mr. MACHLUP. If I may have an opinion that counts in the field of political science, which is not really my field, I would say such a fact-finding board could have served a very good purpose provided they had immediately sifted out what are the relevant facts and what are not. But I am not so sure that the fact finders, however well meaning, would not have looked at the wrong facts.

Representative REUSS. I am talking about a factfinding board armed with a Machlup slide rule.

Mr. MACHLUP. That surely is always good.

Representative REUSS. Is that not, in fact, the most meaningful way to get at what you are driving at here? Just talk by Congressmen and Senators, valuable though it may be, does not really cut much ice.

Mr. MACHLUP. The trouble, Mr. Congressman, is that so many fact-finding boards of the past have stressed the wrong facts. We have had many factfinding boards ever since the war that stressed the ability-to-pay arguments.

Representative REUSS. I am talking about a factfinding board that took into account the Machlup spillover.

Mr. MACHLUP. Yes.

Representative REUSS. Unless you take into account the spillover the factfinding board is not in much of a position to suggest a price decrease, is it? Because if it is just going to take into account whether there is enough fat on the bones to pay this wage increase, it does not involve the slide rule, but that is all that it does involve.

Mr. MACHLUP. I am sure you have read what the industry spokesmen said in the last few days about the steel strike, when they spoke of a noninflationary wage increase, meaning a wage increase that would not raise steel prices.

Now here you have the wrong fact being stressed, even by the representatives of the steel industry who said they wanted to avoid further inflation.

Now this gives me so little hope that we would ever get people on factfinding boards who see what I consider the light, that is, people who understand that the question of the amount of profit is not important in this whole context.

I would be delighted if there were a factfinding board that did hold my views and deemphasized the profit situation. With this proviso I agree with you that a factfinding board showing that there are other facts that are much more important would have been an excellent thing.

Representative REUSS. And by those other facts you mean the position of the entire economy?

Mr. MACHLUP. That is right.

Representative REUSS. Not merely the company or industry involved?

Mr. MACHLUP. Correct.

Representative REUSS. Would you say further that such a factfinding board, called by whatever name you will, might well operate even independently of a specific labor dispute prior to but in those areas of the economy where there are national repercussions from what happens?

Mr. MACULUP. Yes, sir; I agree.

Representative REUSS. I am glad we have had this colloquy because you really are, even though you do not know it, for the Clark-Reuss bill.

Mr. MACHLUP. I am? I am very happy to learn this. I apologize if I did not read the bill correctly. I was perhaps misled by the fact that your bill is often linked with the bill of Senator O'Mahoney, which I have read carefully and which definitely does want a factfinding inquiry prior to any price increase by large corporations.

Such a performance would, I am afraid, make industry more reluctant than ever to consider a reduction in price because if it is so hard to get the price up, then the first rule for the industry would be never to lower a price.

Representative REUSS. I agree with you that a national wage-price policy, a standard to which public-spirited management and labor can repair, has to take into account not merely price increases, but the possibility of price decreases.

Mr. MACHLUP. That is right.

Representative REUSS. That is all.

The CHAIRMAN. Senator Bush.

Senator BUSH. I want to join my colleagues, Professor, in congratulating you on this excellent paper. I think it certainly is one of the best that we have had.

I intend to study it further. I know we will all profit by it.

On this question of creeping inflation which you dealt with, we have had testimony here that this was a good thing and we have had

testimony to the effect that about 3 percent per year of creeping inflation would be helpful to economic growth.

I take it from your paper that you do not agree with that?

Mr. MACHLUP. I do not agree with that, sir.

Senator BUSH. I certainly agree with your point of view. I want to ask you this question: I made the point recently that if we have creeping inflation it must come out of the savers of this country whose savings are in fixed dollar obligations.

For instance, we have, according to the latest Treasury figures, approximately \$800 billion worth of savings of our citizens in dollar obligations such as \$500 million of life insurance policies and I cannot remember the exact billions of savings bonds, of Federal savings and loan deposits, of savings bank deposits, of thrift accounts in the commercial banks, but all these various media of dollar savings amount to approximately \$800 billion.

Now, is it not true, is it not valid to say, that a creeping inflation of 3 percent per year is really a hidden or indirect tax of 3 percent on that \$800 billion which, therefore, is an equivalent of approximately \$24 billion of hidden tax upon the savers of this country?

Is that a fair statement?

Mr. MACHLUP. I think it is a fair statement, but it does not go far enough, because it is not only the savers who suffer from the creeping inflation. There are always large parts of the labor force who suffer, because the labor force is several times the size of the people who can be represented by strong trade unions. Thus, a large part of the labor force suffers, too.

Perhaps the worst consequences of an inflation is not the redistribution of wealth and income, but rather the ways in which decision-makers react to the rising price level. This happens in ways that reduce the efficiency of the economy.

Senator BUSH. I think that is right, I did not mean to say that this was the only effect of creeping inflation, but I wanted to get your opinion as to whether just that much of the effect, that is to say the direct effect on the dollar savers, whether it is valid to say that this is a hidden tax, that they are the ones that pay, at least in part, for it.

Of course, as you point out, those who live on fixed salaries, civil servants, teachers, the preachers, and so forth, and the labor force, as I presume you include them in that—

Mr. MACHLUP. Right.

Senator BUSH. Also help pay the bill.

I think if we can somehow make our people realize that this 3 percent creeping inflation thing is not tax free, that it has to be paid for and that these are the people who pay for it, and they are those who least can afford it, then those deserve our best treatment, namely, the savers.

If we could get that message around this country it would be a great thing for us. Do you agree to that?

Mr. MACHLUP. I agree with that.

Senator BUSH. I agree with Congressman Reuss in part, that I think the President has tremendous authority, as we saw in the way he has rallied public opinion on basic issues, important issues, and this has had a tremendous effect on decisions by the Congress sometime. That is no doubt in the case of the Landrum-Griffin labor bill,

that he mobilized public opinion there in a way that was most unusual.

The CHAIRMAN. And most unfortunate with respect to the bill passed by the House.

Senator BUSH. I beg your pardon?

The CHAIRMAN. Most unfortunate.

Senator BUSH. That is the Senator's opinion. I take quite the opposite view; it is very fortunate that he did so.

Nevertheless, I would hope that he would adopt your slide rule and as this coming year comes on try to make clear to the people the economic philosophy which I think you have more clearly set forth in here than I have seen in any paper that we have had on this whole subject of economic growth and price stability, inflation, and so forth.

Mr. MACHLUP. Thank you, sir.

Senator BUSH. The reason I hope he will do it is that he has the audience. This is perhaps the most important thing of the day to them, certainly one of the most important.

I agree. I take a firm, a rather firm, view of the factfinding board's suggestion in a matter like this just for the reason that you suggest: The question is what facts are they going to look at and who are they going to be?

I would have great doubt. Also, it suggests an intervention of Government into collective bargaining that I think should be discouraged more than encouraged.

I think perhaps that as a result of this very severe strike that we are enduring now that possibly the realization will come that we do not need so much Government intervention; maybe we need less in connection with collective bargaining matters.

How do you feel about that? Have you thought about that?

Mr. MACHLUP. This is one field, Senator, in which I really should disqualify myself. I have not done too much work in the field of labor relations and I do not think my opinion would be worth much.

Senator BUSH. I have no other questions, Mr. Chairman. Thank you.

The CHAIRMAN. Congressman Curtis.

Representative CURTIS. Before I ask the other series of questions, I do want to get into this little debate in political science because I personally think that the Congress is the best institution for this fact-finding that has been discussed.

I have long been a critic of these executive factfinding boards. It is true, though, that Congress has to improve its procedures and improve its methods of congressional debate, its methods of hearing, reporting, committee staffing. The press has to do considerable improving because today we are very dependent on the press doing an adequate job.

The Joint Economic Committee, I think, has created some techniques that are unusual and something new in political science and mainly because we are not a legislative committee.

But it depends on the adequate staff which we have developed and it depends on fairness in setting up the hearings. At this time I want to pay my compliments to Senator Douglas, the chairman, for the fairness and objectivity with which these hearings and these panels have been set up because I think this is exactly the technique that is

going to bring about what you have described as bringing out these factors.

Though it may be a little slow, I think we are making some real progress in this area.

The CHAIRMAN. I want to thank the gentleman.

Representative CURTIS. I mean it from the bottom of my heart.

I feel that these are techniques that we are developing that will go a long way to develop what our very competent witnesses have been suggesting and will bring to the public, the economic elements needed. I am convinced that the executive factfinding board is not the technique but the institution of Congress.

More and more one realizes we have a unique opportunity in our society to develop along these very lines.

I remember when we had the UMT executive factfinding board, who when they made a report, propagandized the American people and even said to the Congress of the witnesses appearing before them that "in order that they be frank with their testimony, we have to keep their testimony secret."

Of all the nonsense about a method of developing information for the benefit of people, that was about the worst in my judgment.

The line of questioning I wanted to pursue is in regard to your reference to price stability and the need for it. You said that some—economic puritans treasure a stable price index as a matter of principle just as they treasure an A for good behavior or deportment in the report cards of their offspring.

Is this not more than that?

As I have always looked at a stable price level it is trying to preserve a measuring stick of economic endeavor, hard work, ideas, and so forth. Maybe we cannot preserve the dollar as a measuring stick, but is not the real value to be derived from that thought alone and not just from economic statistics? It goes way beyond that.

Mr. MACHLUP. I agree fully. The point I was making here is that one should not consider price stability as an end in itself, as an ultimate value. It is valuable because it has other effects, such as to help economic calculations in terms of money.

Representative CURTIS. I thought it was even beyond the statistics. It seems to me it provides a reference point for other things so that you can find out if we will use it as a reference point, something to tie it to, then we can determine where the mistakes are in other areas.

Mr. MACHLUP. That is what I mean by economic calculations. I did not mean the statisticians or economists making these calculations, but the businessmen and the people in everyday life, in their everyday actions making the calculations.

Representative CURTIS. That is right, and trying the best we can to measure the investment dollar and consumer dollar and those values that go in there.

Mr. MACHLUP. Right.

Representative CURTIS. I almost think that needs to be a goal in itself.

Mr. MACHLUP. The point is I believe none of the economic goals is a goal in itself. They all are subservient to something bigger, something contributing to the welfare of the people, and I don't think we should allow any of these goals to become an end in itself, except perhaps liberty. That, I would consider an ultimate value.

Representative CURTIS. I agree with that.

I am thinking more in the nature perhaps—in science we develop weights, measures, and so forth, in order to grope with the problems and discover new things. It seems to me in economics we need similar measuring sticks or we cannot go ahead.

It looks like to me if we try to establish a value that can be used as a measuring stick, to the extent that it is a necessary tool in order to move ahead in these other areas to even preserve freedom if you please, that it becomes a very necessary intermediate goal.

Mr. MACHLUP. I agree. This was the purport of my paper. I wanted to show how important price level stability was for that very purpose. Not of itself, but as an aid to maximum productivity, to maximum output and to as much growth as we can have in our institutions.

Representative CURTIS. The thing that has disturbed me is that by manipulating a measuring stick you can make some things that are economic diseases or malfunctioning, you can make them look as if they are corrected and they really are not.

Mr. MACHLUP. Yes.

Representative CURTIS. That, to me, is a damaging thing. If we only face up to not messing with measuring sticks and say all right, here is what it is measuring—I see that, for instance, in a very obvious way on this fight that goes on every year about the increase in the debt limit. There is a certain group of my colleagues that always rush in to oppose that on the ground that they are for economy, when actually what they are opposing is the indicator which shows what has happened.

So in this area I find that price stability is always an attempt to change the measuring stick in order to make the problem go away.

You have clarified my thoughts in your paper. Thank you.

The CHAIRMAN. Congressman REUSS.

Representative REUSS. Just a question or two about the point you make, Dr. Machlup, concerning tariff restrictions by this country.

You say if they were lowered that that probably would be a good way of combating the problem you are talking about. I happen to be a free trader, too, and I think there are any number of good and sufficient reasons for moving in that direction.

However, have you really tried to relate these sticky industries, the ones that would respond to the Machlup slide rule we are talking about, and tariff protection—I wonder if that is the way the structure really works?

Mr. MACHLUP. I was greatly impressed when Minister Erhardt, of Germany, told me a few months ago how he and his Government were able to use tariff reductions to avoid inflation. He told me—I forget the year of which he spoke—that when it looked as if a big wage push was in the offing and, since business was booming, as if the German industrialists were quite willing to grant wage increases, he was able to get the tariffs down by 35 percent within 1 year, I think in two steps, and he said this was what saved the day.

The rapid reduction of tariffs made it clear to the industrialists that they could not possibly afford to grant these wage increases.

Representative REUSS. There is no doubt, of course, that the lowering of trade restrictions, if they are in fact what prevents competition,

is a sovereign way to induce competition and it is equally true that throughout much of Western Europe and particularly in Minister Erhardt's country, Western Germany, trade restriction, particularly import quotas, have been a leading method of avoiding competition.

However, by and large, and happily, we don't go in for import quotas.

Mr. MACHLUP. I am afraid we go into this more than Germany.

Representative REUSS. More than we would like to see, but by and large we did not have the system of quantitative restrictions that every Western European country had in the 10 post-World War II years.

There is no doubt, therefore, that in the Netherlands, France, Western Germany, and Italy the dissolution of those import quotas did give a tremendous shot in the arm to competition, a stiffening of the employers' backbone at the bargaining table.

It also, in a country like the Netherlands, vested the labor movement with a very high sense of social consciousness which caused them voluntarily to forgo wage increases for which they would have otherwise asked.

My question is: Is this experience really valid for us here? We do not, by and large, have our heavy industry interlaced with import quotas. Our tariffs on many industrial articles are surprisingly low.

I am thinking of motorcars, for instance, where I think it is 10 percent. Has any study been made, therefore, of the interrelationship between the sticky areas where you have this wage spillover that worries you, rightly I think, and those areas in the economy which are now subject to really meaningful protection against foreign trade.

If there was such a connection between, then I would say this is obviously the way to get at it.

Mr. MACHLUP. I do not know the facts sufficiently. Of course, I know the book that Howard Piquet has written and I know several other studies, but I would not know the facts well enough. But if we remember that, for example, in the hearings of the automobile industry, the hearings which were conducted in the Kefauver subcommittee, great stress was placed on price reductions of some \$100 or so.

Well, a price reduction of \$100 might perhaps be achieved without exhortation and without anything, just by reducing the tariff.

Now, I do not know the situation well enough. I do not have the facts at my command, but my feeling is that there are a number of industries where protection does play a part and unfortunately the United States has also gone into a good deal of quota protection in recent years.

We have only recently introduced direct quantitative restrictions in the field of oil. I am afraid there are some other fields in which quantitative restrictions are in force, and many other fields in which the tariff makes a difference.

Representative REUSS. I agree that where it does it should be the subject of a good hard look and perhaps our committee can get together some of the materials and try to match up the cases of sticky prices and sticky wages and tariff or import quotas protection.

Where they interlap there is certainly a connection between the two.

Mr. MACHLUP. I think it would be a splendid undertaking.

Representative REUSS. One more question, leaving tariffs and getting back to the situation in steel and the hypothetical factfinding

board of last spring which we talked about in our earlier colloquy, if such a board had in fact been set up and if you had sat upon it, yourself, and your views as to spillover had prevailed, your recommendation would have been for a price decrease in steel, I gather?

Mr. MACHLUP. Yes, sir.

Representative REUSS. I suppose you are not prepared to give us any indication of the amount, approximate amount of such a decrease.

Mr. MACHLUP. No; I have not studied the case. But my impression is that I would very forcefully have urged a price reduction of steel at that time.

Representative REUSS. If such a factfinding board should be set up in the future, after, let us say, 1961, would you be available to serve on it?

Mr. MACHLUP. I think, sir, I would consider it such an important assignment that I would feel dutybound to accept it.

Representative REUSS. Thank you very much.

The CHAIRMAN. I have only one final question, Dr. Machlup. This deals with the standard which you have set, that the increase in wages in any one industry should approximate the increase in the average productivity in society as a whole rather than the increase in the industry in question.

Now, if this were done, how would you adjust wage differentials which might become obsolete due to changing techniques?

For instance, the blacksmith passed out of the picture, and the steel crafts in various industries change.

There might well be inequities at the very start. To apply this uniformly across the board how do you provide for the adjustment of differentials for skill, risk, and so forth?

Mr. MACHLUP. Of course, I know of no mechanism which would bring that about except competition and the free decision of the people involved.

My point was merely that public opinion would be militated against these big, quick, and immoderate increases. That certainly would not solve the question of wage differentials, it would not establish economically correct wage differentials.

In the past, several years ago, I played with an idea and described it also in one of my books, the idea being that wage increases should be made automatically, by 2 or 2½ percent a year, everywhere except where there is great excess supply of labor. Now, if, through technological changes or shifts in demand, or other reasons, an excess supply of labor, unemployment of labor, should arise in particular areas, clearly I would say the wage rates there should not go up.

It would be in the interest of the people working in these industries that they would refrain from participating in that general increase, refrain for the sake of their continuing employment.

The CHAIRMAN. I have no further questions.

Mr. MACHLUP. I have one little remark.

I am afraid that I overstated or gave a wrong emphasis to one point. I may have given the impression that I believe that the monetary and fiscal brake to be applied to prevent inflation might lead to unnecessary unemployment. Many people ask whether, if you prevent all creeping inflation by use of the monetary brake, this would not lead to severe unemployment.

I have the feeling that it would not, because I believe that wages would not rise in that case. It is true, if wages were increased despite the application of the monetary brake we would get very severe unemployment. The point, however, is that if the monetary brake is applied, money wage increases may be much more moderate or may not be made at all.

Hence, the fear that a policy of monetary stringency would lead to very large unemployment, I think, is an exaggerated fear.

The CHAIRMAN. May I ask this question:

How can we define excessive unemployment. At present we have an unemployment rate of 5.6 percent seasonally adjusted plus another 1.3 percent, in voluntary part time, totaling nearly 7 percent. Would you regard this as excessive?

Mr. MACHLUP. This is very difficult, Senator. I don't think there is any one who can say that this or that is the employment level to be attained at any price, or this is an excessive or an acceptable rate of unemployment.

My point was merely that under a policy of monetary stringency you would not get more unemployment than you would get under a policy of creeping inflation. In the long run, the average rate of unemployment would probably not be greater under a monetary policy that prevents creeping inflation than it would be under a policy which permits a creeping inflation.

The CHAIRMAN. But you have no feeling as to the criteria which can be used to identify whether unemployment at any time is excessive.

Mr. MACHLUP. I am afraid I don't.

Representative CURTIS. This has stimulated me in asking this question, and discussing the way we measure unemployment—particularly when we are getting into this discussion of rapid economic growth and what is called frictional unemployment.

The question is: Should we not have some set of statistics or some way of measuring the available jobs unfilled in a society? We have unemployment and there is no question about it, but I also know that there are a lot of unfilled jobs.

Mr. MACHLUP. This knowledge would be most desirable; indeed some definitions of full employment were made in terms of a comparison of unfilled jobs and unemployed.

It would be most desirable if we had such a statistical measure, but I am afraid we don't have it now, at least not in any satisfactory way.

The CHAIRMAN. Thank you very much, Doctor.

Mr. MACHLUP. Thank you.

(Mr. Machlup subsequently submitted the following for the record:)

THE JOHNS HOPKINS UNIVERSITY,  
Baltimore, Md., November 13, 1959.

Senator PAUL H. DOUGLAS,  
Chairman, Joint Economic Committee,  
Congress of the United States,  
Washington, D.C.

DEAR SENATOR DOUGLAS: I have received several questions on a point I made in my recent testimony before your committee, indicating that I was misunderstood. I wonder whether it would be possible to make this letter a part of the record, or to add the following supplementary statement to my testimony.

At no point in my statement have I disapproved of, or warned against, wage increases of any percentage whatsoever, provided these increases were of the "responsive" type. In other words, a wage increase in response to an excess

demand (short supply) may be of any size and yet would not violate the principle formulated in my testimony. This principle applies only to "aggressive" wage increases, that is, to increases that are not in response to increased demand for labor in the industry and area in question, and are thus the result of a short supply in that particular sector of the labor market.

I apologize for not having made this clear enough to guard against misunderstandings.

Sincerely yours,

Fritz Machlup.

The CHAIRMAN. We will adjourn until 2:30 this afternoon.

(Thereupon, at 12:05 p.m., the committee was recessed, to reconvene at 2:30 p.m. the same day.)

#### AFTERNOON SESSION

(The committee reconvened at 2:30 p.m., upon the expiration of the recess.)

Representative REUSS (presiding). The Joint Economic Committee will be in order.

Chairman Douglas has unfortunately had a cold which got worse this morning and hence currently will not be with us this afternoon.

In this session of the final week of hearings on constructive suggestions for reconciling and simultaneously attaining our economic objectives, we will next hear from Prof. Albert G. Hart, of Columbia University.

We are very happy to have you here, Professor Hart.

You have a somewhat lengthy paper which I believe you would like to file, together with its appendixes.

Without objection, it will become a part of the committee records.

We would like to have you proceed in your own way to spell out whatever you wish, sir.

(The prepared statement referred to follows:)

### STATEMENT OF ALBERT G. HART, COLUMBIA UNIVERSITY

#### STATEMENT OF ALBERT GAILORD HART, COLUMBIA UNIVERSITY

##### THE GONG, THE WHISTLE, AND THE SQUEALING ACCELEROMETER

Back in 1946, when systematic American policy for economic stabilization was just taking practical shape, I suggested that we might set policy up on a gong-and-whistle system. Most of the time, we could hope that the economic system could be kept in reasonable balance by the so-called automatic stabilizers. But special measures would be called for to revive employment if a "gong" was set off by a rise of unemployment beyond some moderately serious level, and special measures to restrain excessive price increases if a "whistle" was set off by a rise in the cost of living index faster than some moderately serious rate of climb. If "adequate growth" is to be added to the list of objectives, a third alarm device is needed. We should hitch up some sort of growth-measuring device. Since "adequate growth" seems to be viewed as a steady percentage rate of rise, which implies that the absolute rate of growth accelerates, an accelerometer seems to be the right kind of measuring instrument; and to give the alarm, it seems to need a device which will issue a wavering squeal if growth slows down too much.

The rules for working such a system are straightforward enough so long as we never hear more than one alarm at the same time. But there is no guarantee that the gong and the whistle will not both sound at once. If our rule is to exert an upward push on the economy when the gong says unemployment is too great, and a downward push when the whistle says prices are rising too fast, there seems to be no way to be right when both signals coincide. The upshot of the discussion in 1946 was that such a situation would suggest something wrong in our machinery for fixing wages and prices, and that the remedy would lie in

policy measures outside the ordinary scope of stabilization policy. This conclusion has been reaffirmed by your witnesses at this series of hearings, and the appropriate policy measures still seem to be those which came to mind in 1946—measures to give more play to competitive forces that tend to hold down prices. But how great an improvement can be scored how soon nobody can tell.

The situation gets still more complicated if we add the squealing accelerometer to the gong and the whistle. In the nature of the case, this cannot be a very accurate instrument. As several of your witnesses have pointed out, changes in the composition of output make it impossible to gage the rise of productivity at all closely. Broadly speaking, the available measuring instruments seem to have a bias toward exaggerating our progress when the composition of output shifts in the direction of more metal products, and to understate our progress when the composition shifts away from metal products. The only reasonably reliable measurements of growth and acceleration seem to rest on comparisons of successive peaks of total activity several years apart. When we lack a very recent peak for comparison (as we did in 1958), our accelerometer gets eccentric. It may squeal when we are not in trouble or stay silent when we are. Yet we are not excused from being concerned as to how the growth process is going.

#### *Social significance of the three goals*

When we look at the three goals of price-level stability, full employment, and adequate growth, we find that the damage done when we fall short in any direction is not easily measured. In each case, it depends on the way in which we fall short, as well as on the degree.

To begin with, consider inflation. Its evils are described as "distortions" and "inequities." We are very properly concerned, for example, with what happens in inflation to people who provided for their retirement at lower prices and since they are no longer earners cannot ride along with inflation through getting their pay increased. But how hard such people are hit depends not only on how much the cost of living rises, but on which components do the climbing. The forces that have held back the price rise in poultry, eggs, orange juice, and men's clothing in recent years have done something to mitigate the problems of this retired group; the disproportionate rise in hard goods has more impact on the active workers in society. For the more active groups, inflation is less of a problem, since many types of income rise with prices. Even those whose incomes we describe as "fixed" commonly have enough of a stake in other types of income to be somewhat protected. The underpaid young schoolteacher may have to wait for his raise if prices go up; but meanwhile his young wife is apt to get a share of the rise on her secretarial job.

To my taste, the main objection to inflation lies in the "side effects." Inflation is a source of friction in society because every group has to be perpetually pressing its claims for fear of being left behind, so that we live in an atmosphere of conflict and many common interests are lost to sight. Inflation intensifies opportunities to grow rich by being clever in guessing future price changes, rather than by figuring out ways to produce and serve human needs. This diverts creative energy from more solid activities; and by creating conspicuous examples of undeserved gains, it accentuates the group conflicts I just referred to. When the employees down the line can see top management setting things up to "cut a melon" in the form of capital gains, as is so easily done in an inflation, how can we expect the employees to feel their own claims must be kept in line with solid productive achievement? Furthermore, inflation leads us into the trap described by the old proverb that the remedy can be worse than the disease. In my judgment, the proposals for peacetime price control which keep cropping up whenever worry about inflation grows more intense would be disastrously disruptive if adopted. Claims for their usefulness take for granted that compliance could easily be verified and noncompliance easily suppressed. This is not true, and uneven enforcement of such measures could introduce a moral rot into our society much more poisonous than that of prohibition. This is a case where an ounce of prevention may forestall the use of pounds of quack medicine.

The objections to unemployment are much more clear cut. Inflation involves a redistribution of income and wealth from Peter to Paul. Unemployment takes income away from Peter without giving it to Paul: It is a redistribution at the expense of the unemployed and in favor of nobody. (Of course "it is an ill wind that blows nobody good," and there are minor gains to some of these still employed because others are out of work; but there are also byproduct ill effects.)

On the other hand, though unemployment is a clear-cut evil, refusal to accept it may involve us in alternative evils. If we insisted on placing every boy in a job the day after he graduated from school or left the Armed Forces, the fit between jobs and abilities for our young men would be worse than when they take a few weeks to look around. The same applies to older workers who are out of work because their previous line of production has been cut back or because there proved to be a misfit in their previous placement. Furthermore, there is again a question of remedies worse than the disease. When unemployment gets below a certain moderate level (not far from where we would have been in recent weeks, at a guess, if we had not been held back by the steel strike), efforts to cure unemployment by general stimulation of the economy prove to be ineffective against unemployment and to run off into inflation. War-time experience suggests that the minimum level of unemployment can be cut by cultivating a situation of excess demand, with lots of spending power pressing against price control. But here we are back into the range of troubles I cited a moment ago.

Failure to achieve adequate growth is a still more subtle problem. As previous witnesses have told you, our understanding of the economics of growth is still primitive; and I might as well say that I am far from expert on many aspects of the problem. I agree with Galbraith that the need of our "affluent society" to raise its standard of living is much less real than that of (for example) India; and I find myself mildly disgusted by the slogans which imply that we owe it to the Indians and other havenots to make sure that we Americans eat ambrosia, live in palaces, and have lots of fun on lots of 3-day weekends. The main argument for a further general rise in the American standard of living (and it is not a trifling argument) is that we have rather a good record for solving social problems in a situation where the growth of output makes it easy for one group to gain income while other groups also gain or at least do not lose. The group conflicts I complained of a moment ago are very mild compared with those of other times and places. While the record is open to plenty of criticism, it seems to me that those who had the lion's share of power and economic welfare a generation ago have given ground rather gracefully in sharing power and welfare with the underprivileged groups. To help us continue this "peaceful revolution" and guide it into constructive channels, a general uptrend in per capita income is a great help.

Apart from this argument, it strikes me that the direction and quality of growth is more important than the speed. Every day I pass places where the suburban "growth" of New York is in evidence, and see the developers cheerfully chewing up the amenities of the neighborhoods they are trying to build. The recorded amount of growth would be the same if they were ingenious enough to work around some of the trees instead of bulldozing them down, or to save some bits of open space, or to lay things out so that the shopping facilities stimulated by their expansion will not create dangerous traffic snarls. The extent to which one piece of "growth" cancels out the benefits of another is astounding. We would be in better shape a generation from now if we had growth that was somewhat slower in many dimensions, but not quite so uncoordinated. On these problems, if we can judge from the redirection of research now in progress, economics will have much more to contribute a few years from now.

#### *Agreeable surprises of the postwar period*

Little as I like to encourage complacency, we have to recognize that the period since World War II has showed an astoundingly good record of growth and stability. I am frank to admit that I have been surprised, over and over again, by this agreeable experience. This is not an apology; unless you keep track of whether experience matches your expectations, it is hard to learn much; and it is when you notice and interpret a surprise that you have a chance to extend your grasp. This has been a very instructive period for economists and we cannot afford to throw away the benefits by pretending we "knew it all the time" like little Audrey.

At the end of World War II, most competent economists expected a serious reconversion-depression. The consensus was so strong that I later got a lot of credit for foresight out of an article (published in September 1945) which modestly said that policy should not be based exclusively on the need to combat this depression, but should allow for the possibility of other outcomes. The widespread view, shared by economists and laymen that it might take continuous effort in the postwar period to prevent the economy from reverting to

depression as its normal state was the driving force behind the Employment Act of 1946. It would have been considered quite reasonable to hope that unemployment would be appreciably below 3 million in the best years; but the idea that we would average less than 3 million for the years 1946-59 would have been considered utopian.

The stability of approximate full employment has been most impressive. In prices of course, we have had two big surges—from the end of the war into 1948, and in 1950-51. When hostilities ended there was a widespread expectation that we could hold the 1945 level of prices, and stock-market values suggested than an influential part of business opinion did not accept higher prices as permanent but regarded a sag off at least part way to prewar levels as a real possibility. As we look back, it is hard to reconstruct this view—it seems so obvious now that the excess liquidity and pent-up demand would make it easy for sellers to boost prices, and that the accumulated tensions of the labor market would boost the level of costs. The 1950-51 spurt was obviously linked to the psychology and financial situation of the Korean war. By hindsight, it seems as if we psychologized ourselves into it by our attitude toward price control. Sellers of both products and labor expected controls and did not want to get “frozen in” too low; while the authorities (heartily seconded by economists like myself) hated to impose controls without assurance they could be fully enforced. That this psychology in combination with an inventory boom and cheap credit could boost the price level does not suggest an undue susceptibility of the economy to inflation. The fact that the inflationary pressure did not continue to pile up against the controls imposed in the spring of 1951 was an agreeable surprise to most responsible observers.

Aside from these two upward jerks there have been signs of an upward creep in the price level. But the pace is readily exaggerated. Compared with the average for 1948, which marked the cresting over of the immediate postwar price surge, the official consumer price index will show a rise of about 22 percent for an annual rate of gain of about 1¼ percent. But about half of this rise took place in late 1950 and early 1951 in connection with the Korean war. If we rule out the increase from May 1950 to May 1951, the rate of rise for the remaining 10 years of the period works out at 1.1 percent per year. This is far from negligible. Yet it is only when economic affairs in general are going extremely well that a country can afford the luxury of worrying about such a modest rate of inflation. Almost every other country of the free world has had a much more rapid rate of inflation than we in recent years.

Comparisons with our own history are also revealing. True the sustained prosperity of 1923-29 was noninflationary (at least if we leave the stock market out of account). But back before World War I we had a very interesting “creeping inflation.” From 1902-12, according to the consumers’ price index submitted to you at your April hearings, there was an average annual price rise of 1.3 percent per annum despite setbacks of business in 1904, 1908, and 1911 which cut much deeper than the postwar setbacks. This piece of history is hard to reconcile with the view that it is the innovation of nationwide collective bargaining which causes prices to creep upward, since it happened before unions in this country became very powerful. It would be more in line with history to suggest that our procedures for setting prices and wages normally yield price increases at the peaks of business (the peaks of the 1920’s being partial exceptions), and that when we are on a high plateau it takes abnormally good functioning of the pricing machinery to keep prices completely stable.

An alternative way to look at inflation (suggested by Professor Fellner, of Yale, in his too-little-noticed book on war inflation) is as a social load-shedding device. The parceling out of money incomes constitutes social recognition of claims of income-receivers to share in consumable output. If in the social logrolling process we recognize claims that outrun the available product, not all claims can be met in full. The situation resembles that during the war when the claims to gasoline represented by ration coupons outran the available flow of gasoline. The Puritan objection to a major inflation (to which I instinctively subscribe) is that it shows a shocking lack of social self-control to recognize claims which outrun the available product by 20 percent or so. But in a nation which comes uncomfortably close to being a federation of interest groups rather than of States, an overallocation by only 1 percent or so suggests a very respectable degree of self-discipline.

## EXPLANATIONS OF THE STABILITY OF EMPLOYMENT

Ordinarily, when we set out to explain why things did not go as expected, we find ourselves asking "What went wrong?" But as Paul Samuelson pointed out at a gathering of economists a few years ago, the puzzle when we look at the employment record is, "What went right?"

When we look at the record, it seems as if economists may have an alarmist bias and tend to expect developing troubles to turn out worse than they actually do. This may be so: I would argue that it is the economist's duty to keep an eye on possible trouble spots rather than just frame messages of congratulation when things go well, and some degree of alarmist bias might be a sign of health in the profession. But I submit that in human experience there is such a thing as a run of good luck, and that we should look out for squalls just as much after a period of good fortune as at any other time.

The problem of maintaining high levels of activity has been much simplified so far in the postwar period by needs to catch up on arrears in many directions. Both the war and the great depression of the 1930's slowed down the processes of expansion and modernization. We entered the postwar period with a layout of plant, equipment, housing, autos and other transport equipment, and public facilities adapted to a stationary population in a depression, not to a growing population in a prosperity. Industry did not have the normal margin of capacity over operations, and was counting as capacity and actively using much semi-obsolete plant and equipment. Further needs in the plant-and-equipment field were set up by the discovery in 1950 that we had gone further toward disarmament than the world situation would justify; whole new industries had to be set up to support the new defense structure. Investment for this purpose was made almost entirely safe by provision for 5-year amortization, with charges for amortization of course included in defense contracts.

To a very great extent, we have caught up. Industry now has a reasonable margin of capacity over operations, and while modernization and expansion continue, we can expect less urgency in business demands for facilities. Our worn-out transport equipment has been replaced and our fleets of autos, trucks, railway cars, etc., built out to an adequate scale; though improvement of highways keeps on making room for more expansion. In housing, it looked for a time as if we might have an awkward gap between the catching-up period and the long spell of high activity which is foreshadowed by the prospective coming of age of youngsters born in 1943 and the ensuing years of high birth rates. But we are now so close to the prospective bulge in family formation that there is little room for an intervening slump in housing. In fact, if there were such a slump for a year or two, it would be almost desirable: we could seize the opportunity to catch up on schools and other community facilities which are still in arrears and which call for much the same sort of construction activity as does housing.

Another important element in our record of stabilization, it seems to me, is an indirect effect of our heavy military spending from late 1950 onward. This spending in itself has been far from regular, and has been to some extent a source of instability. But the counterpart of defense spending has been the high level of taxation—in particular, the corporate tax rate which has been about 50 percent since 1950, but also higher rates and lower exemptions on personal income than would otherwise have been necessary. The consequence has been a tax structure which greatly strengthened our "automatic stabilizers." Something like a third of any drop in the value of gross national product is taken up by the reduction of tax liabilities, the rise in unemployment benefits, and the like. This permits business to move quickly into a position where sales exceed output on a downswing of production, because it weakens the feedback effect of reduced output in reducing sales.

Another source of strength is public confidence that the problem of economic stability has been solved (unless for the inflation side, which worries most people less than perhaps it should). This means a willingness to maintain capital outlays in the face of a setback of sales. At least as important, it means a willingness to expand outlays in a mild slump on the strength of news that suggests a renewed upswing is starting—instead of waiting to see how real the recovery is. At the opening of the postwar period (as may be seen from the relatively low prices of corporate shares, which until 1950 did not get much above the levels of 1936-37), there was a lively recollection of the great depression of the 1930's, and a good deal of doubt that full prosperity

could last. But the long stretch of almost uninterrupted prosperity has built up confidence. By now we have had the longest such stretch in American economic history (at least since activity began to be reasonably well measured). The lapse of time means that by now a generation who have never experienced serious economic trouble has a large share in business leadership and is almost fully responsible for household decisions about housing and durables. Confidence is probably enhanced also (though it is hard to say how much) by the trend of politics—the conservative tone of the administration, and the remarkable dearth of any “radical” ideas in any quarter that show signs of developing a serious following.

The stabilizing factor of “confidence” is one about which economists have mixed feelings. It is a wonderful thing if we are permanently immune to panic psychology; and it is very helpful if businessmen and consumers react to any setback in the conviction that it is transitory rather than permanent. On the other hand, this situation presents a dangerous temptation to policymakers. A substantive policy for stabilization which is inadequate will still pass muster if everybody chooses to act as if it is adequate. But to rely on the public's taking this course is risky. We are still subject to psychological surges in this country. For example, the rapid shift in people's preferences among different types of automobiles is suggestive: though since it creates one market at the same time that it weakens another, it has not upset the economy very much. Another recent example is our progress from elation to panic to satisfaction over the polio vaccination project a few years ago. Stock market psychology seems to show increasing instability. Unreasonable optimism may set the stage for a sudden shift to unreasoning pessimism. An adequate stabilization policy should have enough strength in reserve to do its job even though many people think it is not working.

#### *Stabilizing fiscal policy*

As I hinted when I mentioned the high level of defense activity as a factor in our stability, the behavior of “fiscal policy” (that is, taxation and Government spending) has made a great contribution to stability since the war. Let me refer to the figures appended to my statement, which you may find somewhat surprising.

Some of the elementary textbooks of economics we write these days treat economic stabilization rather in the style of a cookbook. Take certain ingredients, mix well, set them in a 40-degree oven for 25 minutes, and there's your cake. The stabilization policy recipe book offers two kinds of cake. Take a business downswing, says the cookbook, break in a substantial fiscal deficit, and you get a recovery. Or take an inflationary situation, mix with a substantial surplus, and you get a noninflationary prosperity. When we get a shade more sophisticated, we say that if business is shrinking fiscal policy should shift toward a deficit (if there is a large surplus, reduce it; if there is a small surplus, turn it into a deficit; if there is a deficit, enlarge it). Similarly, if there is inflation, we say policy should shift toward a surplus.

Now actual fiscal policy isn't made by one chef in a tall white hat, but by thousands of people who never get together in one room and agree on their line. Every committee of Congress has influence on some appropriations and tax measures; every branch of the administration has a hand; and over the country there are thousands of State and local governments, school boards, and the like, carrying on independent fiscal operations. If we sent out a circular to all these people and asked if they were conducting this kind of a fiscal policy, I would bet that almost all of them would deny it. If they agreed on anything (which is far from certain), it would probably be that they were trying to carry on sound finance and avoid deficits.

The figures are clear, though, that in actuality fiscal policy has been according to the new-fangled cookbook rather than according to the old-fashioned orthodoxy. In the table, the state of business is measured by column 4, which shows total output (GNP in 1954 dollars) as a percent of its apparent full-employment level. The course of prices is shown by the price index in column 9. The state of the budget, for State and local governments combined, is shown in column 8, which expresses the surplus or deficit as a percent of the full-employment level of GNP. The two inflationary periods (secs. A and D of the table) are those where the price index in column 9 rises fast. In both cases, column 8 shows substantial surpluses. The three postwar recessions (secs. B, F, and H of the table) are those where the percent of full-employment realized, as shown in column 4, falls and reaches levels below 95 percent. In all three cases, column 8 shows deficits;

though in the 1953-54 recession, these deficits followed upon deficits in the preceding prosperity. On the upswings from the 1949 and 1954 troughs, surpluses appear as soon as recovery was well advanced.

In short, the whole pattern follows the new-fangled recipe except for the anomaly introduced by the deficits in prosperity of the 1951-53 period of peak Government expenditures for defense. This period was one of almost continuous full prosperity (the sage in mid-1952 being in good part the result of a steel strike), and somewhat inflationary (a rise in our price index of nearly 1½ percent yearly, despite some degree of wage-price control). The fact that it was so little inflationary suggests that perhaps we may presently find that a moderate chronic deficit in prosperity is more healthy economically than a balanced budget; in my view, that is something we must feel out.

The strength of these fiscal shifts is substantial. If you look down the length of column 7, you will see that Government expenditures (excluding inter-governmental grants) have ranged from 24 to 28 percent of full-employment GNP since Korea. The shift from a deficit of about 1 percent of potential GNP in 1949 to a surplus of over 5 percent in late 1950 is thus of the order of a quarter of the scale of Government operations. As compared with the change in the percent of full-employment output realized, the shift looms even larger. The shift from a surplus of about 1 percent to a deficit of about 2½ percent between early 1957 and the 1958 trough is of the order of an eighth of Government expenditures, and of the order of half the drop in activity. Similar results appear for the other periods of shifting activity.

A still clearer image of the strength of the fiscal shifts may be formed from the data brought together in the summary table at the very back of the appendix. This shows changes across the main fluctuations of the period in all the items of the basic appendix table, taking half-year periods to eliminate some of the accidental bounce of quarterly figures. For comparison, it brings in the percents of full-employment GNP represented by the two main classes of postponable private spending—durable goods bought by producers and consumers (col. 10) and changes in inventory (col. 11). The results may be summed up as follows:

*Swing in percents of full-employment GNP*

[In percent]

Period	Proportion	Private postponable expenditures	Fiscal magnitudes		
			Surplus	Receipts	Expenditures
Recession, 1948-49.....	-5.2	-4.7	-4.4	-1.9	+2.5
Recovery, 1949-50.....	+5.3	+9.5	+6.7	+4.4	-2.3
Recession, 1953-54.....	-6.5	-2.6	.0	-3.0	-3.0
Recovery, 1954-55.....	+6.4	+5.5	+2.9	+2.5	+4
Recession, 1957-58.....	-6.8	-5.5	-2.9	-2.5	+4

Of the five movements covered, four showed the fiscal surplus moving in the "right" direction, and by an amount large enough to offset a large proportion of the change in private postponable expenditure. In the fifth case (the 1953-54 recession), the surplus shows no change. The reason is plain: this is the one case where Government expenditure changed in the "wrong" direction. In fact, this recession is perhaps best interpreted as a readjustment to the cresting over of armament expenditures in 1953.

The receipts column shows in every case (including 1953-54) a substantial change in the "right" direction. It should be noted that these "receipts" are not on a cash footing, in that they treat corporation profits taxes on an accrual basis. But this is as it should be—both because accruals of profits taxes probably reflect the tax influence on business incentives better than do cash payments, and because the speeding up of payments under the corporation income tax has spoiled the comparability of cash payments. There is an element of luck in the appropriate tax swing in 1948-49, due to the personal income tax reform of 1948, and perhaps in the appropriate tax swing of 1953-54 (termination of excess profits tax). There was no mere luck in the tax swing of 1949-50, which reflected a prompt and positive reaction to the tax needs of the Korean emergency—and in which your committee's leadership played a great part. Overall, any element of good luck on the tax side is mild compared to the element of

luck in the "correct" movements of expenditure in 1948-49 (involving for example the revival of substantial foreign aid) and in 1949-50 (decline of actual military outgo in face of the beginning of the Korean war, because of the momentum of military cuts decided in 1949.). Since 1952, the movement of Government expenditure in each case has been either negligible or "wrong."

Basically, the surprising fact that fiscal policy has followed the stabilization-policy recipe is a tribute to the strength of our "automatic stabilizers"—the corporate tax, personal income tax, and unemployment compensation above all. In addition, there has been fairly good timing of legislative changes in tax rates and tax bases.

#### *Future needs in stabilization policy*

Looking ahead, we should expect the stabilization problem to be more difficult than in the last few years, for several reasons:

(a) Prospects of disarmament seem fairly bright. If we can achieve something like genuine peace, we can hope to reduce the share of Government expenditures in GNP by perhaps as much as 10 percent. The adjustment will include corresponding tax cuts. Particularly if these centered in corporate and personal income taxes, our automatic stabilizers will be considerably weakened.

(b) With the termination of the catching-up phase in business plant and equipment installations, and the end of accelerated amortization commitments linked to defense contracts, we can expect a stronger feedback from business activity to business investment outlays, meaning more powerful swings for stabilization policy to combat.

(c) We can expect stronger psychological surges in the economic field than we have experienced since 1951. The stock market, notably, is in a much more vulnerable position than formerly, and so many people are so deeply involved that a major break might be a serious economic shock.

While our existing stabilization apparatus and strategy has proved reasonably adequate in recent years, we should strengthen it enough to give a margin of safety against the increased hazards just cited.

#### *Recommendations*

I draw the following policy recommendations from this diagnosis:

(1) Any possible intensification of our automatic stabilizers should be favorably considered. In particular, I would recommend:

(a) More scope for averaging of good and bad years for individual income-tax payers, including carryback of unused personal exemption and refunds of previous tax payments to those having a bad year.

(b) Adaptation of banking policy to reduce the surge of banking funds back and forth between loans and investments and smooth the curve of business loans—with their close relation to inventory fluctuations.

(c) Standby arrangements to help local governments in recession (but not in inflation) with such problems as financing school construction.

(2) The half way house between automatic and discretionary fiscal policy should be carefully explored. I refer to possibilities of "formula flexibility," which can provide for appropriate shifts without legislative delays.

(a) Advance provision might well be made for lengthening the duration of unemployment compensation (against a Government contribution to reserve funds) automatically whenever insured unemployment goes above a stated figure.

(b) Advance legislative provision might well be made for two or three alternative schedules of withholding and annual rates under personal income tax. Quick legislation for temporary tax changes would then be feasible, since hearings and debate could be limited to a choice between rate schedules laid out in advance. Or some agency might be empowered to abate standard taxes by a prescribed amount when there were stated indications of recession in production and employment.

(3) The idea of correcting or forestalling fluctuations in business by manipulating Government expenditure should be deemphasized. Foresight is too limited and the decisionmaking period too long to make such manipulations turn out well in timing. I might make an exception for changes in the rate of contract-letting for light construction and highway work under continuing programs. A good example of the results of trying to be too

smart in this direction is the expenditure program adopted to help against the recession in 1958, which is bearing fruit too late to be helpful.

(4) Discretionary antirecession moves not covered by formula flexibility might well be reserved for situations where we are definitely in serious trouble. The attempt to offset or forestall small fluctuations may do more harm than good.

(5) In view of the good general record since the war, we should try to persuade the public to be less sensitive to minor fluctuations in employment and prices. A good symbol of the difference between minor and major fluctuations might well be the level set for action under formula-flexibility arrangements—perhaps for a second notch of policy adjustment after a moderate first-notch adjustment. For example, we might provide for a 4-point temporary drop in withholding rates if unemployment reached 4 million and a second temporary drop of 8 points if unemployment reached 6 million.

Our postwar record should command confidence. But it should not lead us to complacency. We should build on existing arrangements to give us a secure base for a growing economy.

APPENDIX TABLE.—*Impact of fiscal policy of all Government bodies combined in business fluctuations quarterly, 1947-58*

A. POSTWAR INFLATION PERIOD

[Dollar amounts in annual rates, seasonally adjusted; billions]

Year and quarter	Relation of 1954-dollar gross national product to full-employment level			Full-employment gross national product in current dollars	Fiscal magnitudes (social-account basis) as percent of full-employment gross national product			Price index: deflator of gross national product, 1954=100
	Full-employment level	Actual level	Actual level as percent of full-employment level		Receipts	Expenditures	Surplus	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1947:								
I.....	\$277.3	\$278.4	100.4	\$225.1	25.1	18.8	6.3	81.2
II.....	280.5	280.4	100.0	230.0	24.5	18.1	6.4	82.0
III.....	283.9	282.9	99.6	236.5	23.9	19.8	4.1	83.3
IV.....	287.3	287.2	100.0	245.1	24.1	18.1	6.0	85.3
1948:								
I.....	290.8	286.4	98.5	253.3	23.8	18.2	5.7	87.1
II.....	294.3	293.3	99.7	258.5	22.8	19.3	3.4	87.9
III.....	297.9	295.6	99.2	266.1	22.1	19.9	2.3	89.3

B. FIRST POSTWAR RECESSION AND TROUGH

1948: IV.....	\$301.5	\$297.3	98.5	\$269.7	21.8	20.4	1.5	89.5
1949:								
I.....	305.1	291.5	95.5	272.0	20.8	21.4	-0.6	89.1
II.....	308.8	290.3	94.0	272.8	20.4	22.0	-1.6	88.3
III.....	312.6	295.6	94.6	273.6	20.8	22.1	-1.3	87.6
IV.....	316.3	293.0	92.6	277.5	20.4	21.5	-1.1	87.7

C. PRE-KOREAN UPSWING

1950:								
I.....	\$320.2	\$302.7	94.5	\$281.3	21.8	23.7	-1.9	87.8
II.....	324.0	312.0	96.3	284.9	23.2	20.7	2.5	87.9

D. KOREAN INFLATION

1950:								
III.....	327.9	325.6	99.3	295.3	24.8	19.2	5.6	90.1
IV.....	331.9	331.6	99.9	304.6	25.2	20.4	4.8	91.8
1951: I.....	335.9	334.0	99.4	319.7	27.7	21.3	6.4	95.1

See footnote at end of table.

APPENDIX TABLE.—Impact of fiscal policy of all Government bodies combined in business fluctuations quarterly, 1947-58—Continued

## E. POST-KOREAN PLATEAU

[Dollar amounts in annual rates, seasonally adjusted; billions]

Year and quarter	Relation of 1954-dollar gross national product to full-employment level			Full-employment gross national product in current dollars	Fiscal magnitudes (social-account basis) as percent of full-employment gross national product			Price index: deflator of gross national product, 1954=100
	Full employment level	Actual level	Actual level as percent of full employment level		Receipts	Expenditures	Surplus	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1951:								
II.....	340.0	340.0	100.0	326.4	25.9	23.5	2.4	96.0
III.....	343.6	346.3	100.8	331.2	25.0	25.3	-3	96.4
IV.....	347.3	346.9	99.9	338.4	25.4	26.2	-7	97.5
1952:								
I.....	351.0	349.6	99.6	342.4	26.1	25.9	.3	97.6
II.....	354.8	349.3	98.4	346.8	25.8	27.0	-1.2	97.7
III.....	358.6	352.6	98.3	353.0	25.5	27.5	-2.0	98.4
IV.....	362.4	362.3	100.0	358.6	26.0	27.3	-1.3	99.0
1953:								
I.....	366.3	368.9	100.7	362.0	26.4	28.0	-1.5	98.8
II.....	370.8	373.2	100.6	366.6	26.4	28.0	-1.6	98.8

## F. SECOND POSTWAR RECESSION AND TROUGH

1953:								
III.....	373.5	370.2	99.1	370.4	25.9	27.4	-1.4	99.2
IV.....	376.2	363.9	96.7	373.3	24.5	27.6	-3.2	99.2
1954:								
I.....	378.9	360.4	95.1	378.5	23.5	26.3	-2.9	99.9
II.....	381.6	359.5	94.2	381.0	23.5	25.1	-1.6	99.8
III.....	384.4	362.1	94.2	384.3	23.3	25.0	-1.7	100.0
IV.....	387.1	370.1	95.6	387.9	23.8	24.8	-1.0	100.2

## G. 1955-57 PLATEAU

1955:								
I.....	389.9	382.2	98.0	392.1	24.7	24.9	-0.2	100.5
II.....	392.7	389.5	99.2	396.2	25.2	24.7	0.5	100.9
III.....	395.5	397.5	100.5	401.4	25.8	24.5	1.2	101.5
IV.....	398.3	401.1	100.7	406.1	26.0	24.7	1.3	101.9
1956:								
I.....	401.0	398.8	99.5	413.1	26.0	24.4	1.6	103.0
II.....	404.0	398.9	98.7	420.5	25.9	24.4	1.5	104.0
III.....	407.2	400.2	98.3	428.3	25.5	24.6	0.9	105.2
IV.....	410.2	405.5	98.9	434.8	25.9	24.9	1.0	106.0
1957:								
I.....	413.1	408.7	98.9	442.1	26.4	25.4	0.9	107.1
II.....	416.1	410.1	98.6	448.7	26.0	25.7	0.3	107.9
III.....	418.8	410.6	98.0	456.9	25.8	25.2	0.5	109.1

## H. THIRD POSTWAR RECESSION AND TROUGH

1957: IV.....	421.9	403.8	95.7	462.2	24.9	25.4	-0.5	109.5
1958:								
I.....	424.9	391.0	92.0	468.5	23.6	25.8	-2.1	110.2
II.....	427.9	393.1	91.9	472.8	23.7	26.3	-2.6	110.5
III.....	431.0	400.9	93.0	477.4	24.3	26.7	-2.4	110.7
IV.....	434.1	410.8	94.6	483.2	25.0	27.0	-2.0	111.3

<sup>1</sup> Receipts lowered by income tax cut enacted in 1948.<sup>2</sup> Some tax accruals under legislation of late 1950 are imputed to 1950-I and 1950-II. Note that corporate income tax is treated by the source on an accrual basis.<sup>3</sup> Dividend on veterans' life insurance; nonrecurrent.<sup>4</sup> Receipts reduced by expiry of excess profits tax.

Sources: Cols. 3, 9 from Survey of Current Business, national income tables I-5 and VII-3. Col. 2 is a logarithmic interpolation between averages for 1947, 1951, 1952-IV to 1953-III, and 1955-III to 1956-II. Values for dates later than 1956-II are a logarithmic straight-line extrapolation from the 1952-53 and 1955-56 averages. Col. 4 is the actual 1954-dollar GNP (col. 3) divided by col. 2. Col. 5 is the actual current-dollar GNP (national income table I-3) divided by col. 4 (or—the same thing—col. 2 multiplied by the deflator in col. 9). Cols. 6, 7, and 8 are current-dollar figures for receipts and expenditures of all Government bodies (excluding intergovernmental grants) from national income table III-3, divided by col. 5.

SUMMARY TABLE.—Shifts of fiscal policy and of postponable private expenditures between selected half years, 1947-58

[Dollar amounts in annual rates, seasonally adjusted, billions]

Year and quarters (1)	Relation of 1954-dollar GNP to full-employment level			Full-employment GNP in current dollars (5)	Fiscal magnitudes (social-account basis) as percent of full-employment GNP			Price index: deflator of GNP 1954=100 (9)	Private postponable expenditures as percent of full-employment GNP	
	Full-employment level (2)	Actual level (3)	Actual as percent of full employment level (4)		Receipts (6)	Expenditures (7)	Surplus (8)		Consumer durables, plus private construction plus durable equipment (10)	Change in inventories (11)
1948, II-III.....	\$296.0	\$294.5	Percent 90.5	\$262.3	Percent 22.5	Percent 19.6	Percent 2.9	88.6	Percent 23.5	Percent +2.1
1949, II-III.....	310.7	293.0	94.3	273.2	20.6	22.1	-1.5	88.0	22.2	-1.3
	14.7	-5.5	-5.2	10.9	-1.9	2.5	-4.4	-6	-1.3	-3.4
1949, II-III.....	310.7	293.0	94.3	273.2	20.6	22.1	-1.5	88.0	22.2	-1.3
1950, III-IV.....	329.9	328.6	99.6	300.0	25.0	19.8	5.2	91.0	27.1	3.3
Trough to prosperity.....	19.2	35.6	5.3	26.8	4.4	-2.3	6.7	3.0	4.9	+4.6
1953, I-II.....	374.8	371.1	100.7	364.3	26.4	28.0	-1.6	98.8	22.6	+1.0
1954, II-III.....	383.0	360.8	94.2	382.7	23.4	25.0	-1.6	90.9	21.6	-6
Prosperity to trough.....	8.2	-10.3	-6.5	18.4	-3.0	-3.0	0	1.1	-1.0	-1.0
1954, II-III.....	383.0	360.8	94.2	382.7	23.4	25.0	-1.6	90.9	21.6	-6
1955, III-IV.....	396.9	399.3	100.6	403.8	25.9	24.6	1.3	101.7	25.0	+1.5
Trough to prosperity.....	13.9	38.5	6.4	21.1	2.5	-4	2.9	1.8	3.4	+2.1
1957, I-II.....	414.6	409.4	98.7	445.4	26.2	25.6	.6	107.5	23.6	+7
1958, I-II.....	426.9	392.1	91.9	470.6	23.7	26.0	-2.3	110.4	20.2	-1.4
Prosperity to trough.....	12.3	-17.3	-6.8	25.2	-2.5	.4	-2.9	2.9	-3.4	-2.1

Source: Cols. 2-9: corresponding columns of appendix table. Cols. 10-11: data from national income table I-3 divided by figures in appendix table col. 5.

Mr. HART. Thank you, sir.

May I open by saying that your invitation was completely irresistible. I hope the committee will realize the sense of gratitude that you command among the profession of economists for providing a point of contact for our thinking about economic policy with the Government and with the public.

We also appreciate very much the flair the committee and subcommittee members have shown for framing the right questions over the years; the questionnaires which have come out from your committee and subcommittees, and the problems set up for such series of hearings as this have been the kind of thing on which an economist can profitably do very serious work.

Coming to today's subject, when we think of reconciling these objectives we get involved in the deeper questions of the strategy of economic policy. As I mentioned in the written statement, I published some years ago various papers on economic policy in which I suggested a gong and whistle system of alarm mechanisms which would go off when certain kinds of action were called for.

The gong, let us say, would call for action because unemployment was getting serious; and the whistle would call for action because inflation was going so rapidly as to concern us.

If we threw in the third objective of adequate growth we would need something like an accelerometer which would squeal if the economy gained speed too slowly.

This kind of model of how to run policy is fine so long as only one alarm sounds at once. But things get painful when we hear simultaneously from the gong and the whistle. A lot of the concern people have expressed in the last year or two has been because we apparently have the combination of unemployment in a range that causes concern with some degree of price inflation.

It is quite plain that if this happens we have to ask ourselves whether there is something wrong with machinery which determines prices.

This question has been raised in your inquiries. I have a feeling that the trouble with this machinery is not too serious at present. But it might get so, and something in the way of improvement of the price machinery is a valuable precaution.

It is probably worthwhile, since you are discussing things so broadly, to say a few words about what kind of importance I would attribute to these three objectives of stable prices, adequate employment, and adequate growth.

The inflation-avoidance goal, the goal of price stability, is one about which people make a good deal of fuss; yet one wonders if they care as much as they say they do. The damage done by a moderate rate of inflation such as we have been experiencing is easily overrated. For example, the damage done to people's retirement programs is in good part repaired for the people who have a long working life ahead by the higher interest rate which is a natural accompaniment of an inflationary trend.

The problem is tough for people who retire at a time when prices have unexpectedly shown a large rise as did many people who have retired in the postwar years.

Really, I think the main objection to inflation is its indirect consequences. The conflict that inflation sets up between groups, and the damage that is done by remedies worse than the disease are its real evils.

The evils of unemployment are more direct and quite obvious. When we complain about inflation our complaint is largely that we think it is unfair to redistribute income and wealth between the people who can keep up with an inflation—or run ahead of it—and the people who run behind.

The redistribution with unemployment is even more obviously unfair. Unemployment takes things away from some people without giving them to anybody else. The potential output of the people who don't work and the potential income they might have enjoyed is to a very large degree lost forever.

At the scale of unemployment we have been experiencing, this does not seem a very large problem in the American perspective. I suppose in 1958 we lost 6 or 7 percent of our potential output.

This is not very much of an economic loss in the U.S. perspective, but there are several important countries of the world for which 7 percent of American production equals half of theirs. If you think of what could have been done with it, it is a very serious matter if it is avoidable.

The values of economic growth, like those of inflation are, I think, a little harder to keep straight. I am not terribly impressed by the argument that we owe it to the world to live better and better. The main value of American economic growth, I would be inclined to say, is in its side effects. We have, in fact, been able to achieve a very great redistribution of power and social recognition and so forth in this country. The fact that it has been possible for the underprivileged to gain, while economically speaking the privileged groups have lost rather little has made it very much easier than if the gains of the underprivileged had to be at the expense of substantial absolute losses for the people up the line.

It is much easier to organize any sort of social compromise in the context of there being a larger amount to share out than in the context of a substantially constant amount to share out.

I do think that our success on many social issues in the last generation is very much linked with our ability to grow, that if our growth was very seriously set back we would find a lot of these problems grow very much more difficult. Again, the fact of rapid economic growth in the United States makes resources available to help in other parts of the world.

At the same time, from the standpoint of the welfare of our own children, I think the quality of the growth we get makes much more difference than whether we can get an additional one-half of 1 percent per annum rate of economic growth. In fact, I would be inclined to say that the stress on the rate of growth creates various temptations to score the cheaper kind of growth at the expense of what is worth more.

I am very much impressed by the extent to what we are calling growth is the stuff we will have to tear down when we change our minds where our highway network should run or change our land-use patterns. A slightly slower pace of more sure-footed growth would

very likely put us further in the direction of where we want to be 20 years from now. I am inclined to bet that as we develop our economics of regional development and metropolitan growth, we can figure out how to design our development so that the different things we do reinforce each other instead of getting in the way of each other. There is more to be gained in this way than by moving faster in no particular direction.

Coming closer to the specific questions, I think we have to say, looking at the postwar period, that things have gone much better than we had any reasonable ground to expect. We have had a fairly serious overall inflation. However, when you allow for how much of this happened during the Korean period, the average rate of price increase for the 10 years since 1948 works out at about 1.1 percent per annum.

It is interesting to notice that the United States seems to have had a faster rate of inflation in the halcyon period before World War I. A large portion of the explanations that are brought to bear for the postwar inflation, it seems to me, do not square very well with what went on then.

I am inclined to infer that if our price-making machinery works normally, it tends to throw off increases of prices and wages in prosperity. In past periods when there has not been a cumulative increase, it has largely been because these rises were ground away again in periods of serious unemployment.

When you have a period without any serious spells of unemployment, the price-making mechanism naturally tends to throw off a cumulative gain. To this the 1920's are an interesting exception, but the general tendency seems clear from a long record of business fluctuations.

I do not know whether we should be entirely complacent about this. But I do think the people who argue that our price system is functioning abnormally badly, and we should declare an emergency, are rather out of line with the record. Perhaps we should ask ourselves whether we don't need a much better functioning price and wage-making machinery than we have ever had in the past. But the idea that it has been misbehaving on a very remarkable scale in recent years does not seem to me historically sound. We have had, since World War II, overwhelmingly the best employment record of any stretch of several years as far back as American economic history mentions. This has been a considerably more stable period and with a higher average apparently of potential output realized than the pre-World War I period I referred to. It has been as good as the period from 1923 to 1929 in terms of the utilization of our productive capacity, and, of course, has gone on now almost twice as long.

It is rather hard for the economist to see exactly why. We don't really believe that the forces of instability have disappeared from the economic system. But whereas, in so many cases, when you have a surprise you have to ask what went wrong, here I think we have to ask, as Paul Samuelson asked a group of economists a while ago, what has gone unexpectedly right.

I don't think we can afford to pretend we are not surprised. It is very hard to learn if you do not admit you are surprised. Frankly,

I am; and I think if anybody was so malicious as to drag out the record of my utterances on these matters (let alone to search the file of my unpublished papers, because I have had the good luck not to publish some of my worst forecasts) I think I have been systematically more alarmed in the post-world-war period than has been borne out by the record.

I don't apologize for this. I think it is the economists' business to look for things that might go wrong. But for all that, I do think there is a problem of explaining why things have gone so well.

If we ask ourselves this question, I think in the first place that the catching-up requirements which we sensed at the end of World War II have proved to be unexpectedly large. We entered the war with facilities and housing, and so forth, calculated to work in a depressed economy with an appreciably smaller population and with not much population growth. After the war we needed a lot more industrial plants. We needed a good deal more housing. We had to replace the wornout and inadequate fleet of automobiles and trucks which were left over from the war.

This undoubtedly gave the economy the impetus that carried it through the first boom, and the revival which started before the Korean war broke out was based on the same forces. The need for totally new types of output in connection with the Korean war of course put on a further stimulus which carried somewhat. Besides this, business investment in plant and equipment was made to a large extent fool-proof by the accelerated amortization arrangements which went through in connection with the rearmament program started in 1950.

I think one must also give credit for this stability to an indirect consequence of the defense spending. It is well known that Government takes a much larger share of total output than it used to. However, what we mean by Government in this connection is primarily defense. If you take Government excluding defense, its share of gross national product is not so different from what it was in the 1920's. The counterpart of this, of course, is the high taxes we have needed and this has taken the form especially of high corporation taxes.

The consequence has been that whenever there was a setback, the so-called automatic stabilizers have had a good deal more to operate with than they would have if the Government expense and taxes had been lower. This has introduced an important element of stability in our economic system. I will say something about this in connection with the figures I have thrown into the appendix here.

These forces of stability have to some extent worn off. We seem to have caught up on the industrial facilities side. The weakness on this side has been somewhat disguised by the steel strike and by the resulting need to stock up. But on the whole the need to expand facilities is now a question of keeping up with growth instead of trying to bull ahead so as to give industry some margin of capacity over the operating level. Something like a normal margin of capacity over operations had been established by the end of 1957. On the housing side it looked for quite a while as if we might catch up and have an awkward gap. Since we now have the prospect that within a few years there will be again a rapid increase in the rate of family formation, I don't think we have much to worry about on the housing side. If there were a couple of slack years, we could use these for things like school construction.

If, by any chance we get something resembling peace, we will be able to cut back Government expenditures a good deal in the next few years and in this case these automatic stabilizers will be considerably weakened.

To a large extent I think one must say that the strong postwar record has been what in the old days we used to call confidence. The public entered the postwar period very skeptically. For several years we found for instance the stock prices ruling at about the same level as in the late 1940's, in spite of the fact that all the products of industry were selling at much higher prices and current profits were very good. Apparently people did not seriously believe that the postwar price level of prosperity could be projected. The recent stock market boom shows a reversal of this attitude, this long run of favorable experience, today, after people seem on the whole to have developed a confidence that things will go on going well. Undoubtedly there is a great deal of confidence in the willingness and abilities of the Federal Government to do what it takes to overcome any serious economic setbacks.

Obviously whether this can happen is to a considerable extent untested, but people have undoubtedly fallen into the habit of relying on it. This means in case of a setback there is not a tremendous scramble to get out from under commitments for capital installations. And when there has been a setback and the commitments have been cut back somewhat, business and households who are considering buying houses and so forth are willing to be encouraged by signs of upturns and start expansion again without adopting a wait-and-see attitude.

If everybody was inclined to wait another year and see how things went before he invested in any more facilities, or new houses, the whole situation would be much more fragile.

To what extent one can really rely on confidence as a stabilizing factor is one of the great unknowns. My puritanical instinct is to feel that it is unethical for national policy to rely on this. If we have a policy which is good enough in the face of public skepticism then it is certainly good enough if the public does not feel that skepticism. But if we rely on the public's confidence to carry through a policy which will be inadequate if skepticism developed, then we are in danger.

In the economic sphere we have not had terrific surges of opinion in recent years, but the susceptibility of the American Nation to psychological surges has by no means worn off. We have talked ourselves into being all stirred up about several questions since the war. The big scare that we had a few years ago about the polio program is very indicative of this kind of thing. We have psychological band-wagons. The stock market has shown some signs of getting more psychologically unstable in the last 3 years. We have even found the bond market putting on some very fascinating gyrations of this sort.

It seems to me it is quite possible that we might talk ourselves as a nation into a defeatist psychology about our economic affairs. The test of adequate public policy in this field is not whether it will work if everybody is sure it will work, but whether it will prove to the public which developed skepticism that its skepticism was unjusti-

fied, and pull activity and prices back where they belong in spite of one of the psychological storms pulling in the wrong direction.

I think it is very interesting when we look at the record to see to what extent the postwar stability may be attributed to fiscal policy—of a sort which I think most people in politics still regard as unorthodox.

I am pretty sure that if we could send out a questionnaire to the several thousand people in this country who are responsible for tax legislation (Federal, State, and local), and for Government expenditures (Federal, State, and local), most of them would say that they were trying to operate a policy of old fashioned "sound finance."

But if you look at what has actually happened, the sort of shift in policy which was called for by the fiscal policy cookbook of Keynesian school seems really to have been happening. This cookbook says: when a recession comes, shift in the direction of deficit, and when there is a potential inflationary situation shift in the direction of surplus. That is just what Government has done, on quite a handsome scale.

On page 14 of the statement I have a little table which sums up what has happened in five business movements since the war. (The 1959 figures are not available on a comparable basis yet to give us the sixth.) I have measured things here in terms of percent of the full employment level of gross national product, which we can estimate pretty well for any given period now that we have the new quarterly series in 1954 dollars from the national income unit in the Department of Commerce. And I take the figures on a national income basis, which takes corporate taxes as accrued rather than as paid as cash.

If you look at the middle column of the table in comparison with the left-hand column you will observe that in four of the five fluctuations the surplus of government receipts over expenditures has moved in the right direction and by a substantial amount compared with the size of the business swing.

The exception to this is the 1953-54 recession. If you look at the receipts column you will observe that receipts moved in the right direction by a substantial amount each time. But in the 1953-54 recession the expenditures swung in the wrong direction. That is a cut in spending at the time of recession was enough to offset the change on the receipts side. The reason that this happened is, of course—well, 1953-54 may be described as a Government expenditure recession. Probably it was the cresting over of the defense program at that time which made it necessary to reorganize the economy and gave us the setback.

However, the swing of the revenue figures has been thoroughly appropriate in each case. This is partly due to deliberate policy at the time. From 1949 to 1950, for instance, the action of your committee in exerting leadership for a prompt tax adjustment as the situation became inflationary made a considerable contribution to the swing on the revenue side.

But in good part the fiscal record is a testimonial to the built-in stabilizers on the revenue side. I am inclined to agree with the statement which came out from the Nixon committee in the papers over the weekend that the expenditure record from the standpoint

of economic stabilization is not too good and that attempts to use expenditure fluctuations in this way may well have done more harm than good.

If you look at the expenditure column, you will notice that of the five changes, one is a large movement in the wrong direction and the bottom two (for 1954-55, 1957-58) represent very small movements of expenditures in the right direction.

The main effect of the attempt to combat the 1958 recession on the expenditures side seems to have been a bulge in expenditures after the trough of the recession was passed, which complicates the policy problem how to cope with the upswing that we are now engaged in. This probably would be a desirable time to get Government expenditures on the down grade. But the measures taken in early in 1958 in the name of recovery from the recession have made correction difficult.

On the whole then, I would argue that we have had stability in good part because, half unconsciously, the people who have been making the decisions about Government revenue and expenditure and especially about revenue, have made them in the direction which is appropriate according to this new kind of cookbook. The prospect of continuing a record of economic stability probably depends on the continuation and development of the sort of behavior on the part of the responsible policymakers in government which has done this.

For the reasons I mentioned a few minutes ago, it seems to me that we should expect stabilization to be more difficult rather than easier from here out. We have been having a run of good luck—especially in the way the public has been reacting to policy measures. Since we have caught up to a good extent on our industrial facilities, we are likely to find a more sensitive short-run reaction of business capital expenditures to changes in sales. And if we do succeed in getting some sort of approach to peace and cutting back the level of Government expenditures, the corresponding lower levels of taxes, especially the corporation tax, are likely to weaken the stabilizing forces which have been working on the revenue side of this picture.

I have gathered that it was probably appropriate for me to make a few fairly concrete policy suggestions. My main recommendations can be put pretty briefly, I think.

In the first place, there are a few things that could be done to improve the automatic stabilizer machinery in ways which I think would have desirable effects from other standpoints as well.

My first suggestion would be to look carefully into the possibilities of more averaging of good and bad years for individual income-tax payers. We have done moderately well, I think, on that in recent years with the corporation tax. Particularly the move in the direction of carryback of losses, it seems to me, is very constructive from this side.

There is some room for carryback of losses under the personal tax. However, a carryback of unused personal exemption, which would mean that a person whose income fell below the exemption limit could get a refund of part of the taxes he paid last year, could be a much bigger improvement. In terms of fairness among taxpayers, the idea that one's average taxes over a stretch of years would depend on the average income rather than on how one's income is concentrated in the best years is very appealing.

A family with an average income of \$10,000 a year pays a good deal more tax if its income bounces around than if it runs steadily; although, in terms of its ability to cope with family needs, a steady income would actually put them in a better position with the same average.

So I think one would feel good about carryback of unused personal exemption in terms of the fairness of the tax system and the sort of incentive to constructive work it creates; and it certainly would be an improvement from the stabilization standpoint. This change would mean that unemployment or any serious fall in income would set automatic changes at work comparable to those we have in the unemployment insurance field.

A second point is unexploited possibility in the banking field. Here I feel somewhat insecure because the monetary analysis on which this rests has not been properly checked in the profession. But the feel of things is, as we get further into the data, that it makes more difference than we used to think whether banks hold loans or securities.

The postwar record looks very much as if an expansion of loans accompanied by a contraction of securities held by the banks is inflationary. There is a pretty good reason why this should be so, which is that bank loans are very closely linked with inventory—with business inventory on the one hand and through installment loans with the consumers' inventory of durable goods, which in a way is very much the same kind of affair. If it were possible to reduce the surges in bank loans with the same course of total bank earning assets, loans plus securities, I am pretty confident we would have a more stable economy.

One of the great needs in stabilization policy is a really first-rate specialized control of some sort to reduce the amplitude of inventory fluctuations. There is no doubt that inventory is one of the most volatile elements in the economy and in fact a large part of such trouble as we have had with the unemployment situation in the postwar period seems to have gone with inventory swings.

However, no one has yet come up with a workable direct control proposal in the inventory field. I am inclined to suggest that if we could have some control mechanism which would operate on the total amount of bank loans where the present controls operate on the total of loans plus investments, we would be one step closer to being able to handle the inventory situation.

There is no use being perfectionist about this. The connection is not so direct and the possibilities of financing inventory booms are not so limited that one would expect to get a complete stabilization of inventories. In any case, I don't seriously believe that it is possible to make the curve of bank loans go completely smoothly by any control I can imagine. But I think it would be possible to devise controls which would considerably damp the fluctuations of bank loans and the associated fluctuations of inventory and give us a more stabilizable situation on the upswing.

Looking into 1960, we can guess that the shortages left by the steel strike are going to leave business with incentive to build up inventory very fast. If somehow or other we could get this inventory buildup spread out over a longer period at a more gradual pace, the situation at the end of 1960 would be much more manageable and the danger

of sharp setback from reversal of inventory policy would be considerably reduced.

I would also guess that there was a fair amount of room for standby arrangements which would be semiautomatic for helping local governments with some of their construction problems and especially school construction in recessions. The trouble is that the problem of local government which seems to command the most sympathy is the problem of high interest rates. It seems to me that to lift the local government over high interest rates in a time of tight money is not what we call appropriate stabilization policy. It is more urgent to help them face moderate interest charges at the time when growth has ceased and we need more construction. Unfortunately such expenses are still rising in local government, so that it is hard to persuade the taxpayers to take one more bond issue at what would be a good time from any other standpoint. Help on the first 2 years' interest, say, might be decisive.

I also think that there is a good deal of room for development of policy in the halfway area known as formula flexibility, lying between these automatic adjustments and discretionary adjustments of the sort represented by expenditure policy. It is all too easy to try to be too smart in this field of stabilization policy, and if we are trying to adjust expenditures in order to offset minor fluctuations such as we experienced since World War II, our timing is likely to go wrong. There is more room for well-timed measures, I would be inclined to say, on the revenue side.

However, there are some possibilities on the expenditure side. Obviously this idea of a shelf of public works which has been in circulation now for just about 40 years is still not fully utilized. One very promising semiautomatic control which might be given formula flexibility is on the unemployment compensation side. One of the constructive moves in the last recession was to prolong the period of unemployment benefits. It seems to me it would be possible to have standing legislation under which any time insured unemployment passed a certain figure, there would be a temporary extension of the period of eligibility. This would call for a corresponding Federal contribution to avoid depleting the unemployment reserves held in the name of the different States. The argument in favor of having a limited period of compensation is largely to encourage people out of work to shift into other kinds of work than they are used to. The more unemployment there is, the less feasible it is for them to make the shift.

I am also still of the opinion, as I have been for a number of years, that formula flexibility would be workable for the personal income tax. I have a very good conscience about having advocated a temporary income tax cut rather than a bulge in expenditures as an economic stimulus in the winter of 1957-58. The arguments to the effect that a temporary change could not be made struck me as inconclusive.

Unless we have advance provision, of course, all tax changes are time consuming. There has to be a process of hearings and detailed consideration and everybody who might be injured by a change in taxes is entitled to his day before the Ways and Means Committee.

However, there might be advance agreement that any temporary change would be limited to a change in the rates of withholding under

the personal income tax. Then the question would be, Is this a time for the change and how big should the change be? If there was advance provision so that everyone who was involved in collecting withholding tax knew that there were, shall we say, two alternative rate schedules that might be put in force, it would be possible to get very quick congressional action.

This possibility is tested by what happened in 1950 when action took the form of deciding whether or not to make an increase in certain specified types of taxes. The shape of the thing was agreed on in advance. The question was the size and timing. It was not terribly time consuming for the Congress to come to agreement on the time and size of the increase as long as the shape was not controversial.

It would even be possible, I think, to delegate taxing power under a formula for temporary changes. It is obvious that Congress cannot let anybody impose a tax which would not otherwise exist. There are constitutional barriers and even if there weren't, there are serious public policy objections I think to having Congress delegate power to that degree. However, it is entirely possible to delegate the power to abate the tax.

We do, in fact, of course, enable the Bureau of Internal Revenue to make abatements in connection with settlements of individual cases. The formula-flexibility idea is that under stated conditions it might be possible to abate everybody's tax for a certain period by a certain proportion, the normal rates of tax to go back into force when these conditions lapsed. This is perfectly workable. New York State has, in fact, been operating under this kind of system for a good part of the postwar period, when there was a last-minute abatement of the tax and everybody was told to take his schedule and subtract a certain proportion of the tax. This kind of device is open to the Federal Government and I would say it is well worth while to exercise foresight and work out procedures of this sort.

I also think it is worth considerable effort to persuade people in advance not to rely on clever improvisations in the field of Government expenditures. If we found ourselves up against really serious situations such as the winter of 1930-31, then the case for major changes in the spending program would be different. But in a situation like that, you can be sure that the recovery cannot happen quick enough, and the measures taken during a recession will be effective before the slump is over.

I think the main task of policy is to persuade people to be a little bit less hypersensitive. One reason for these miscarriages on the side of expenditure has been, I think, that people took minor fluctuations a little bit too seriously. I must say I don't hold with the school that says it is good for a man to be unemployed a good part of the time. It is a very serious misfortune to be out of work and we certainly have to be very much concerned not to let unemployment situations accumulate.

On the other hand, if we try to take steps against unemployment too hastily, we are likely to take measures which do little about the unemployment situation and yet contribute to boosting prices.

I would argue very strongly that one of the great dangers in this field is to try to be too sensitive in reaction, that the timing of these adjustments is very difficult. It is only those which are preset which

generally seem to come in at the right time. On the whole, discretionary action should be reserved for fairly serious emergencies which will be thoroughly recognizable when they do happen. One of the great errors of the inter-World War period was failure to take discretionary action at the time effective countermeasures against the depression could best have been taken.

But, I think, given the postwar record and the underlying strength of the situation, we can afford to let things develop a little bit and feel the situation out rather than be forever trying to be very smart about keeping one ahead.

Representative REUSS. Thank you very much, Mr. Hart.

Mr. Curtis.

Representative CURTIS. Thank you, Mr. Chairman. I want to thank Mr. Hart for a very fine paper. Take comment No. 5 which you just ended with of trying to persuade the public to be a good deal less sensitive on minor fluctuations in employment and prices. That perhaps could be directed at those of us who are in politics because it seems to me we are the ones who are picking up these switches and trying to magnify them into political issues.

I think that is where a good bit of the hue and cry has come.

Directing attention to some of your recommendations I would like to examine 1B, adaptation of banking policy to reduce the surge of banking funds back and forth between loans and investments.

I wonder if a great deal of it is not where banks have actually been lending money in areas that in the past let us say, or possibly according to good economics, would be better handled through equity investment.

I know in examining into a number of bank loans of small banks in the recent recessions one of the things that happened, particularly in the small business area, was that the banker had lent to the small business on a basis that really looked like it should have been an equity investment.

Then when things got tight, he called him in and said, "I have to make this more of a bankable loan and have to call this particular thing."

Have you any comment on that? There are many people who have commented that the financial structure of our business has too narrow an equity base and too much of a loan and bond base.

Mr. HART. Well, I must say again this appeals to my emotions about the economic situation. I like the idea of every tub standing on its own bottom and the idea of the financial structure of enterprise being on a loan basis strikes me as somewhat repulsive.

Yet I think we have to recognize that the long-term bank loan on an amortized basis, which a long-term loan tends to be these days, is perhaps less destabilizing than the short-term loan closer to the traditional field of bank operations which is linked with inventories.

It seems to me that in the inventory field we get involved in a feedback. When bank funds are easily available it is possible to build up inventory and when there is an inventory surge in process, the price situation and the procurement situation both seem to point in the direction of building up inventory loans. Loans which a few months earlier would not have looked good to either borrower or banker now look good to both. So we get expansion with bank loans and inventory boosting each other.

Then we get a turnaround, once sales stop growing. It is a good policy to turn back in inventory policy. If the borrower does not do it on his own, the bank puts on pressure to do so. Loan contracts reduces inventory, and inventory reduction makes business bad and induces loan contractions.

Whether or not it is altogether prudent for a business house to be financing, shall we say, long-term installations with a 5-year amortized bank loan, well, this is a question of business policy. Sometimes it is a trap and they should stay out of it, but if it is workable for them, I don't think that it is very dangerous from the standpoint of what it does to the total economy. This is the kind of thing on which there won't be as sudden a cutback perhaps as if they were dependent on floating securities in the open market.

Actually the small business which comes in question really can place equity securities only under favorable conditions. Its financing possibilities outside the bank are more likely to dry up than the financing possibilities at the bank.

Representative CURTIS. If he has already started out with an equity investment, why it certainly is more stable, it seems to me.

Another thing, for example, a small business, particularly in the distributive field, and that is where the small business occupies a large part of the area, must expand their inventory to do an increased amount of business.

Now, some of that expansion it seems to me should be financed with new equity investment, whether it is plowed back earnings of new securities.

But this has not been occurring. The reason I am dwelling on this is that in our tax structure we give great benefit to borrowing type capital because it escapes the double taxation of equity. I have long felt that this has been one of our fundamental errors in our tax structure and has produced—I may be wrong in saying this is the present phenomena, but I think it is correct—a narrow equity base in the financing of many of our corporations, particularly in the small business area.

When you mention this loan fluctuation back and forth I wondered whether that phenomenon is really inventory or whether it could not be this area that I am referring to.

Mr. HART. Well, the very least one must say—I was saying we could not get a sudden dropoff of term loans because they have to be amortized over a time.

However, it is true that they are capable of expanding rather fast or ceasing to expand and at times if they cease to expand and the small business in question ceases to make the corresponding plant and equipment expenditures and ceases to build up inventory on that account, this can give us a bump. Yes, if we grow dependent on that, this is a possible source of instability.

As to the stimulation of debt by tax discrimination, I have been agreeably surprised again here. I got terribly worked up about the incentives for debt financing in our tax structure as far back as 1937-38 when we had that awesome tax rate of 18 percent, which you could get out from under by going into debt financing. I had expected to find a much more drastic shift in business finance than we experienced over this period.

Yet we more than doubled the tax incentive by putting the corporate tax rate up to 50 percent. It seems to me that the tenacity of business in equity financing has been rather remarkable; and I think has been one of the great safeguards for the economy for the long period.

Mr. CURTIS. You think equity financing has kept up with our economic growth? I thought the figures showed the other way around.

Mr. HART. It is really a pity for me to get too far into this because there are so many people who have analyzed the postwar figures more closely than I have.

You are correct in picturing heavy borrowing as a small business pattern. To a large extent it has always been a small business pattern.

In the depression the bank practically went out of the lending business and small enterprises made no headway at all. I think in periods when they have made headway they have relied very heavily on bank financing.

If you look at the list of corporations on the stock exchanges, only a very small percentage of American corporations can get their stock listed. This is a pretty good index of who has some chance of selling stock outside of the immediate group of people concerned.

Representative CURTIS. I was really directing your attention to this small business area, but I think also I can say this: that I was directing it into the service field and the distributive field because the service field is largely occupied by small businesses.

Another interesting thing is that the increased cost of living index has increased in the service areas. I have long felt that the difficulty was the fact that small service businesses could not finance themselves. Some of them came back in this very field that they do have to get equity financing usually although the banks have gone a long ways with them in granting them loans which again suggests that they were not traditionally bank loans.

Take the tight money picture now, that is the segment that is hit first and is being hit right now. I would dare say there are lots of small businesses, I know some of them, that cannot get the money to finance their expansion. They are cutting back.

Mr. HART. Of course, we have to remember that small business is the great place where people try themselves out and a very large proportion of small businesses fold rather soon.

There has always been a tremendous rate of birth and death in this field and at any give time there are always small businesses which are rather on the edge.

Representative CURTIS. Let us eliminate that because I am really not talking about the deaths, which always occur. I am more really concerned about the small business that has established itself and is trying to grow. There is the area that I see where this pinch is hitting because one that has just started cannot even get a bank loan.

It is operating on whatever equity the man who has gone into it and his friends have.

But one that has established itself over a period of 15 years can get a bankable loan and also is the one that is expanding or has plans to expand and occupies collectively—I do not know what amount of the gross national product, it accounts for but it is a sizable amount, particularly in the service and distributive fields.

Now, so much of what we have talked about here in these hearings are the big blocks, the manufacturing end, rather than the distributive and service end.

Yet when we discuss inflation it has been in the service fields that we see the most indications. That is why I was trying to dig into this one aspect a little more here.

I have one other comment on that and then I will turn it over.

There has been a tendency to eliminate futures markets and in certain businesses, at any rate, futures markets provide a method whereby they do not have to maintain large inventories.

I wonder from an economic standpoint whether you think futures markets are desirable things and might help alleviate this problem which you see of fluctuations in inventory.

Let us take a company like Purina Mills. Of course, they are buying agricultural products. Through the use of futures markets they don't have to invest in large inventories, they can put their investment in futures.

Some of this inventory buildup comes from a hedging process to avoid the price fluctuations or the effects of price fluctuations.

Do you not feel that this is so? Even in things like steel there is hedging.

Mr. HART. Of course, when there is an inventory boom going not very many of the people involved will admit that they are simply trying to be smart about price. They are trying to preserve their ability to operate in a situation where it is hard to get hold of some of the things they need, or they are trying to make sure they won't lose orders because they cannot give delivery in a situation where the selling markets are expanding.

Mostly it makes good sense for them to do it.

On the other hand, we can never take this kind of thing at face value as showing that it is socially desirable. We have to ask, Are these people collectively building up for a letdown and, if inventory expansion goes too fast in any large segment, then are the people involved likely to be working themselves into trouble if they cannot be persuaded to spread it out over time?

By the way, I would say this in general about attempts to operate through money and credit in terms of economic stabilization: On the whole if the effect of the restriction is simply to prevent something from happening ever, which was otherwise going to happen, very likely the restriction has done more harm than good. On the other hand, if restriction can spread development out over time and persuade people to climb off the peakload and postpone something they are going to do to a time when the economy is a little more slack, then this is a help.

I would say the same thing for the effect of tight money on utilities and to some extent on municipal operations. If the average utility and municipal capital expenditure can be postponed a few weeks in response to a tightening of the money markets this may transfer quite a noticeable amount, a couple of billion dollars, of heavy expenditure from one year into the next, which may be quite a bit of help in taking the inflationary load off at one time and putting activity into what would otherwise be a slack year. If they tried to build more than the construction industry could handle the first year, they could not pull

it off anyhow; and in the attempt to do so they would pull up construction cost. The same goes to a considerable degree for inventory expansion.

Of course, restrictive policy can be overdone. It would be possible to let a tight money policy become so intense that we were not getting anything like full utilization of facilities.

The ideal restrictive money policy would reach just the point where we had a full volume of operations and where, if credit were easier, we would get the same volume of operation at rising prices instead of at constant prices. To the extent that the people who are borrowing are bidding up prices against themselves, they are creating speculative opportunities, but they are probably not really helping the business prospects of the general class of people whom we are trying to benefit.

I think we can see this to a considerable extent since the war in the construction field. Our attempts to expedite construction by easy financing, I think, on the whole, have led to about the same volume of construction with a more rapid rise in construction costs.

Representative CURTIS. Thank you very much. I will just make this comment: Both of your recommendations here seem to me on analysis just a correction of our basic tax structure; eliminating some of the errors in that would bring about the correction. You recommend actual tax revision, but the other, at least it seems to me, would arise from our tax structure and you simply corrected the tax structure.

As I was saying in regard to equity investment as opposed to bank borrowing, I think maybe this other would be eliminated.

Representative REUSS. Mr. Widnall.

Representative WIDNALL. Professor Hart, in your written testimony you say:

Little as I like to encourage complacency, we have to recognize that the period since World War II has showed an astoundingly good record of growth and stability.

Of course, when you give an optimistic statement like that, it is at complete variance with some of those who want to be far more optimistic about our growth in comparison with Russia. Are you alarmed at all by the rapidity of growth exhibited by Russia in comparison with our own growth at the present time?

Mr. HART. Yes, I am. I would feel much more comfortable about the state of the world if our growth was somewhat faster and theirs were somewhat more gradual.

Though, again, this is largely, I think, because I am so concerned that a good part of their growth seems to be siphoned into military channels.

If I was sure that their growth was being put into human welfare of people outside the United States, I don't think it would worry me the least in the world that they are gaining ground faster than us.

On the other hand if by raising productivity we really mean an armament race, I really don't have faith that security can be bought by expanding defense programs. It seems to me this is a case where each side is losing more security from the other side's military expansion than it can possibly offset on its own side. We create a catastrophe hazard.

If I thought we had peace to look forward to, I would be quite complacent about these relative rates; insofar as I don't, it is the composition of output rather than the scale of output that counts, I think.

Representative WIDNALL. Do you feel that there is a hampering factor in our own projection of growth here in this country because of the inability or the unwillingness of Congress to bind itself more than 2 years by way of future planning?

In the dictatorship countries, they can plan something for 5, 7, or 10 years without going back and taking a second look at it. But here where your Congress changes every 2 years, you have a limited outlook for the future and you have political influences that hamper long-range planning.

Do you think that something should be done in that field to try to create better long-range plans?

Mr. HART. Of course, when you put it like that, I am sure we all agree better long-range planning would help.

On the other hand, I wish I knew more about Government expenditures. I have a decided impression that one reason that we have as much difficulty as we have maintaining efficient Government operations is that such elements of long-range planning as we have, have to a considerable extent put Congress and the administration in difficulties about reshaping expenditure programs as time goes on. A tremendous proportion of the budget in any one year represents long-range commitments which were entered into a while back without a full visualization of the current situation.

I think probably, yes, we need more long-range planning in certain areas. I am considerably exercised, for instance, about the question of our ability to enter into long-range contracts in some of the foreign aid programs to a greater extent than we can. Yet there is a good case that we need more flexibility and more scope for adapting long-range commitments as the situation shapes.

Representative WIDNALL. You also said on page 5:

The extent to which one piece of growth cancels out the benefits of another is astounding.

I think that is quite apparent in many areas. Yet those who project growth never admit that occurrence in the other direction.

There are advocates in one direction not realizing most of the time what they are doing to other parts of the economy. So that requires better planning than we have done in the past.

Mr. HART. Yes, but this is a question of private as well as public planning. I was talking before I came here with some of the staff people at Resources for the Future.

When you look at one of these developments, we agreed you have to say that the expectations of one business group for engaging in development—people putting up houses, say—cannot really be executed unless another set of expectations falls through.

Our system is shot through with inconsistencies of this sort where, shall we say, the people who are putting up an apartment house development are making a commitment on behalf of the people who will own those apartments, to the preservation of the residential character of the neighborhood. But other people down the line are planning development of an industrial park which is going to make this

area relatively uninhabitable for the sort of people that the apartments are built for. The people who work in the industrial park may then need housing developments some miles away because this apartment district has intruded where these workers would naturally be living.

This kind of inconsistency absorbs a good deal of what we call growth. We put up these developments and then tear out the heart of some of them because we put highways through. The reason we have to push the highways through is because we are carrying out other things we already know about when we put up the housing developments.

One of my colleagues who works on the transit problem tells me the way you figure out the transit problem is to extrapolate the pattern of land use, to suppose all these things are going to develop in any way they choose and then plan how transit policy will fit into a chaotic course of development.

By the same token, when you plan a land-use policy, you are not supposed to ask about effects on the efficiency of transport facilities. So, we get a handsome set of inconsistencies. We have not worked out a mechanism for tying all these things together.

Of course, if you look at a planning mechanism like the Russians; a large proportion of what they say about each plan implies that they are scrambling and scrabbling to make up for the misdirection in the preceding one. Even so, their situation is more fool-proof than ours just because they are in an earlier stage of growth. In early stages of growth, if you overdo something, you can wait a little while and other things will catch up. But today in the United States there is more chance of going wrong because we are to such a large extent filling things up in our land-use development. If we make a mistake, we are likely to find that we have to undo something instead of just not do it later on. To a very large extent, we are putting all our sites in certain metropolitan areas into one use or other. If the selected use is wrong, we have to cancel out something we have already done as well as start the new thing. The possibility of low quality of growth offsetting large quantity of growth is getting to be more and more bothersome for us.

Representative WIDNALL. In your written statement you say:

The idea of correcting or forestalling fluctuations in business by manipulating Government expenditure should be deemphasized. Foresight is too limited and the decisionmaking period too long to make such manipulations turn out well in timing. I might make an exception for changes in the rate of contract-letting for light construction and highway work under continuing programs. A good example of the results of trying to be too smart in this direction is the expenditure program adopted to help against the recession in 1958, which is bearing fruit too late to be helpful.

I pose this question: Did not that expenditure program help to create a better psychology with respect to the people and instill some confidence in them so that it helped to create a better atmosphere throughout the whole economy?

Mr. HART. Yes, sir. This is a point Mr. Curtis was making, if I understood him, that people who are responsible have to show concern for the fact that other people are in trouble, and adopt remedies which will be recognized as effective.

If we took this point of deemphasis to say that we should let the public think Congress was just prepared to let things ride the way things were let ride in 1930 and 1931, this would be dreadful. These measures in 1958 did go some way to justify people's confidence that recovery would be assured by Government action. But it would be possible to build up equal confidence in the feasibility of making appropriate adjustments on the tax side.

This was one of the psychological surges I am talking about, I think. Somehow or other a consensus developed—practically everybody who talked to the public about these questions for some months said a temporary tax cut could do no good, and that the only thing that could do any good was an adjustment on the expenditure side. The arguments which went behind this were rather thin. I, having quite a background in these problems was not carried away. Yet I could feel the impulse to join in this chorus because somehow or other this was the way informed people seemed to be talking and I hated to be isolated.

Now having built up this sort of psychological climate, expenditure methods would have a favorable psychological effect and revenue measures might not. I think it was a failure of leadership in the country that led people to gage whether the Government was trying to do something about the situation by what happened on the expenditure side, where this was not an appropriate way to gage it.

Representative WIDNALL. It is my impression that within the last year there has been more interest in government throughout the United States than we have ever had in this country for a number of years, that there is more sense of citizen participation right now, more feeling for it, and they are more closely watching the Government.

I think what you touched on in connection with confidence as provided by leadership is something that is very important in the country and the response of the public to it.

Now, on page 17, when you were talking about trying to persuade the public to be less sensitive to minor fluctuations and employment and prices, did you mean that by way of verbal persuasion or by way of legislative action?

Later in the paragraph you provided for a four-point temporary drop in rates if unemployment reached 4 million, projecting something for the future if the public knew they had a cushion. Is that what you had in mind?

Mr. HART. Yes.

It seems to me one of the defenses we rely on in a recession is that when some of the people notice some of their neighbors get laid off, they don't suddenly get scared themselves. Even in factories where workers have been laid off, it may not be all the workers in the family, and if not, it helps the economy if they feel they will go ahead with confidence in something like the established way of living, rather than cut way back.

I think extension of unemployment benefits helps in terms of this psychology of maintaining confidence. However, I think I would rather put this point of persuading the public to be less sensitive rather more positively. I would hope we could get people more interested in some of these decisions that affect the quality of our

economic growth. On the whole I am very much cheered by this evolution of the field of policy you gentlemen are talking about, where we start lining up prices employment, and growth instead of concentrating so exclusively on employment.

I think that there has been an undue emphasis in policy on the stabilization question. Yes, we should intensify our precautions in the way of built-in flexibility and have some formula flexibility which protects us against a set back developing too fast and too far. But on the whole we should take stabilization a little more for granted, which on the record we are somewhat entitled to do. We should try to capture public attention for constructive measures in other fields and, shall we say, let part of the front page and part of the business page be occupied by suggestions about better directed growth which would squeeze out space that is available for other things. Fortunately such a shift in emphasis seems to be taking place.

Representative WIDNALL. I just have one more question, Professor Hart.

You do not appear to be as disturbed about creeping inflation as some of the other economists who have testified, and others outside the congressional hall.

Do you not worry that it might turn into a gallop rather than just a creep through action of the public?

Mr. HART. Well, yes, sir.

Again this is partly a question of experience. I am no longer a youngster, and I have been concerned about these things over a long period. Here again I have been agreeably surprised.

For instance, in 1951 it looked as if we were trying to institutionalize inflation by putting in escalator clauses all over the place so that whenever there was an inflationary movement in one sector, all the other sectors would keep pace and we would build in a higher level of costs and go on from there. I have been rather agreeably surprised at the willingness for instance, of labor unions to barter cost-of-living clauses for other elements in the labor contract. There has been a lot of talk lately about the development of an inflationary public psychology. Yet it seems to me that over the years the public's willingness to operate as if it expected price stability has not been very much upset. Obviously, if you are realistic you recognize that prices are more likely to go up than down; but we don't really seem to have parted company with the convention of treating the dollar as if it was a good unit to calculate in and we on the whole do not try to set escalators up contractually—well, we just don't go to the length that we would go to if we were very close to this breaking point.

I have formed the impression that we have more substantive and psychological resistance to inflation than I was prepared to believe in 1950 and 1951, and I am moderately calm about it.

Of course, I am in a profession where naturally we tend to be pinched by creeping inflation; to get the academic salary scale adjusted is a terrific tussle. When you found me talking about the way in which various kinds of social frictions are intensified by inflation, this is partly personal experience. These frictions are quite perceptible inside the university and quite perceptible in relation between the university and other groups.

I think we have a decided stake in price stability as against creeping inflation even at the pace of recent years. Yet as social misfortunes go,

this is a fairly mild one. In comparison with other countries, and this country in other periods, it is a great luxury to be able to worry about an inflation at 1 percent per annum. One would expect to have more acute things to worry about.

It is worth worrying about, but let us not forget to count our blessings and let us not be prepared to go into rash policy gambles for the sake of curing such a mild affliction.

I do fear the ideas of peacetime price control which seem to crop up in many quarters when we discuss this kind of thing. The attempt to impose peacetime price control would be a very much worse evil than the sort of inflation we have experienced since World War II. This is on account of the fact, as I mentioned in the text, that I don't have the slightest confidence that such controls could be evenhandedly enforced.

I think uneven enforcement of such controls is one of the worst evils you can unleash. The experience of Western European countries since World War II, and the reasons why they have gone for decontrol in sector after sector when they entered the postwar period with the idea they would become normal, confirm my view. On the whole control problems for the United States would be much more acute for the Netherlands or for Britain or for Scandinavia. But in these countries, having tried all this kind of control, they have climbed back and been prepared to a considerable degree to accept the evil of inflation in exchange for the evil of this particular kind of anti-inflation policy.

Other ways to oppose inflation have drawbacks too. Mr. Curtis was mentioning the difficulties you get into in terms of pressures of different kinds on the economy if you rely on monetary policy. We have already had experience to show that these questions are fairly serious. To try, in the face of the other policies our Government adopts, a monetary policy so restrictive as to stop inflation completely would accentuate these difficulties to an extent that would worry me considerably. So my opposition to inflation is not unconditional. So many of the remedies we would be likely to get involved in are pretty serious evils in themselves, and rather ineffective relative to what ails us, that it may be best to let inflation creep.

Representative WIDNALL. You mentioned also as part of your testimony the fact that you felt that the Government should get into the school construction in times of recession. Of course, that is a contrary opinion to a lot of that going around Washington right now where they feel that the Federal Government should step in regardless of cost, regardless of the state of the economy, and take away from the States.

How do you arrive in your distinction on that? Do you feel that the Federal Government's role should also be supplemental in a field such as this?

Mr. HART. No.

I am inclined to think that we are well behind on school construction and that if we expect a steady prosperity from now on, school construction needs some acceleration. Probably it is a good idea for the Federal Government to push in this direction.

I am involved in a citizens' committee on the public schools. In that capacity, I have views here, which I must admit are not well enough based in my own research to be genuinely expert views.

It seems to me as if we are pretty seriously in arrears and we have a pattern of local government financing which makes it very hard to catch up. The main constructive suggestion that many people seem to have to offer is to get school districts in the sales tax business which makes me shiver. To have a sales tax in a very small geographical area makes a horrible mess. It seems to me on the whole, given the financial situation we somehow or other have to find broader units to base school financing on. There is a lot to be said for the national unit. On the other hand, the construction program does seem a way to get the Federal Government involved so that there is minimum distortion of local standards of curricula. On the whole, I think I am for such a Federal program, but I wish I were well based enough about it to know why I was for it.

Representative WIDNALL. The reason I brought that up, in your testimony you said:

Standby arrangements to help local governments in recession (but not in inflation) with such problems as financing school construction.

I wonder what you characterize our period as now.

Mr. HART. I think you put your finger on a place where I expressed myself much too hastily. I don't really think I am prepared to stand by that. I should say that if there is to be any sort of Federal program of assistance, the timing cannot be disregarded and on the whole there are times when it is more appropriate for pushing it forward. The kind of device I have in mind is the sort of thing where the overhead body might say: for all contracts entered into within the next so many months, we will assume the first 2 years' interest charges.

This is based on a hunch (which is not too well buttressed by evidence) that the willingness or reluctance of local communities to pass bond issues probably depends in good part on the question whether this is the kind of year in which we are willing to face an increase in tax rate. If part or all of the increase in the tax rate can be postponed 2 years because somebody else is carrying the interest charge, this may very well make it possible to vote the bond issue where otherwise we would have to fight another campaign on the bond issue next year, at a time when there is a setback in business and people have been laid off and other people are wondering about their prospects, this resistance to taking on the interest commitment is stronger in a local community, so that I think we are likely to get an appreciable response of school financing at the local level to business conditions. My proposal is to offset this local response by a Federal program.

This is a researchable question, and I have not done enough research to be fully sure of my ground.

To that extent, I am talking irresponsibly.

Representative REUSS. I would like to follow up on some of the questions Mr. Widnall was asking concerning your point 1(b) on page 16, the surge of banking funds back and forth between loans and investments.

I take it your feeling is that a policy of monetary restraint, that is policy that regulates the total money supply, tends to be vitiated to a degree by the ability of the banking systems to switch between loans and investments.

Mr. HART. Yes, sir.

As I see it, at present the basic thing that the Federal Reserve System can do is to put the banks under pressure in their reserve position. This affects their ability to expand their total of loans plus investments.

To the extent that they can sell their investment securities somewhere outside the banking system or pass their burdens back to the Treasury by reducing their bill purchases as the old bills run off, they can put themselves into a position to expand loans and thus stimulate an inventory expansion.

I am struck by the close resemblance in time shape between the bank loan curves and the inventory curves in the postwar period and I am pretty sure this is not accidental. But I think the economic profession has not done the research it should have here. It is a curious fact that our most important researches in the field of inventory generally do not do very much investigation of the banking side, although both business cycle theory and the way the bankers talk about their activities would suggest the relation is very close. The comparison of figures confirms that the relations are very close. This is a place where the research program is not what it should be. This relation should be much better understood than it is; but in my opinion we have been putting our research emphasis in the wrong direction.

**Representative CURTIS.** In these statistics the inventories are usually those of the large business, are they not? Are we not pretty much limited in that knowledge?

**Mr. HART.** I don't know as much as I should about the details of the figures. The inventory figures that appear, for instance, in the Survey of Current Business are intended to represent manufacturing and trade as a whole, but our census figures come in rather rarely. When we try to figure out how things have changed in the last few months we have to rely on sampling information which is good for the large firms and poor for the small firms. So, it is highly probable that the movement in the large firms dominate what purport to be figures for the economy as a whole.

**Representative REUSS.** Whether the inventory movement is predominantly in the large sector or the small sector, inventory speculation is one of the worst and most disquieting forms of incipient inflation, is it not?

That is what you are concerned about, I think.

**Mr. HART.** Yes. Yet when we say "speculation," we are putting on an overtone which I think is not always justified. What one tends to call inventory speculation, from the businessman's standpoint is not like deciding to plunge on the stock market and take a flyer on armament shares or aircraft shares. The businessman who expands inventory is operating in his own field. It is a question of being a little better provided with raw materials or a little bit better provided with finished products.

People who carry out the field surveys have to probe pretty hard to get any admission that inventory decisions have anything to do with price situations. Businessmen tell us that they are only incidentally trying to take advantage of price movements. The way it appeals to them is that they are trying to assure the flow of supplies. They are trying to make sure they are not going to lose sales.

By the way, over time the American economy shows a rather interesting tendency to expand inventory less than in proportion to operations. Over time we seem to be improving our efficiency in the use of inventories, and businessmen take proper pride in this improvement. I would suspect a good many of the people involved might feel rather unjustly treated if you said they were speculating in inventory, but their operation has the same overall economic effect.

Representative REUSS. The point is that inventory accumulation, to use the less weighted term, worries you because if there is too much inventory accumulation you see this as a movement that tends toward inflationary price levels. I take it that is why you bring it up here at all.

Mr. HART. It is not only the price rises. In the recent publications of the Department of Commerce about the course of social accounts there are some fascinating comparisons of the rate of final sales of products as compared to the rate of production. If we get in a situation where there is a marked difference, where there is a tendency for production to run ahead of sales, then we are likely to be in for a rather painful readjustment.

Of course, the main way that production can run ahead of sales is to have inventory accumulation at a nonsustainable rate. It is obvious that we cannot hope to get a complete stabilization of the rate of growth and inventory. This is utopian, but it seems to me it is reasonable to hope for a considerably narrower range of fluctuation in the rate of growth of inventory. When we reach what otherwise would be a downturn, if the inventories are definitely a little bit on the lean side, we can hope to postpone the downturn and not have such a sharp downturn when it does come.

Representative REUSS. So you feel uneasy about excessive inventory accumulations for two reasons:

One, they may tend toward greater price increase than you would like to see; and

Two, they may lead to too great accumulations which will necessitate a later adjustment which may cause something like a recession?

Mr. HART. Right. By the way, I would not like to sell the price thing too short. When you have a part of the market in this condition, production outrunning sales and inventories being piled up, the price situation tends to get out of touch with the actual use of the commodity. The price may get to a point where the public cannot begin to absorb what the industry is capable of producing, although they might be able to at a lower price. Thus inventory buildup can create a price increase which, to begin with, is more or less a psychological phenomenon and which then in one way or another gets imbedded.

I think this is something to worry about. But I remain more concerned with the effect on activity. It is a little like the inflation thing. To worry about inventory fluctuation with the amplitude we have had in recent years is a luxury we could not afford if affairs had not been going rather well.

Representative REUSS. So whatever the immediate impact, you are fearful of undue inventory accumulations because they will have a poor effect on economic growth? They might cause a recession?

Mr. HART. Yes. Although, if you think of the growth of economic

capacity as the fundamental characteristic of growth, it is a curious thing, but even the great depression of the 1930's does not seem to have set back very much the growth in our capacity to produce. To a large extent, the production we lost in the thirties was a loss to our consumption of the thirties rather than to our productivity capacity for later periods.

Mind you, I do think to some extent we have permanent losses from failure to accumulate during these periods. Yet I think on the whole the kind of economic loss which the economy carries through the recession is mostly experienced at the time of the recession rather than later, so the permanent effects of inventory wobbles may be small.

Representative REUSS. Is it not a fact that at a time when businessmen feel like accumulating inventories the incentive to accumulate inventories on the part of businessmen is likely to be quite strong and since the period of a bank loan for the acquisition of an inventory is likely to be relatively short, the tolerance of businessmen to rather high interest rates to be used for an inventory loan is considerable?

In other words, high interest rates are not a terribly good deterrent against taking out of an inventory loan.

Do you agree with that?

Mr. HART. I definitely agree with that. That is, I tend on the whole toward the availability school. It seems to me that if the bankers were in a position where they were loaned up and could not expand and their customers were coming in with loan proposals it would take such form as the following:

"You want \$150,000 for 3 months. I don't see how we can do that. We have other customers to take care of, things are tight, but how about \$120,000 for 2 months?"

If this is the best loan the borrower can get, then he has to reconsider his inventory policy. If he can only get \$120,000 for 2 months he is going to have to figure how to get along with less raw materials and to little less finished products than otherwise.

This type of credit situation puts the right sort of pressure on him. Merely to say "you can have \$150,000 for 3 months, but it will cost you 5 percent instead of 4," might not make much difference.

When the banker is in a position where it is hard to expand and he realizes to be generous in one loan will put him under pressure for another, I think he can put on quantitative pressure of this sort. My impression is that this kind of pressure is fairly commonly applied.

Representative REUSS. The thing you worry about, I gather, is that a bank sitting there with, maybe, 60 percent in loans and maybe 40 percent in investments, probably U.S. securities, is fairly likely to be willing to sell some of its U.S. securities even though it may have to take a loss at the current market price on the U.S. securities because it can get rather an attractive rate of interest for a short term inventory loan.

That is the basis of your concern, is it not?

Mr. HART. It is not only the rate of interest, but the inventory loan builds up good will. They don't want to have to chase away their customers. To make loans is good for a bank in the long run even if it takes an immediate financial loss. Beside the bank may not have to sell a bond at a loss. The securities that the bank holds are

maturing from time to time, particularly Treasury bonds and certificates. The question is will they buy new securities. They pass the pressure back to the Treasury if they don't replace their holdings of issues that mature.

Representative REUSS. Let me go on to the next point: If it is so that it is quite easy for a bank to make an inventory loan for the reasons we have just described, if it is also true that banks hold and have held for some time a very large part of their assets in investments, mainly U.S. securities, as well as in loans, which is demonstrably true, is it not, then a policy of overall monetary restraint likely, unwittingly, to be a deterrent to growth in the following way, that a policy of monetary restraint does not seem really, for the reasons you have given, markedly to restrain inventory loans?

In other words, it does not restrain them enough, otherwise you would not be worried about it!

In order to get enough restraint on inventory loans to get anywhere, the money has to be made so tight that noninventory loans, that is, loans by financial sources other than banks, for the needs of industry for business expansion, for plant, and for equipment, and for construction by local governmental units, as for schools and streets, get so high priced that they are not made.

Is not, therefore, the relative freedom of banks to make inventory loans a factor which induces a policy of monetary restraint that is so supertight that it incidentally hurts growth?

In other words, the inventory loans, which do not help growth in any way, get made regardless. Growth-breeding loans, however, tend to get killed off.

Mr. HART. I think on the whole I agree with that.

I do not seriously think that it is feasible to discriminate between types of loans made by a given bank. I do think that installment credit is in much the same category as loans for business inventory and, the same is true of construction loans, a typical bank construction loan is really carrying the inventory of the contractor, you might say.

Representative REUSS. I was not talking so much about bank loans as loans made by the market generally to borrowers, corporate and small business, to build new plants and buy machine tools and equipment tools.

Mr. HART. This pressure gets transmitted quite a way, of course.

If the banks are dumping securities and giving incentives to the insurance companies and savings banks to buy them, this means that these institutions have less available for mortgage financing and I think there is a good deal in the view of the people in the housing industry that to try to operate stabilization policy through interest rates is probably in good part to dump the burden of economic fluctuations on the producers of housing and such items.

The policy toward loans I am suggesting here would imply a transformation of the reserve system. This was suggested back in the early 1950's by several people. In a way there is an anomaly about the bank reserve requirement. The act by which credit is expanded is not the act of accepting a deposit at the bank; it is the act of making a loan, or buying a security. Yet the deterrents to bank expansion are addressed to the banks which have an inflow of deposits, you might say. The reserve requirement is related to the amount of deposits

you hold rather than to the way in which you are changing your earning assets.

The implication would seem to be that we are addressing the incentives to people in the wrong capacity. If we want to stabilize the banking operation, we should address ourselves to the banker in the capacity of one who decides whether to make a loan or buy a security rather than in his capacity of one who is responsible for customer balances.

If you go into the idea of reserve addressed to assets, then it is possible to differentiate to some extent. The form which such a loan reserve would take would presumably be a special issue of Government securities or some sort of security put out by the Federal Reserve.

Representative REUSS. What is the monicker for this device? Is this called tied reserves?

Mr. HART. These ideas come from the celebrated Dr. Goldenweiser and from Professor Jacob Viner.

As I remember, the original hoped for scheme was loan reserves or asset reserves. In any event, the idea would be to have outstanding a certain limited amount of transferrable permits to hold loans. A bank would be required to have permits equivalent to a million dollars worth of loans for each million dollars of loans it held.

If one bank chose to reduce its loans and some other bank wanted to expand, there is no reason why there should be objection. In this case the bank expanding could buy this transferrable permit from the bank which was contracting. The banks that had reason to expand must be able to offer enough to make it worthwhile for some other bank to part with a permit if the stock of permits is being held constant.

A mechanism of that sort would make it possible to distinguish between loans and securities of the banks. You can carry it to any degree of refinement by class of asset. But when you start asking about the labeling, even loans and securities shade into each other somewhat. Whether the thing is a term loan or a privately placed bond issue gets to be a fairly delicate question. If you tried to classify very much finer than loans versus investments, the possibility of relabeling would be tremendous. If the proposal has any merit, it is the loan versus security boundary that is most likely to be workable.

Even then I don't see how in advance of experience you can be sure that there would not be seepage. I think it is a hopeful device; I don't think it is a sure-fire device.

Representative REUSS. So, to recapitulate, we can say that you do not have any golden panacea on the subject of this afternoon, that there has been some thinking on it, that a good deal more thinking needs to be done before a solution can be grasped.

Mr. HART. And if we were offering prizes for social invention, this is an area in which such a prize might be offered. There is a yawning opportunity here. Inventory is one of the great stabilizers of the economy. As you were saying a few minutes ago, it is hard to see where the surges of inventory are socially constructive. You can see where individual firms have to be able to adjust rather quickly, but we should hope to get offsetting adjustments in different sectors of the economy.

Intuitively one feels there must be room for controls which would take hold as stabilizing influences on this inventory segment. But

the only reasonably hopeful channel I have been able to hit upon through which you could set up a reasonably impersonal and fair operation with any reasonable hope that it would be effective seems to be banking.

Representative REUSS. And the opportunity is one that yawns, as you say, because it does seem as if a crude meat-ax monetary policy, i.e., controls over the total money supply, seems to fall with particular impact on growth loans, i.e., borrowing by business to build plant and equipment, capital goods which make for growth, whereas such a policy does not seem to bother very much the ease with which a banking institution may grant an inventory loan, which becomes even easier by virtue of the fact that the banks hold a large volume of liquid or near liquid securities, some \$60 billion of U.S. securities.

Mr. HART. Yes, on the whole I would agree to that.

Representative REUSS. Thank you very much.

Representative CURTIS. If I may, I do not want to dwell unduly long on this inventory aspect, but it has not been brought in before, and to me it is exceedingly interesting.

Of course, in our statistics there is no distinction, no breakdown of which kind of inventory we are talking about, is there? Whether it might be material that could be processed, or material already processed.

Yet I can see that there is a big distinction. If it were materials already processed and ready for the market on which the loan was granted, consumer credit available would make a big difference in consumer demand. The inventory of raw materials, to take the extreme position, would require a far more stable type of loan.

Is there a breakdown or do you regard inventory just as inventory?

Mr. HART. There is a breakdown into the five categories, retail trade, wholesale trade, and in manufacturing, raw materials, finished goods, and goods in process.

However, one must admit that this breakdown is a little shaky. Notice when we get these inventory fluctuations there are some queer things in the figures. On the downswing, for instance, you will find that finished products gain on raw materials. Finished products go on expanding after raw materials have started to fall off.

Now, this is in part a question of the way we classify the same goods. If you have something which is semifabricated, in a recession there is a tendency to shift the risk back, and consequently what might have been a raw material item for the user becomes a finished product for the producer of the semifabricated goods.

It goes in also at a lower figure, of course, before it has changed hands. It goes in at the fabricator's cost instead of at the price he sells to the user.

This is corrected for in the estimates of social accounting. In the inventory charge figure they try to allow for this. How perfectly they succeed I don't know. It is one of the tricky problems in social accounting I know too little about.

However, if you will follow the monthly figures of the dollar value in these categories, a shift as to who carries the risk on these goods, looks like a diminution of inventories in the raw material category where perhaps it really is not.

Representative CURTIS. Actually, goods in process will stay with the company. Finished goods can be shifted?

Mr. HART. Yes.

It is only for goods in process that the classification is clear-cut. Representative CURTIS. That is right.

Mr. HART. But the finished products of one company are to a large extent the raw materials of the other?

Representative CURTIS. They could be or they could be the end product. With raw materials of course, you get into some of these futures markets that I mentioned.

I do think that there is a real area of speculation. I personally think it is a very proper area for endeavor. I think the futures markets help a great deal, but also, it seems to me the middlemen have entered this picture, too. That may account for your comment or observation that there seems to be a better handling of inventory, say, since World War II.

It may be the entry of more middlemen to absorb, on the basis of their wisdom and business judgment, some of the speculation that is bound to go into any inventory accumulation. The more warehousemen at various stages there are in this picture, the less need for the maintenance of inventory, or do the holdings of middlemen go into these economics statistics on inventory?

Mr. HART. We have figures for retailers' inventories and figures for wholesalers' inventories as separate categories. Of course, in good part, the wholesalers' inventories must be those items which are finished products for one group of manufacturers and raw materials for another.

For example, part of the steel inventory presumably crops up among the wholesalers' inventories. These are partly finished products.

I suppose that practically all the retailers' stuff must be on the way to the consumer, but the wholesalers' stuff and the finished products stuff in industry are in good part producers' goods which are on their way to further productive operations.

Representative CURTIS. I want to thank you for giving me this information. This is a field in which I have not followed closely.

I certainly am impressed with the bearing it has on our overall subject.

Now, if I may go back to the general theme that we are discussing here, and I was so pleased to have your emphasis on the quality of growth as opposed to just the absolute rate, but if we granted the quality of growth and it was fairly rapid, are we not bound to have an increased amount of frictional unemployment?

That is a question I have asked other panels. It seems to me it is axiomatic, but it might not be. The more rapid growth, the more obsolete skills I would assume, and therefore the more frictional unemployment.

Mr. HART. I wish I knew more about those things. My guess is that this relation is not that simple. When I say we should develop a little sensitivity, I do think we are getting into a period when there will be more frictional unemployment. Developments in the automobile industry in particular point to a sharper seasonal fluctuation in auto production. If we get a sharper seasonal fluctuation in the industries with high wage rates, it means that the total labor force attached to those industries grows relative to the average of employment in those

industries and the amount of year-around employment that we will get is therefore going to be higher.

In the immediate postwar period, a lot of our seasonal fluctuations were flattened against a ceiling of full production in these industries. As the seasonals come back, the amount of unemployment which we have to accept goes up on us, in the sense that if we try to combat it by fiscal means we find that we are raising prices rather than reducing unemployment.

Representative CURTIS. I have another thought.

I have given as an example of the rapid technological growth the farm segment where we certainly have created considerable frictional unemployment, but then just as I was thinking and you were thinking, there comes to mind another area where there have been jobs created in the electronics field; for example, the rapid growth there has not produced frictional unemployment.

Quite to the contrary, it has opened up jobs. So maybe we have to look at both.

Mr. HART. In the growth industries you get different patterns. In my occupation, for instance, the rate of turnover does not have very much to do with the rate of unemployment because you are on with the new before you are off with the old. It is perfectly good form to hold one job and look for another job.

So, to keep the labor force reasonably efficiently spread, does not take unemployment there. But in many occupations you cannot effectively look for a new job until you quit the old one. To the extent that the efficiency of the economy calls for replacing people, they have to be out of the old job before they can begin to get another. It takes time to find a new job. That means that unemployment is created.

To the extent that the new industries are in this category where you can negotiate for the new job while employed on the old job, then their growth might reduce frictional unemployment. I was talking last night to a man who knows a lot about air traffic problems and he says that in many directions it is getting to the point where you need an engineering type of personnel rather than a mechanical type of personnel for some maintenance operations.

If this is so, the practice of the engineering profession makes it easier to work the job market without having people thrown out than the practices of the lines where you employ mechanics. Though, again, unemployed engineers are relatively more common than unemployed professors of economics, because the job is not quite so well adapted to seeking a new job while you hold the old one.

Representative CURTIS. You have a very definite, difficult job of retraining where the skill has become obsolete.

Mr. HART. This is partly the question of the pace at which it happens.

When you travel on the train, these days, you practically never see a young man working for the railroads. However, if the attrition is slow enough, then it is just a question of their not taking on youngsters and the youngsters being trained for whatever is growing. If the attrition gets to be so rapid, workers actually get fired. There has been a certain disappearance of the younger station agents on the New York Central because the closing down of some stations has caused their jobs to be taken over by older people who bumped them.

If the declining industries do not decline too fast, this problem is not terribly serious. If the declining industries decline somewhat faster, then the number of individuals who at a fairly advanced age have to start learning new tricks goes up on us. But the primary problem of training for the new industries is always back at the younger age groups because the rising industries always tend to have a very young labor force who have very recently come out of school.

Representative CURTIS. I have one other question directed to the economic growth. I can see how if the growth has been accompanied with increased productivity you actually could have a price decrease, but if you have a situation like we do in the medical field where it is not increased productivity as much as increased quality that demonstrates the growth, are we not bound to have cost increases in that kind of setup?

I mean real costs. The research and development that has to go to produce this economic growth, the obsolescence that has occurred in equipment and skills and the retraining, is that not going to have a cost increase aspect to it?

Mr. HART. The outcome varies. In any event, earnings in the different industries are going to be kept more or less in mind. I don't know that I quite like the medical illustration. It is hard to tell about the increase in quantity and quality where we have no unit of physical measurement.

Representative CURTIS. I do not think there would be much chance of increased productivity.

Mr. HART. A haircut is about the same thing it used to be a while back except I don't have so much hair. They still call a head a head. It stands to reason that unless the number of haircuts a barber can give an hour goes up, then at the time there is a general price in wages the price of haircuts is going to go up.

Representative CURTIS. That is not an area of economic growth. I am trying to relate it to an area where you have very rapid growth. It just strikes me that in that area you are almost bound to have increased price, just as a sheer cost of the growth.

Mr. HART. I would have argued it the other way. I would have expected the price rise in the backward industries. In chemicals, for instance, even in this inflationary period you are not surprised to find a good many products coming down because they are able to increase their output per man-hour so much.

Representative CURTIS. The reason I chose medical care, maybe it is unique and, therefore, not a good choice, but the reason I chose it was because I did not think there was much productivity increase, but the growth took place in the area of quality, improvement—the fact that you live 15 years longer, the fact that a little bottle of a drug produces much more health than a big bottle.

Those things, and the costs involved in them, the research involved, the fact it has made obsolete previous equipment, do not those costs have to be recouped in some way and if they are recouped, are you not bound to have an increased cost?

Mr. HART. Now when I was a boy one of the great mainstays of the medical profession was the mastoid operation. This produced a lot of medical income and with a noticeable rise in medical cost to many families.

Now the total cost of taking care of a family's ear, nose, and throat problems today is a fraction of what it was in the 1920's. I would call this a gain of medical productivity, due to antibiotics.

This has paid off in large part in something which we do not exactly call price reductions. But there is no doubt that the quality of service afforded in that direction is improved greatly. The medical profession has cheerfully absorbed the disappearance of this sort of income, and is going into other specialities. Here is something they are doing for us enormously cheaper, because of successful research.

Representative CURTIS. That was a speculation I was interested in. Now, one final question, if you will bear with me, Mr. Chairman.

I just want to clarify something. You said:

The fact that it was so little inflationary suggests that perhaps we may presently find that a moderate chronic deficit in prosperity is more healthy economically than a balanced budget—

I did not quite follow the reasoning on that.

I thought the theory was that we would pay off the deficit in periods of prosperity.

Mr. HART. I am expressing here what is a somewhat unfashionable but a thoroughly sound attitude toward taxation. Namely, I think a tax is an evil in itself.

The reason that the evil of taxes is worth accepting is that the alternative is a worse evil.

Now given our Government expenditures, the question is how much taxes do we need to offset the inflationary effect of the Government expenditures? If we are able to get down to \$70 billion worth a year of government expenditure, for all levels of government if \$60 billion of taxes was enough to prevent that from being inflationary and we ran a \$10 billion deficit, I would be inclined to say, "How satisfactory that we don't have to have taxes exceeding \$60 billion."

The objection to a tax is not only the inconvenience to the fellow who has to pay it. The side effects of high tax rates in terms of distortion of all sorts of decisions are pretty serious. If we could have the government expenditures without either the taxes or the inflation I would be very cheerful about financing government 100 percent on a deficit basis.

Unfortunately this is not the way it works and if we have the expenditures and hold down inflation to a livable amount we have to have taxes which come fairly close to matching the expenditures. But how close they have to be is something we have to feel out.

I don't think anybody's ability to forecast how much taxes it will take 10 years from now to balance the inflationary effect of a given amount of expenditures is very good. You can approximate it, but to come within \$4 or \$5 billion at this time in guessing what would be the appropriate revenue for a \$70 billion expenditure level, is something I don't think feasible. We may need a surplus; my guess is that we need a deficit of some billions a year.

Representative CURTIS. If there is a deficit you are going to have to market your bonds. That is a thing that bothers a lot of us right now, the impact on the economy through trying to market bonds, just the mere size of the number of bonds. If you just assume a Federal deficit you are going to keep on adding to, you assume that you are

going to continue to have this problem of being able to market your bonds.

Mr. HART. Aren't we saying this is the situation to be felt out?

I don't want to overdo this business of how the economy adjusts itself. My predecessors in economics have come croppers by arguing the economy is automatically self-adjusting. Yet if you have this situation where revenue can be less than expenditure without inflationary effect, this would imply an offsetting imbalance in private finance. The rate at which funds were becoming available from savers would tend to run ahead of the rate at which business was absorbing savings. Thus there would be potential buyers in corresponding amount for Government securities.

In this case the ingenuity of debt managers would readily find a form for marketing securities which would work. It probably would be possible to take a situation that could work out rather smoothly in the way I am describing and turn it into a mess by putting out the wrong securities, but I think we can trust the ingenuity of debt management. And if we are in a situation where we do not need a balanced budget to avert inflation, then we are in a situation where, with reasonable gumption, yes, we can place the securities.

Representative CURTIS. Thank you.

Representative REUSS. Thank you very much, Mr. Hart. We appreciate your help.

The session will now recess until 2:30 o'clock tomorrow afternoon in this place where we will hear from Mr. Robert Triffin, Yale University.

(Thereupon, at 4:45 p.m., the committee recessed, to reconvene at 2:30 p.m., Wednesday, October 28, 1959.)

# EMPLOYMENT, GROWTH, AND PRICE LEVELS

WEDNESDAY, OCTOBER 28, 1959

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met at 2:30 p.m., pursuant to recess, in the Old Supreme Court Chamber, the Capitol, Hon. Paul H. Douglas, chairman of the committee, presiding.

Present: Senator Douglas (presiding), Representatives Bolling and Reuss.

The CHAIRMAN. We are very glad to welcome you this afternoon, Mr. Triffin, and we appreciate your preparing two papers for us. They will be printed in the record at this point and then you may proceed as you wish.

## STATEMENT OF ROBERT TRIFFIN, YALE UNIVERSITY

Mr. TRIFFIN. Thank you.  
(The statements referred to follow:)

THE INTERNATIONAL MONETARY POSITION OF THE UNITED STATES  
(Statement of Robert Triffin before the Joint Economic Committee,  
October 28, 1959)

### I

Let me first apologize for being unable to offer you today more than a very narrow contribution to the broad and fundamental policy issues debated by your committee. The time at my disposal was extremely short, and my only field of competence—if any—lies in the area of our international monetary policy, rather than in the field of domestic economic policies which is the main concern of this inquiry.

I am very much afraid, however, that the evolution of the last 10 years has now brought us to a point where these issues have become inextricably intertwined, and where we can no longer afford to ignore the impact of our domestic policies upon our balance of payments and reserve position. I must admit that this way of looking at things is still very unfamiliar to most of my colleagues in the academic world, although it has recently begun to force itself upon the attention of economists in business and Government circles.

For many years after the war, our only problem in this field was to reduce to more manageable proportions our enormous surpluses with the rest of the world, and to find adequate means to finance them. The so-called "dollar shortage" theory dominated economic thinking and inspired economic policy, both here and abroad. The authors of these theories, however, and policymakers themselves were extraordinarily slow in realizing the full extent of their own success in dealing with the problem. Only our large gold losses of last year finally woke us all to the fact that our balance of payments had shown persistent deficits on overall account ever since 1949, and that our net international reserve position had been declining continuously at a rate of about \$1¼ billion over the 8 years, 1950-57. This latter figure rose abruptly to \$3.3 billion

in 1958, and is likely to exceed \$4 billion this year. While our gold losses have been dammed up somewhat this year by sharp increases in interest rates, they have nevertheless continued, and been accompanied by a further upward spiraling of our short-term indebtedness abroad. Finally, and for the first time in many years, this country—the richest in the world, by far—is now experiencing large and growing deficits even in its current account, i.e., its purchases of goods and services abroad far exceed its sales to foreign countries, even though a substantial portion of these sales are financed and supported by extraordinary aid programs, particularly in relation with the disposal of our agricultural surpluses. More and more is being heard about our producers “having priced themselves out of the world markets.”

The situation clearly calls for an “agonizing reappraisal” of our foreign economic policies, but we are in great danger of misinterpreting the evidence and of taking refuge in the kind of policies which, although extremely plausible on the surface, are not likely to be as effective as one might think in redressing our own position and are most likely, on the other hand, to trigger off a disastrous reversal in the postwar trend toward freer and expanding world trade.

My main attention has been directed at the international aspects of this problem. I beg your permission to introduce in evidence a paper on “The Gold Shortage, the Dollar Glut and the Future of Convertibility” which discusses it from that angle and which I submitted last month to the annual meeting of the International Economic Association. I shall try to summarize today the main conclusion and policy suggestions of that paper, but in doing so I’ll attempt to relate them more explicitly to the problems of the United States, and more particularly, to the issues raised by your committee.

## II

Two major questions emerge from any objective examination of our current balance of payments and reserve position. Does the evolution of our balance of payments on current account suggest that we may be in danger of pricing ourselves out of the world markets? Does the evolution of our international reserve position suggest that we might have difficulties in maintaining the free convertibility of the dollar at its present value in terms of gold and foreign exchange?

I do not pretend to be able to give you a definite answer to the first of these two questions, but I might point out some reasons for serious concern in this respect.

As the richest country in the world, with far-flung economic, political, and military responsibilities, we should be able to finance a large and steady capital outflow toward the underdeveloped countries, to help sustain their economy and their defense establishment. With far less resources than we have, the British estimate that they should aim for such purposes, at a current account surplus averaging more than \$1 billion a year. On a comparable basis, an average surplus of, let us say, \$4 billion a year in our own balance of payments would not seem excessive. This is indeed just about the level around which our capital exports—public and private—have fluctuated, rather narrowly, over the last 9 or 10 years. Our current account surplus, however, has long been insufficient to cover such exports. It averaged slightly more than \$2 billion over the years 1952–57, fell to \$1.5 billion in 1958, and turned into an annual deficit rate of more than \$1 billion in the first half of this year.

Even more disturbing as an indication of our relative competitiveness in world trade is the evolution of our current account with Western Europe. This is the area which is most directly in competition with us in the field of manufactures, while our balance with the rest of the world is more responsive to cyclical conditions and to the level of foreign aid and capital made available to these countries. Discounting some highly abnormal movements connected with the peak of the European boom and the Suez crisis, in 1956–57, our current account with Western Europe has shown a pronounced and markedly unfavorable trend ever since 1951. Our surpluses of the immediate postwar years had thinned out rapidly even before then, falling from \$5 billion a year in 1947 to \$1.8 billion in 1951. They averaged less than \$100 million a year in 1952–57, and have now shifted to an annual deficit rate of \$800 million in 1958 and more than \$2 billion in the first half of this year.

The combination of a relatively stable level of capital exports—about \$4 billion a year—with much smaller and fast declining surpluses on current account, turning into an actual deficit in 1959, has left us with a persistent and growing deficit on overall account, running today at the rate of about \$5 billion a year,

A small portion of this, however, is covered by long-term foreign capital exports to the United States and by other untraceable transactions appearing as "errors and omissions" in our balance of payments estimates. The remainder has given rise to annual gold losses and increases in our short-term indebtedness abroad totaling, on the average, more than \$1 billion a year in 1952-57, \$3.4 billion in 1958 and, at an annual rate, \$3.7 billion in the first half of this year.

A continuation of this trend would clearly be untenable in the long run. It is not to be anticipated in any case. The incipient, but strong, recovery of economic activity in Europe and the end of the steel strike should produce some improvement over the forthcoming months. Yet, this is most unlikely to redress the situation fully and to bring about a reasonable and tenable equilibrium in our overall balance of payments account, at satisfactory levels of trade and of net capital exports by the United States to the rest of the world.

Among the policy measures which suggest themselves, two are particularly plausible and yet likely to prove both ineffective and unwise. The first, and most obvious one, would be a sharp curtailment of our foreign-aid programs. The trouble with this is that such curtailment would be offset, in very large part, by corresponding cuts in our exports. Of a total capital flow of \$5.4 billion in 1958, less than \$800 million went to Western Europe, and more than \$4.6 billion to the rest of the world, i.e., mostly to the underdeveloped countries. A comparison of our capital exports to this area with our current account surplus with it shows a high degree of correlation, as the ability of these countries to run deficits with us on current account depends primarily on the financing made available to them by our own capital exports and foreign aid. A lesser flow of capital to them is thus likely to be matched, in very large part, by declining purchases of U.S. exports by them, and to bring relatively little improvement in our overall balance of payments.

We must also note that most of our aid programs and official capital exports are closely linked to political objectives which we would hardly abandon on mere balance of payments grounds.

This may yet leave some room for so-called tied loans, ensuring that the recipients of aid use it to buy in this market rather than to add to their reserves or to spend the dollars in other areas. This would be a palliative at best, the practical results of which are likely to prove disappointing as a great deal of our aid—such as the financing of our exports by agricultural surpluses—is already tied in this manner, or is, in any case, used in fact for purchases in the United States.

A second, and even more disastrous, line of action would be to reverse the liberal trading policies pursued by us for more than 20 years, and which have helped so spectacularly in the recovery and liberalization of world trade in general. This could hardly fail to trigger off similar reactions abroad, to arrest and reverse the current trend toward liberalization by foreign countries and to stifle further our own export trade.

The remedies, I feel, should be sought in a different direction. First of all, the current relaxation of world tensions may possibly enable us to reduce the terrifying and disproportionate defense burdens—internal and external—which probably accounts, more than any other single factor, for the revolutionary shift in the international dollar balance from prewar to postwar days. This is, however, only a hope yet, and one about which I feel totally incompetent to hazard any guess or suggestion.

We should, secondly, continue to press vigorously for the elimination of remaining discrimination on dollar goods and the further reduction of other obstacles to trade and payments by foreign countries, particularly in Europe. A more determined support for GATT and its efforts to outlaw unjustified discrimination and liberalize other damaging restrictions on world trade should also serve as a basis for greater efforts on the part of our own producers to prospect foreign markets and expand the level of our exports.

We should, in the third place, do everything we can to encourage European countries to assume a larger share of the burden of development financing, and to allow the recipients to spend the proceeds of such financing in the United States as well as in Europe itself. (This is another reason, by the way, for us to be chary of "tying" our own lending operations any more than they already are.) Success along these lines should probably involve some redirection of our own programs away from bilateral assistance, and toward multilateral assistance, such as is implicit in the present IDA project.

Fuller European participation in the financing of developmental needs seems to me particularly crucial at the present juncture, since I am not confident that

the various measures mentioned above will be sufficient to bring about a sufficiently rapid and drastic improvement in our overall balance of payments position. Time will be needed to restore, in a politically desirable and feasible manner, full competitiveness in our external trading position. Creeping inflation here must be arrested, while our rates of growth and productivity are stepped up at the same time by appropriate investments in research and technology. We should also be aided by the inevitable adjustment of foreign wage and consumption levels to the steep increases in production and the large balance of payments surpluses achieved by foreign countries over recent years. In the meantime, we shall probably be forced to keep our interest rates high enough to retain and attract foreign funds to this market, and to slow down somewhat our own capital exports. While unavoidable in the short run, this policy would be difficult to reconcile with our longer run policy objectives, internally as well as externally. The last part of my statement will come back to this point and make concrete suggestions to help us out of this dilemma.

### III

The second major question which I raised above relates to the evolution of our international reserve position and the threat which it may raise for the future stability of the dollar.

I have already mentioned the fact that the largest portion of our persistent balance of payments deficits on overall account has been financed, year after year, for nearly a decade, by a growing deterioration in our net reserve position. At the end of 1949, our gold stock exceeded the liquid dollar claims of foreign countries by more than \$18 billion. This exceedingly comfortable cushion was already down last June to less than \$3 billion. At the rate of loss experienced in 1958 and early 1959, these \$3 billions would be wiped out within a year, and our short-term indebtedness abroad would begin to outstrip our total gold stock.

The financial press, here and abroad, has sometimes exaggerated the significance of these figures. First of all, we are not in any danger of becoming insolvent as a Nation. Our gold losses and the increase in our short-term liabilities abroad are matched—and far more than matched—by the enormous growth of our foreign investments since the war. Most of these investments, however, are long-term investments on private account and could not be mobilized quickly to meet any demand for foreigners for conversion of their liquid dollar holdings into gold.

Secondly, however, there is nothing unusual or necessarily alarming, for a country like ours, in this rough equivalence between our gold assets and the dollar balances held abroad. Sterling was made convertible last December, and has shown considerable strength ever since—as reflected in its persistent premium over the dollar on the exchange market—in the face of a level of foreign sterling balances three to four times larger than the total gold and convertible currency reserves of the United Kingdom.

The strength, and the weaknesses, of our international position cannot be gaged from any simple formula or calculation of this sort. Account should also be taken of our short-term, and even long-term, assets abroad, but also of other assets held here by foreigners and which might, under certain circumstances, be liquidated by them for reinvestment elsewhere or for repatriation to the owners' countries. Continued mismanagement of our own affairs might even prompt a flight from the dollar by our own citizens and find us unwilling or unprepared to take effective measures against it. The future of the dollar is far less dependent on transitory fluctuations in our balance of payments than on the maintenance of people's confidence in our determination to preserve its basic and still formidable strength, in our own interest as well as in the interest of the world at large. Our capital is very high in this respect, and there is no reason to think that it is in serious danger of being jeopardized by excessive complacency, or dissipated by sheer irresponsibility, on the part of the monetary and political authorities of this country.

### IV

Even the most successful readjustment of our overall balance of payments, however, will leave in its wake two major problems. The first is the impact which such a readjustment will entail for the maintenance of an adequate degree of international liquidity in an expanding world economy. The second is the

need to protect our own economy and the freedom of our internal economic policies against the dangers inevitably associated with the existence of such a huge backlog of foreign short-term funds in our financial and exchange markets. The concrete, but somewhat revolutionary suggestions presented below aim at solving rationally both of these problems together. First, however, it is necessary to state them more precisely and to replace them in their historical perspective.

The present international monetary system of the world can be sketchily described as follows. A number of countries—particularly the old industrial countries of Western Europe—are both anxious and able to maintain relatively high levels of monetary reserves and to increase them more or less *pari passu* with increases in production, money supply and international trade turnover. Other countries—particularly in the underdeveloped areas of the world—are content with much lower levels of reserves and a more continuous recourse to foreign aid and short-term capital, currency devaluation or trade and exchange restrictions as alternative techniques of balance of payments adjustment. Current increases in the world monetary gold stock meet only a fraction (about one-third) of the combined demand for monetary reserves defined above. Most—although not all—countries, however, have shown themselves willing to accumulate a substantial portion of their monetary reserves in the form of foreign exchange rather than gold. In choosing a particular foreign currency for this purpose, they naturally tend to select the currency that appears safest, i.e., that of a major creditor country: primarily the United Kingdom in former days, and primarily the United States today. This accumulation of a key currency as international reserves by the rest of the world necessarily entails a large amount of “unrequited” capital imports by the key currency country. Coal is brought to Newcastle, from which it should be exported instead. The international liquidity shortage, moreover, is not thereby relieved, unless the key currency country allows its resulting short-term indebtedness to grow continually and persistently at a faster pace than its own gold assets. (It may otherwise disguise the basic gold shortage into a scarcity of the key currency itself.

This is an exact description of what has happened in fact since the war, and a major explanation of the growing threat to our own liquidity position. We have been lending long—and even given funds away—while borrowing short and losing gold. Foreign countries' gold reserves and dollar holdings have risen by \$20 billion (from \$15 billion to \$35 billion) between the end of 1949 and the middle of this year, but only one-fourth (\$5 billion) of this increase has come from new gold production—including Russian gold sales in Western markets. The remaining three fourths (\$15 billion) were derived from our own gold losses and increasing short-term liabilities to foreigners.

The restoration of overall balance in the U.S. international transactions would put an end to this process and deprive the rest of the world of the major source, by far, from which the international liquidity requirements of an expanding world economy are being met currently in the face of a totally inadequate supply of monetary gold. This might trigger off tomorrow—as it did under very similar circumstances in the early 1930's—a new cycle of international deflation, currency devaluations, and trade exchange restrictions.

The other problem that would be left unsolved by the readjustment of our current balance of payments is that of the huge legacy of short-term foreign indebtedness inherited from the past, and the huge handicap that might be placed thereby on sound policies for economic growth and stability of our own economy. Such funds are extremely volatile and may, at any time, move out of our market in response to interest rate differentials or to foreign conditions over which we have no control.

The experience of the United Kingdom, in the late 1920's and early 1930's, is particularly eloquent in this respect. The pound had been stabilized in 1925 at an overvalued level with the help of large amounts of speculative foreign funds and refugee capital, particularly from the continent, during the period of currency depreciation that followed World War I. The dangers of this situation were well perceived and led to various exchanges of views between Montague Norman of the Bank of England and Benjamin Strong of the Federal Reserve Bank of New York. Both men agreed, in general terms, that interest rates should be kept higher in London than in New York, in order to prevent an outflow of short-term funds from the first to the latter. This soon entered into conflict with domestic policy criteria in both countries. A rise of interest rates in the United States seemed highly desirable at times to slow down excessive lending here, particularly in connection with the boom in Wall Street. Even

greater pressure arose in England to ease credit conditions in order to fight the economic stagnation and mass unemployment which plagued the British economy in the late 1920's.

The enormous repatriation of French refugee capital after the Poincaré stabilization of the French franc heralded the beginning of the end. The pound still held out for a few years, but had to be bolstered in various ways, including urgent pleas to the Bank of France and other central banks to refrain from converting, at an unpropitious time, the huge amounts of sterling absorbed by them from private traders and speculators. Some reluctant cooperation was given to the British in answer to these pleas, and substantial exchange losses were incurred as a result by several central banks when the pound finally devalued in September 1931.

A disquieting parallel could be drawn between those events and our own situation today. The extent of foreign currency devaluation since the war may have given a competitive edge to those countries after their production potential had recovered from the early postwar low. Some foreign currencies may now be undervalued in relation to the dollar, as they were in relation to the pound in the late 1920's. Refugee capital flew here in large amounts after the Second World War, as it had flown to London after the First World War. Some of it may again return home, as currency conditions become definitely stabilized in Europe. Our huge gold losses of last year were due in part to such a movement. They have been slowed down this year by an extremely sharp rise in interest rates, prompted by our domestic concern with creeping inflation in this country. In this case, external and internal interest rate policy criteria happily coincided, but they may diverge tomorrow. If any when we feel reassured about our internal price and cost trends, we are likely to turn increasingly our attention to our laggard rates of economic growth as compared not only with Russia, but also with most countries in Western Europe. We may wish to ease credit and lower interest rates to spur new investments and technological progress. At this point, however, interest rates abroad might again become more attractive to financial investors, and the gold dammed up this year by our high interest rates might flow out at a rate comparable to that of 1958, or even worse.

I cannot resist quoting here an incisive remark of Suntyana, which the dynamic Managing Director of the International Monetary Fund, Per Jacobsson, has used most aptly in some of his recent speeches: "Those who do not remember the past will be condemned to repeat it." John Steinbeck wrote in the same vein: "The study of history, while it does not endow with prophecy, may indicate lines of probability."

## V

My final remarks will attempt to sketch, in very succinct form, the most logical policy answer to the two problems which I have just discussed. Those of you whom this summary might leave both interested and unconvinced may find a somewhat more detailed presentation of these suggestions in my paper on "The Gold Shortage, the Dollar Glut and the Future of Convertibility" and a fuller and more technical treatment in another publication of mine on "Tomorrow's Convertibility: Aims and Means of International Monetary Policy."<sup>1</sup>

The keystone of my proposals lies in the true "internationalization" of the foreign exchange component of the world's monetary reserves. The use of national currencies as international reserves constitutes indeed a totally irrational "built-in destabilizer" in the present world monetary system. It is bound to weaken dangerously in time the key currencies—primarily sterling and the dollar—used as reserves by other countries under this system. These difficulties are then bound, in turn, to endanger the stability of the whole international monetary superstructure erected upon these key currencies.

The logical solution of the problem 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 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.

<sup>1</sup> Published (in English) in the June 1959 issue of the *Banca Nazionale del Lavoro Quarterly Review*. This and another article on the international liquidity problem form part of a forthcoming volume, to be published by the Yale University Press early next year.

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. The history of human institutions, however, has a logic of its own. Gold as a commodity enjoyed 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 recent phenomenon in world affairs. Its extension to the international sphere is even more recent and has also developed haphazardly under the pressure of circumstances rather than as a rational act of creation on the part of any national or international authority. This explains the present, and totally irrational, use of national currencies as international reserves. Yet, the proliferation of regional, international, and supranational agencies since the war is slowly laying the groundwork for further, and long overdue, adaptations in the international monetary system, and particularly for the internationalization of the fiduciary portion—foreign exchange—of countries' monetary reserves. This portion should be made up of international deposits rather than of national currencies.

The United States and the United Kingdom should bar the use of sterling and dollars as monetary reserves by other countries. All countries should simultaneously renounce the use of these, or other, national currencies as international reserve holdings. They would be offered instead the opportunity of keeping in the form of deposits with the International Monetary Fund any portion of their reserves which they do not wish to hold in the form of gold. Deposits with the Fund would be constituted initially by transferring to the Fund the national currencies—primarily dollars and sterling now held as reserves by the central banks of members countries, plus any amount of gold which they might also wish to exchange for such deposits.

Reserve deposits at the Fund would be as fully usable as gold itself in all international settlements. They could be drawn upon by their holders to procure any currency needed in such settlements or for stabilization interventions of central banks in the exchange market. The amounts withdrawn would be merely debited from the withdrawer's deposit account and credited to the account of the country whose currency has been bought from the Fund.

Fund deposits would carry exchange rates and convertibility guarantees which would make them a far safer medium for reserve investment than any national currency holdings, always exposed to devaluation, inconvertibility, blocking, or even default by the debtor country. They would, moreover, earn interest at a rate to be determined, and varied from time to time, in the light of the Fund's earnings on its own loans and investments.

These various features, combining the earning incentive of foreign exchange holdings with the safety incentive of gold holdings, should insure in time a large and continuing demand for Fund deposits by central banks, once they become sufficiently familiar with the system and confident in its management. In order to take account of initial diffidence and inertia, however, and to guarantee the system against the vagaries of sudden and unpredictable shifts between gold holdings and Fund deposits, all members should undertake to hold in the form of Fund deposits a uniform and agreed proportion of their gross monetary reserves. They would be entitled, but not compelled, to convert into gold at the Fund any deposits accruing to their account in excess of this minimum requirement.

A minimum deposit ratio of 20 percent would probably be ample to initiate the new system, and would substitute for the present, exceedingly complex and rigid, system of IMF quotas. This ratio might have to be increased in time, however, in order to provide adequate lending power to the Fund and to insure beyond any shadow of doubt the full liquidity and convertibility of Fund deposits, necessary to make them as unquestionably acceptable by all countries as gold itself in all international settlements. On the other hand, prudent management of the system would, in all likelihood, make it unnecessary to resort to compulsion for that purpose, as member countries' own interests would lead them to maintain with the Fund, rather than in gold, a much larger proportion of their total reserves than the minimum percentages imposed by the Fund.

The major objection to this proposed reform in the Fund's operations would be the same as that raised against the Keynes plan for an International Clearing Union. Such a system would endow the Fund with a lending capacity which, if improperly used, might impart a strong inflationary bias to the world economy.

This is no reason, however, to fall back upon a system whose deflationary bias can only be combatted through an ever-increasing dependence upon the haphazard constitution of reserves in the form of national currencies, and an increasing vulnerability to unfavorable developments in one or a few key countries. The threat of inflationary abuses can be guarded against far more simply and directly by limiting the Fund's annual lending authority to the amount necessary to preserve an adequate level of international liquidity.

Various alternative criteria could be retained for this purpose. The simplest one might be to limit the Fund's net lending, over any 12 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 percent 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 percent 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 percent a year.

Assuming, for instance, that monetary gold stocks continue to increase by \$700 million or \$800 million a year, the Fund's annual lending quota based on a 3 percent rate could be roughly estimated today at about \$800 million to \$900 million. A 4 percent rate would raise this to about \$1.4 billion, and 5 percent to about \$2 billion a year. 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.

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. The recent standby techniques of lending might, in addition, 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 standby agreements, and would be guaranteed by the country's minimum deposit obligation.

A second broad category of Fund lending would take the form of investments in the financial markets of member countries. These operations would be decided at the initiative of the Fund itself, but always of course in agreement with the monetary authorities of the countries concerned. Such agreement would be necessary in any case to attach to these investments the same guarantees against exchange and inconvertibility risks as those which protect the Fund's own deposit liabilities.

The first investments of this character would be imposed upon the Fund by its absorption of the outstanding national currency reserves transferred to it by members in exchange for Fund deposits. The bulk of these reserves would be in the form of bank deposits, acceptances and Treasury bills previously held by the central banks themselves in New York and London. 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 wish to use every year—of liquidating such investments at a maximum pace of, let us say, 5 percent 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.

The acceptance of the basic reforms proposed above should eliminate all existing balance of payments grounds for permissible discrimination under the

GATT. This should constitute a powerful incentive for U.S. support of these proposals, as the United States has long been the main target of such discrimination by other countries.

The gradual liberalization of remaining trade, exchange, and tariff restrictions could also be given a new impetus by these reforms if they were allied to a continuous and worldwide negotiation of *reciprocal* liberalization commitments, similar to that successfully undertaken regionally by the OEEC on the basis of the EPU agreement. Prospective credit assistance by the Fund to countries in difficulty should help spur the acceptance and implementation of such commitments by members. Yet the OEEC experience also suggests that members will insist on retaining the right to invoke escape clauses whenever such assistance is either insufficient or inappropriate to meet their deficits. As in OEEC, a joint examination of the overall policies followed by the member should be undertaken in such cases and lead to agreed proposals for monetary rehabilitation and stabilization and for the restoration of the liberalization measures reciprocally accepted by all Fund members. Ideally, the Fund should be given the right to disallow, after 1 year, for instance, continued recourse to such escape clauses if it deems them to be no longer justified. Such a decision might entail automatically the right for the country in question to allow fluctuations in its exchange rate as long as its gross reserves remain inferior to, let us say, 30 percent of annual imports.

Finally, some fundamental reforms in the cumbersome administrative machinery of the Fund have long been overdue. Greater efforts should be made to preserve effective contacts at all levels between the Fund and the national administrations of its members. Periodic meetings of high-level representatives currently entrusted with monetary policy in their own country should determine the broad lines of the Fund's policy and the limits within which decisions can be delegated to permanent representatives or to the Fund's management itself. The OEEC and EPU experience should serve as an invaluable guide in shaping up such reforms in more concrete terms.

These and other questions cannot be fruitfully explored here. Actual possibilities for agreement can only be discovered through the process of international negotiations itself. A number of compromises and adaptations in the broad and bold aims and techniques suggested here could undoubtedly prove necessary to reach such an agreement. A number of these adaptations should probably be directed at decentralizing the heavy responsibilities placed here upon the IMF, by transferring to some existing or prospective regional groups—such as the European Economic Community, the sterling area, or the European Economic Association—the handling of all international settlements and financial assistance involving only the use of their own members' currencies.

## VI

May I close with a few words about the advantages and disadvantages which such a reform would entail for the United States itself.

Its major advantage emerges clearly, I hope, from our previous discussion. The United States would no longer have to bear the burden and court the danger, inseparable from the use of the dollar as a reserve currency by other countries. This would, it is true, deprive us of unrequited capital imports which have, in the past 10 years, allowed us to carry a heavier burden of foreign lending and aid programs than we could have financed otherwise. We would now have to share these responsibilities—and the political influence that might accompany them—with other countries, through processes of multilateral decision making which would, at times, be irritating and frustrating. We would, on the other hand, have consolidated in the hands of the Fund a large portion of highly volatile foreign funds, whose sudden and unpredictable outflow might otherwise unleash, at any time, an unbearable drain on our gold reserves. Most of all, we would have shed thereby the straitjacket which the need to prevent such an outflow would impose upon monetary management and interest rates in this country, whenever the success of our price stabilization efforts allows us to give primary consideration once more to the furtherance of maximum feasible rates of employment and economic growth.

A second and closely related consideration is that these reforms would put an end to an absurd situation under which we have been in practice—with only minor exceptions—the sole net lender in the IMF, in spite of our persistent deficits and of the equally persistent and huge surpluses accumulated over

the last 10 years by other IMF members. We would, moreover, be able for the first time to obtain ourselves assistance from the IMF—through the more flexible procedure of IMF investments rather than loans—without triggering off the dangerous psychological reactions which would now accompany a U.S. request for such assistance. The IMF itself would need to look for safe investment outlets for its expanded resources, particularly during the initial years of the new system, and this would fit in particularly well with our own need to buy the time necessary for effecting, 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 deficits.

These I think, are the essential considerations that should guide us. I should mention, however, two other points of a more technical character, but which may still be of interest to this committee.

Our minimum deposit obligation in this new IMF can be calculated approximately, on the basis of our current position, as in the neighborhood of \$4.3 billion, which is just about equal to our present Fund quota. About half of this obligation would be discharged by counting as part of our required deposit the \$2.1 billion of net claims on the Fund accumulated by us as a result of our gold contribution to the Fund's capital and of the Fund's use of our local currency subscription in its lending operations. The other half, however, would have to be paid in gold, but the IMF would also cancel about \$2 billion of demand deposits and Treasury certificates which it now holds against us, and which represent the still unused portion of our local currency capital subscription.

It should also be noted that our deposits with the Fund should be properly regarded in a very different light from our present subscription to the Fund capital. This subscription is not considered, and should not be considered, as a fully liquid and bankable asset. It is therefore excluded from the calculation of our monetary reserves. Our deposits with the Fund, on the other hand, would be as fully liquid as gold itself and as fully usable in all international payments. It should therefore properly be counted—in our case as in the case of other countries—as fully equivalent to gold for the calculation of monetary reserves and of gold cover requirements. Our monetary reserves, after the cancellation of our present quota subscription and its replacement by a 20-percent deposit with the Fund, would actually have risen from its present level of \$19.5 billion to about \$21.6 billion. Most of all, our short-term liabilities to foreign countries would have declined by approximately \$9 billion through the transfer to the Fund, and consolidation by it, of the liquid dollar holdings now held by these countries as monetary reserves.

These, I firmly and deeply believe, are extremely powerful arguments for a serious study of these proposals by the administrations and by Congress. I fervently hope that we shall be able to act in time, and to refute the disabused comment and dire prediction of a former colleague of mine in the administration: "Triffin, you are very probably right, but in this matter as in that of EPU your proposals come several years too soon, and this time I don't honestly think you'll get anywhere until people are shaken into action by a real crisis. Then, maybe."

This, I must admit, is probably the most widely held view on this subject at present.

TABLE 1.—Balance of payments of the United States, 1952-59

[Annual rates, in billions of dollars]

	With the world			With Western Europe			With the rest of the world		
	1952-57	1958	January-June 1959 <sup>1</sup>	1952-57	1958	January-June 1959	1952-57	1958	January-June 1959 <sup>2</sup>
1. Balance of goods, services, and ordinary transfers.....	2.1	1.5	-1.2	0.1	-0.8	-2.3	2.0	2.4	1.1
2. Net exports of U.S. capital and economic aid.....	3.9	5.4	<sup>3</sup> 3.9	1.2	.2	.8	2.8	4.7	<sup>3</sup> 3.1
(a) Private.....	1.8	2.8	2.0	.3	.4	.6	1.5	2.4	1.4
(b) Official.....	2.2	2.6	<sup>3</sup> 2.4	.9	.4	.2	1.3	2.2	<sup>3</sup> 2.2
3. Overall balance (1-2).....	-1.8	-3.9	-5.0	-1.1	-1.6	-3.1	-7	-2.3	-2.0
Offset by:									
(a) Errors, omissions, and triangular settlements.....	-5	-4	-8		1.3	-3	-5	-1.7	-5
(b) Inflow (-) of long-term foreign capital.....	-3		-5	-2		-4	-1		-1
(c) Gold sales and increases in foreign dollar holdings (-).....	-1.1	-3.4	<sup>3</sup> -3.7	-9	-2.9	-2.4	-2	-5	<sup>3</sup> -1.3
(i) Dollar holdings.....	-1.1	-1.1	<sup>3</sup> -2.7	-7	-6	-1.7	-3	-6	<sup>3</sup> -1.1
(ii) Gold sales.....		-2.3	<sup>3</sup> -1.0	-2	-2.3	-7	.2	.1	<sup>3</sup> -3
RELATED INFORMATION									
4. Military transactions:									
(a) Exports under grants.....	2.9	2.5	1.9	2.2	1.5	1.2	.7	1.1	.7
(b) Expenditures abroad.....	2.7	3.4	3.2	1.4	1.9	1.8	1.3	1.6	1.4
5. Increase in foreign gold and dollar holdings.....	1.6	4.3	<sup>3</sup> 4.7	1.3	3.7	3.0	.3	.6	<sup>3</sup> 1.7
(a) From estimated U.S. transactions.....	1.1	3.4	<sup>3</sup> 3.7	.9	1.6	2.7	.2	1.8	<sup>3</sup> 1.0
(b) Other.....	.5	.9	1.0	.4	2.1	.3	.1	-1.2	.7

<sup>1</sup> Seasonally adjusted, except items 4 and 5(b) and breakdown of item 2.

<sup>2</sup> Figures in this column were calculated by subtracting seasonally unadjusted estimates for Western Europe from seasonally adjusted estimates for the world. This has the effect of ascribing to transactions with the rest of the world only the total of these adjustments.

<sup>3</sup> Excluding from item 2(b) gold (\$344,000,000) and currency (\$1,031,000,000) subscriptions to the increase of the IMF capital, and the impact of these operations on items 3(c), 5, and 5(a).

Source: Survey of Current Business.

TABLE 2.—U.S. balance of payments on current account and net exports of U.S. capital, 1949-59

[In millions of U.S. dollars]

	Current account <sup>1</sup>			Exports of U.S. capital and economic aid			Balance		
	With the world	With Western Europe	With rest of world	With the world	With Western Europe	With rest of world	With the world	With Western Europe	With rest of world <sup>2</sup>
1949.....	5,519	2,772	2,747	6,202	4,545	1,657	-683	-1,773	1,090
1950.....	1,280	1,152	128	4,905	3,226	1,679	-3,625	-2,074	-1,551
1951.....	3,264	1,754	1,510	4,259	2,193	2,066	-995	-430	-556
1952.....	1,800	477	1,323	3,538	1,679	1,859	-1,738	-1,202	-536
1953.....	-180	-850	670	2,424	881	1,543	-2,604	-1,731	-873
1954.....	1,246	-309	1,555	3,173	1,068	2,105	-1,927	-1,377	-550
1955.....	1,481	-73	1,554	3,422	1,056	2,356	-1,941	-1,139	-802
1956.....	3,211	288	2,923	5,352	1,318	4,034	-2,141	-1,030	-1,111
1957.....	5,108	898	4,210	5,749	1,085	4,664	-641	-187	-454
1958.....	1,541	-828	2,369	5,421	766	4,655	-3,880	-1,594	-2,286
Annual rate 1959: <sup>2</sup>									
January to March.....	-908	-1,792	884	3,620	376	3,244	-4,528	-2,168	-2,360
April and May.....	-1,396	-2,784	1,388	5,100	1,200	3,900	-6,496	-3,984	-2,512

<sup>1</sup> Including ordinary transfers.<sup>2</sup> Seasonally unadjusted, but excluding U.S. contribution to International Monetary Fund capital increase.

Source: Survey of Current Business.

TABLE 3.—*Monetary gold and dollar holdings, 1949-59*

[In millions of U.S. dollars]

	Monetary gold <sup>1</sup>				Dollar holdings			Gold and dollar holdings		
	Total (equals (b)+(c)+(d))	United States	Foreign countries	International institutions	Total (equals (f)+(g))	Foreign countries	International institutions	United States (equals (b)-(f)) <sup>2</sup>	Foreign countries (equals (c)+(f))	International institutions (equals (d)+(g))
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
End of—										
1949.....	35,055	24,563	9,041	1,451	8,226	6,409	1,817	18,154	15,450	3,268
1950.....	35,498	22,820	11,184	1,494	10,197	8,393	1,804	14,427	10,577	3,298
1951.....	35,664	22,873	11,261	1,530	10,173	8,271	1,902	14,602	10,532	3,432
1952.....	35,968	23,252	11,024	1,692	11,719	9,864	1,855	13,388	20,888	3,547
1953.....	36,396	22,091	12,603	1,702	12,739	10,825	1,914	11,266	23,428	3,616
1954.....	37,056	21,793	13,523	1,740	14,019	11,895	2,124	9,898	25,418	3,864
1955.....	37,716	21,753	14,155	1,808	15,230	13,028	2,202	8,725	27,183	4,010
1956.....	38,246	22,058	14,496	1,692	16,433	14,590	1,843	7,468	29,086	3,535
1957.....	38,960	22,857	14,923	1,180	16,600	14,861	1,739	7,996	29,784	2,919
1958.....	39,851	20,582	17,937	1,332	17,637	15,598	2,039	4,984	33,535	3,371
1959:										
March.....	40,073	20,486	18,216	1,371	18,250	16,052	2,199	4,434	34,268	3,570
June.....	40,332	19,746	18,677	1,909	20,055	16,776	3,279	2,970	35,453	5,188
Change: 1950-58.....	+4,796	-3,981	+8,896	-119	+9,411	+9,189	+222	-13,270	+18,085	+103

<sup>1</sup> Gold estimates are obtained residually by deducting dollar holdings from gold and dollar holdings.

<sup>2</sup> Excess of U.S. gold stock over dollar holdings of foreign countries only, but not of international institutions.

Source: Federal Reserve Bulletin.

## THE GOLD SHORTAGE, THE DOLLAR GLUT, AND THE FUTURE OF CONVERTIBILITY

By Robert Triffin  
Professor of economics, Yale University<sup>1</sup>

## I. DIAGNOSIS: THE INTERNATIONAL LIQUIDITY PROBLEM

The new experiment in convertibility launched in December of last year faces the same two threats which contributed so much to the early wreckage of a similar experiment some 30 years ago.

The first is the difficulty of preserving adequate supplies of international monetary reserves in an expanding world economy. The ratio of world monetary gold stocks to annual imports has fallen gradually and persistently throughout the postwar years to less than 40 percent in 1958, as compared to 110 percent in 1938. The International Monetary Fund recently estimated at \$700 million a year the total increase in monetary gold stocks which can be expected in the foreseeable future from new gold production and U.S.S.R. gold sales in Western markets. This is less than 1.5 percent of current world reserves of gold and foreign exchange, as compared with the annual growth rate of about 5 to 6 percent in the volume of world trade and manufacturing activity maintained in most of the postwar years. Whatever assumption one wishes to make about a sustainable rate of growth in future years, it is evident that gold alone could not possibly feed the maintenance of adequate reserve levels in an expanding world economy. If new ways of economizing gold cannot be found tomorrow—as they were found indeed in the 19th century—current trends cannot but lead once more, sooner or later, to widespread deflation, devaluation, or trade and exchange restrictions.

The increasing shortage of gold with relation to reserve needs has been palliated in part, but in part only, by the shift from a gold-bullion standard to a gold-exchange standard in the aftermath of the First World War. National currencies, primarily the pound sterling and the U.S. dollar, have been increasingly used since then as international reserves in order to supplement the growingly inadequate supplies of monetary gold. Yet, this was insufficient to prevent a gradual and persistent decline throughout the postwar years in the ratio of gross reserves of gold and foreign exchange to annual imports. For all countries taken together, this ratio had fallen by 1958 to less than half its 1938 level.

The second and most immediate threat to the future of convertibility lies precisely in the vulnerability imparted to it by this ever-growing dependence of the world monetary system on the use of national currencies as international reserves. Brushing aside other well-known technical flaws in such a system, let us merely retain the obvious and incontrovertible fact that its smooth functioning presupposes a continuing and justified trust in the unflinching luck and wisdom of monetary management in the center countries whose national currency is used as international reserves by others; i.e., primarily in the United States and the United Kingdom. Otherwise, large-scale conversions of reserves and other liquid assets from one key currency into the other, or from both into gold, may at any time topple the whole structure, as they did in the early 1930's. The conversion of sterling balances into gold and dollars precipitated the devaluation of sterling in 1931 and was followed by a similar run on the dollar. The gold exchange standard was practically wiped out in the process, except in the sterling area, the foreign exchange component of international reserves falling by about 70 percent between 1928 and 1932 for the world as a whole. Total dollar balances, official and private, fell from \$2.9 billion in October 1929 to less than \$4 million at the end of 1933.

The huge gold losses suffered last year by the United States have recently given rise to some uneasiness about the future of the dollar. People woke up, rather belatedly, to the fact that the excess of U.S. aid and capital exports over dwindling current account surpluses is now in its 10th year, and has been financed over the last 9 years by a combination of gold losses (\$4.2 billion) and increases of foreign dollar holdings (\$9.4 billion), averaging together about \$1¼ billion annually over the 8 years 1950-57, rising abruptly to \$3.3 billion in

<sup>1</sup> Sophisticated readers are likely to wince at this highly simplified presentation of a very complex problem. They may, if they wish, turn for further details and documentation to two articles of the author on "The Return to Convertibility: 1926-31 and 1958-?" or "Convertibility and the Morning After" and "Tomorrow's Convertibility: Aims and Means of International Monetary Policy" in the Banca Nazionale del Lavoro Quarterly Review, March and June 1959.

1958, and threatening to exceed even this figure during the present year. Former and ingenious theories of a chronic and untractable dollar shortage are now in danger of being replaced tomorrow by equally farfetched explanations of a chronic and untractable dollar glut.

Most of the comments and forecasts elicited by this spectacular reversal in the international dollar balance discuss it nearly exclusively from the U.S. point of view. Excessive fears are often expressed regarding the ability of the United States to redress the situation in time, or, more justifiably, about the temptation to plug the present deficit through cuts in foreign aid and a return to restrictions and protectionism. Europe is rightly urged to "do her part" by stepping up her own aid and capital exports to underdeveloped countries, shedding her remaining discriminations on dollar goods, lowering her own trade barriers toward the rest of the world in general, reducing the interest rates jacked up at the height of the 1957 boom, and pursuing bolder expansionary policies.

All this is well and good, but fails to view the problem in its full historical perspective and leaves entirely out of account the fact that a successful readjustment of the U.S. overall payments balance is bound to bring back to the fore the latent crisis of international liquidity. The maintenance of adequate reserve levels outside the United States has indeed been fed, over the last 9 years, only up to one-third by current gold production, and for the remaining two-thirds by the persistent deterioration of the U.S. net reserve position. The restoration of overall balance in the U.S. international transactions would thus deprive the rest of the world of the major source, by far, from which normal increases in reserve requirements are being met today in the face of a totally inadequate supply of monetary gold.

The present international monetary system of the world can indeed be sketchily described as follows: A number of countries—particularly the old industrial countries of Western Europe—are both anxious and able to maintain relatively high levels of monetary reserves and to increase them more or less pari passu with increases in production, money supply, and international trade turnover. Other countries—particularly in the underdeveloped areas of the world—are content with much lower levels of reserves and a more continuous recourse to foreign aid and short-term capital, currency devaluation, or trade and exchange restrictions as alternative techniques of balance of payments adjustment. Current increases in the world monetary gold stock meet only a fraction (about one-third) of the combined demand for monetary reserves defined above. Most—although not all—countries, however, have shown themselves willing to accumulate a substantial portion of their monetary reserves in the form of foreign exchange rather than gold. In choosing a particular foreign currency for this purpose, they naturally tend to select the currency that appears safest, i.e. that of a major creditor country: primarily the United Kingdom in former days, and primarily the United States today.

This accumulation of key currency as international reserves by the rest of the world necessarily entails a large amount of unrequited capital imports by the key currency country. Coal is brought to Newcastle, from which it should be exported instead. The international liquidity shortage, moreover, is not thereby relieved, unless the key currency country allows its resulting short-term indebtedness to grow continually and persistently at a faster pace than its own gold assets. (It may otherwise disguise the basic gold shortage into a scarcity of the key currency itself.)

The United States has been eminently successful, over the last 9 years, in warding off any shortage of international liquidity by maintaining a rate of foreign aid and capital exports far in excess of its own current account surpluses. The gap was met, for the most part, year after year, by gold sales and the unrequited short-term capital imports mentioned above. Long-term capital exports and straight gifts to the rest of the world were thus matched, at least in part, by a growing deterioration in the U.S. net reserve position, in the form of gold losses and short-term indebtedness abroad. This, however, could not continue indefinitely without endangering the financial strength of the dollar and destroying the willingness of other countries to regard it as a safe medium for reserve accumulation. The process is thus bound to come to an end, sooner or later, at the initiative either of the United States or of the other countries. When it does, the underlying problem of world liquidity will once more threaten to slow down or reverse the high pace of expansion maintained since the war in world trade and production.

## II. PRESCRIPTION: THE INTERNATIONALIZATION OF FOREIGN EXCHANGE RESERVES

A simple and logical solution of the problem emerges from its diagnosis. The shortage of gold supplies in relation to reserve needs should be made up—but no more than made up—by the provision of an additional medium for reserve holdings. This new medium, however, should not take the form of national currencies whose actual supply to reserve holders is dependent at all times on the vagaries of the key countries' balance of payments, and whose actual demand by reserve holders may fluctuate erratically and catastrophically with every change in confidence in the key countries' monetary position and policies. The foreign exchange component of international reserves should be made up of international deposits rather than of national currencies.<sup>2</sup>

All countries should renounce the use of national currency holdings as international reserves, and would be offered instead the opportunity of keeping in the form of deposits with the International Monetary Fund any portion of their reserves which they do not wish to hold in the form of gold. Deposits with the Fund would be constituted initially by transferring to the Fund the national currencies—primarily dollars and sterling—now held as reserves by the central banks of members countries, plus any amount of gold which they might also wish to exchange for such deposits.

Reserve deposits at the Fund would be as fully usable as gold itself in all international settlements. They could be drawn upon by their holders to procure any currency needed in such settlements or for stabilization interventions of central banks in the exchange market. The amounts withdrawn would be merely debited from the withdrawer's deposit account and credited to the account of the country whose currency has been bought from the Fund.

Fund deposits would carry exchange rates and convertibility guarantees which would make them a far safer medium for reserve investment than any national currency holdings, always exposed to devaluation, inconvertibility, blocking, or even default by the debtor country. They would, moreover, earn interest at a rate to be determined, and varied from time to time, in the light of the Fund's earnings on its own loans and investments.

These various features, combining the earning incentive of foreign exchange holdings with the safety incentive of gold holdings, should insure in time a large and continuing demand for Fund deposits by central banks, once they become sufficiently familiar with the system and confident in its management. In order to take account of initial diffidence and inertia, however, and to guarantee the system against the vagaries of sudden and unpredictable shifts between gold holdings and Fund deposits, all members should undertake to hold in the form of Fund deposits a uniform and agreed proportion of their gross monetary reserves. They would be entitled, but not compelled, to convert into gold at the Fund any deposits accruing to their account in excess of this minimum requirement.

On the basis of December 1958 reserve estimates, minimum deposit requirements equal to 20 percent of each country's gross reserves would total about \$11 billion. This would be substantially less than the estimated total of the new Fund quotas (more than \$14 billion). Individual countries' deposit requirements would be considerably less than their Fund quota for low-reserve countries, and only moderately larger for a much smaller number of high-reserve countries.

<sup>2</sup> Alternative solutions such as a revaluation of gold, the generalized adoption of floating exchange rates, or periodic increases in the quotas of the International Monetary Fund, are discussed in the second of the two articles referred to in footnote 1 above. Let me merely note here that the increases in Fund quotas now underway will provide a useful breathing spell for the negotiation of the more radical reforms needed in the Fund's methods of operation, but could not meet for more than a very few years the prospective liquidity shortage that would result from feasible, noninflationary rates of growth in world trade and production. Quota increases could, of course, be repeated periodically, but this would involve each time a full-scale negotiation among several scores of countries, followed by a long-drawn-out process of national ratifications and parliamentary approvals. This procedure, moreover, is incapable of adjusting in a flexible manner the national currency contributions of surplus member countries to the national currency needs of the borrowing countries. A shortage of U.S. dollars or German marks in the Fund cannot be met by the millions or billions of rupees, cruzeiros, pesos, bolivianos, etc., which flow into the Fund's coffers as a result of such quota increases. Finally, one wonders indeed how any country can, under convertibility conditions, ever "represent" to the Fund, as required under art. V, sec. 3, subsec. (a), that a particular currency "is presently needed for making in that currency payments which are consistent with the provisions of the agreement." A country keeps its currency convertible 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.

Minimum deposits, on the other hand, would have to be paid fully in gold or foreign exchange, while three-fourths of the present Fund quotas are callable only in local currencies. These local currency contributions are a real burden for the few countries whose currency is actually borrowed from the Fund—primarily the United States up to now—but mere window dressing, of no earthly use to the Fund, in the case of all other countries.

As distinct from the present capital and subscriptions to the Fund, however, the deposits constituted at the Fund would remain as liquid and usable in international settlements as gold itself. There would be no reason for any country not to count them as part of its monetary reserves, and as fully equivalent to gold for the calculation of reserve or gold cover requirements wherever legal provisions still exist in this respect. The maintenance of a portion of a country's reserves in this form would therefore be no burden to it and would not raise the internal financing problems which some countries now find in financing their quota subscription to the Fund.

Most countries would have more than fulfilled their 20 percent minimum deposit obligation through the transfer to the Fund of the portion of their total reserves now held in the form of foreign exchange (including outstanding net claims on the Fund itself arising from past transactions and gold subscriptions). The only significant exceptions in this regard would be the United States, the United Kingdom, Belgium, and—assuming that it joined the Fund—Switzerland. The amounts of gold to be paid in by these four countries would be, respectively, of the order of \$2.5 billion, \$0.4 billion, \$0.2 billion, and \$0.3 billion, making a total of \$3.4 billion, and bringing the total initial gold holdings of the new Fund to about \$5 billion, as against total liabilities of approximately \$21 billion. The remainder of the Fund's assets (\$16 billion) would be constituted to a small extent by outstanding net claims (little more than \$1 billion) arising from past transactions and, for the rest, by foreign exchange holdings, the overwhelming bulk of which made up of the dollar balances (probably close to \$9 billion) and sterling balances (probably more than \$5 billion) to be transferred to the Fund in exchange for Fund deposits.

The repayment of the Fund claims arising from its own past operations would, of course, continue to be governed by existing provisions of the Fund agreement. New, and different, provisions would have to be made with regard to the new claims acquired by the Fund as a result of the proposed reform. The bulk of these claims would be in the form of bank deposits, acceptances, and Treasury bills previously held by the central banks themselves in New York and London. 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 wish to use every year—of liquidating such investments at a maximum pace of, let us say, 5 percent annually. The maximum yearly liability for repayment which this would entail would be of the order of \$450 million for the United States and \$250 million for the United Kingdom. If, however, a strong world demand for sterling or dollars boosted the United Kingdom's or the United States' deposit balances with the Fund beyond their 20 percent reserve requirement, any request for conversion of such excess balances into gold could be countered and warded off by a Fund's request to apply them instead to extraordinary amortization of these countries' indebtedness to the Fund.

Such a pattern of Fund assets would practically rule out, for a long time to come, any danger of a "scarce currency" condition for the two major currencies in world trade and payments. Neither could a currency scarcity develop for other countries' currencies unless and until the overall surpluses of these countries reached such magnitudes that they could not be covered:

(a) by the increase in their 20 percent minimum deposit obligation, associated with the parallel increase in their gross reserves;

(b) by the excess deposits which many countries would undoubtedly wish to maintain at the Fund—rather than convert into gold—both as working balances and as earning investments fully protected against exchange, inconvertibility, and default risks;

(c) by the minimum initial gold assets of nearly \$5 billion with which the new Fund would start its operations.

Remote as such a contingency is, it should nevertheless be guarded against, so as to insure beyond any shadow of doubt the full liquidity and convertibility of Fund deposits necessary to make them as unquestionably acceptable by all

countries as gold itself in all international settlements. A number of alternatives or complementary measures may be envisaged for this purpose and are discussed in the second article referred to in the introductory footnote above. Let me mention here only the simplest and most obvious of them. If the Fund found itself threatened with a shortage of liquidity, it should be allowed to raise to a higher percentage the 20 percent minimum deposit obligation of members, either across the board, or possibly only on that portion of each member's reserves which exceeds the average ratio of world monetary gold to world imports.

Foreign exchange reserves, for all countries taken together, made up about 30 percent of their total monetary reserves at the end of last year. A uniform rise of the deposit requirements to 30 percent would thus suffice at the start to guarantee the Fund against any gold shortage, even in the totally improbable event that all countries exercised their right to convert all of their excess balances into gold.

Under the same extreme assumptions, it might theoretically become necessary, however, to raise this ratio further, year after year, in order to allow the Fund to complement through its own credit operations the growing shortage of gold in relation to reserve requirements. If monetary gold stocks continued to increase at an average rate of \$700 to \$800 million a year, a 3 percent rate of growth in gross reserves, for instance, would require that deposits with the Fund rise to 40 percent of members' gross reserve in the course of the next 10 years. Prudent management of the system, however, should make it unnecessary to resort to compulsion for that purpose, as member countries' own interests would lead them to maintain with the Fund, rather than in gold, a much larger proportion of their total reserves than the minimum percentages imposed by the Fund.

The major objection to this proposed reform in the Fund's operations would be the same as that raised against the Keynes plan for an International Clearing Union. Such a system would endow the Fund with a lending capacity which, if improperly used, might impart a strong inflationary bias to the world economy. This is no reason, however, to fall back upon a system whose deflationary bias can only be combatted through an ever-increasing dependence upon the haphazard constitution of reserves in the form of national currencies, and an increasing vulnerability to unfavorable developments in one or a few key countries. The threat of inflationary abuses can be guarded against very simply by limiting the Fund's lending powers to the amounts necessary to preserve an adequate level of international liquidity.

Various alternative criteria could be retained for this purpose. The simplest one might be to limit the fund's net lending, over any 12-month 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 percent 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 the 3 percent 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 percent a year.

Assuming, for instance, that monetary gold stocks continue to increase by \$700 million or \$800 million a year, the fund's annual lending quota based on a 3 percent rate could be roughly estimated today at about \$800 million to \$900 million. A 4 percent rate would raise this to about \$1.4 billion, and 5 percent to about \$2 billion a year. 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.

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 ensure long run equilibrium in its international transactions without excessive recourse to trade and exchange controls. The recent standby techniques

of lending might, in addition, 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 standby agreements, and would be guaranteed by the country's minimum deposit obligation.<sup>3</sup>

A second broad category of fund lending would take the form of investments in the financial markets of member countries. These operations would be decided at the initiative of the fund itself, but always of course in agreement with the monetary authorities of the countries concerned. Such agreement would be necessary in any case to attach to these investments the same guarantees against exchange and inconvertibility risks as those which protect the fund's own deposit liabilities.

The first investments of this character would be imposed upon the fund by its absorption of the outstanding national currency reserves transferred to it by members in exchange for fund deposits. They would be overwhelmingly dollar and sterling investments and would be subject to special provisions, already outlined above, to avoid unnecessary disturbances to the monetary and financial markets of the United States and the United Kingdom. The resources derived from their progressive liquidation, however, would normally be re-employed 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 channelled into relatively long-term investments for economic development through purchases of IBRD bonds or other securities of a similar character.

The acceptance of the basic reforms proposed above should eliminate all existing balance of payments grounds for permissible discrimination under the GATT. This should constitute a powerful incentive for U.S. support of these proposals, as the United States has long been the main target of such discrimination by other countries.

The gradual liberalization of remaining trade, exchange and tariff restrictions could also be given a new impetus by these reforms if they were allied to a continuous and worldwide negotiation of reciprocal liberalization commitments, similar to that successfully undertaken regionally by the OEEC on the basis of the EPU Agreement. Prospective credit assistance by the fund to countries in difficulty should help spur the acceptance and implementation of such commitments by members. Yet, the OEEC experience also suggests that members will insist on retaining the right to invoke escape clauses whenever such assistance is either insufficient or inappropriate to meet their deficits. As in OEEC, a joint examination of the overall policies followed by the member should be undertaken in such cases and lead to agreed proposals for monetary rehabilitation and stabilization and for the restoration of the liberalization measures reciprocally accepted by all fund members. Ideally, the fund should be given the right to disallow, after 1 year for instance, continued recourse to such escape clauses if it deems them to be no longer justified. Such a decision might entail automatically the right for the country in question to allow fluctuations in its exchange rate as long as its gross reserves remain inferior to, let us say, 30 percent of annual imports.

Finally, some fundamental reforms in the cumbersome administrative machinery of the fund have long been overdue. Greater efforts should be made to preserve effective contacts at all levels between the fund and the national administrations of its members. Periodic meetings of high-level representatives currently entrusted with monetary policy in their own country, should determine the broad lines of the fund's policy and the limits within which decisions can be delegated to permanent representatives or to the fund's management itself. The OEEC and EPU experience should serve as an invaluable guide in shaping up such reforms in more concrete terms.

These, and other questions, could not be fruitfully explored within the scope of the present study. Actual possibilities for agreement can only be discovered through the process of international negotiation itself. We might note, how-

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<sup>3</sup> Let us note, in connection with the remark made in footnote 2 above, that any loan granted to a member would be credited to its fund deposit account, and that the member could draw on this account in any currency whatsoever without having to make any "representation" that it needs to make payments in that particular currency.

ever, that the total deposit obligation required from the United States would not be appreciably larger than its revised fund quota, and that both the United States and the United Kingdom would benefit particularly from the stabilization of the dollar and sterling balances whose present volatility constitutes a major source of instability for monetary management in both countries. The underdeveloped areas, on the other hand, would find in the new lending capacity of the fund a precious complement to their precious borrowing sources. This would certainly put the world's thirst for liquidity to better use than further expansion in gold digging and in unrequited lending to rich countries which least need such capital imports from abroad and find it difficult to reexport it without endangering their own liquidity position.

Yet, the final outcome of such a complex negotiation obviously remains highly uncertain. It is most likely that the final compromises that prove immediately feasible on a worldwide scale will remain substantially short of the broad and bold aims and techniques suggested here, and of what might be agreed to within smaller groups of countries, more closely interdependent on one another, keenly conscious of this interdependence, and more willing to trust one another's policies and commitments. Some of the ideas discussed above might therefore be recast usefully in terms of such existing, or prospective, regional agreements as the sterling area, the European Economic Community, a future European Economic Association, etc. It would, in any case, be useful to coordinate the monetary and payments machinery of such agreements with their commercial provisions, and to define in an appropriate way their relationship to the International Monetary Fund. Such a study could lead to a considerable streamlining and decentralization of the Fund's own operations by transferring to the regional groups themselves the handling of all international settlements and financial assistance involving only the use of their own members' currencies.

The slow and gradual adaptation of the world monetary system to changing needs was abruptly interrupted by the first world war, and the ensuing collapse of the gold standard. Attempts at reconstruction have been, still are, and always will be handicapped by the enormous difficulties involved in overcoming the forces of inertia and in reaching agreements 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 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 afterwards in other deep holes, especially excavated to receive it and heavily guarded to protect it.

The history of human institutions, however, has a logic of its own. Gold as a commodity enjoyed 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 recent phenomenon in world affairs. Its extension to the international sphere is even more recent and has also developed haphazardly under the pressure of circumstances rather than as a rational act of creation on the part of any national or international authority. This explains the present, and total irrational, use of national currencies as international reserves. Yet, the proliferation of regional, international, and supranational agencies since the war is slowly laying the groundwork for further, and long overdue, adaptations in the international monetary system, and particularly for the internationalization of the fiduciary portion—foreign exchange—of countries' monetary reserves. The difficulties created in the past by the excessive growth of foreign sterling balances and those which might arise tomorrow from the even larger growth of dollar balances should incite the monetary authorities to heed the cautiously phrased warning addressed to them by the Bank of International Settlements in its last annual report (pp. 243-244):

"The fact that such a considerable proportion of the total volume of liquidity consists of liabilities of the United States and the United Kingdom implies that the working of the system of international payments depends at present to a large extent on the pursuit by these countries of economic and monetary policies aimed at maintaining the purchasing power of their monetary units, and so preserving confidence, both at home and abroad, in their currencies.

If in the future—as is greatly to be hoped—further expansions of trade take place, the volume of international monetary reserves may have to be adjusted to the increasing need of means of payment. The problem may then arise of deciding what will be the best ways of effecting such an adjustment. This is a technical problem which the monetary authorities will have to consider in good time."

Mr. TRIFFIN. Mr. Chairman, members of the committee, let me first apologize for being unable to offer you today more than a very narrow contribution to the broad and fundamental policy issues debated by your committee.

The time at my disposal was extremely short, and my only field of competence, if any, lies in the area of international monetary policy rather than in the field of domestic economic policies which is the main concern of this inquiry.

I am very much afraid, however, that the evolution of the last 10 years has now brought us to a point where these issues have become inextricably tangled with one another, and where we can no longer afford to ignore the impact of our internal policies upon our external position, and vice versa.

We have certainly licked that famous, supposedly permanent and untractable dollar shortage which dominated for more than 10 years, economic thinking and policy, here and abroad.

I only pray to God that none of my bright colleagues come up tomorrow with an opposite, and equally absurd, theory of a permanent and untractable dollar glut.

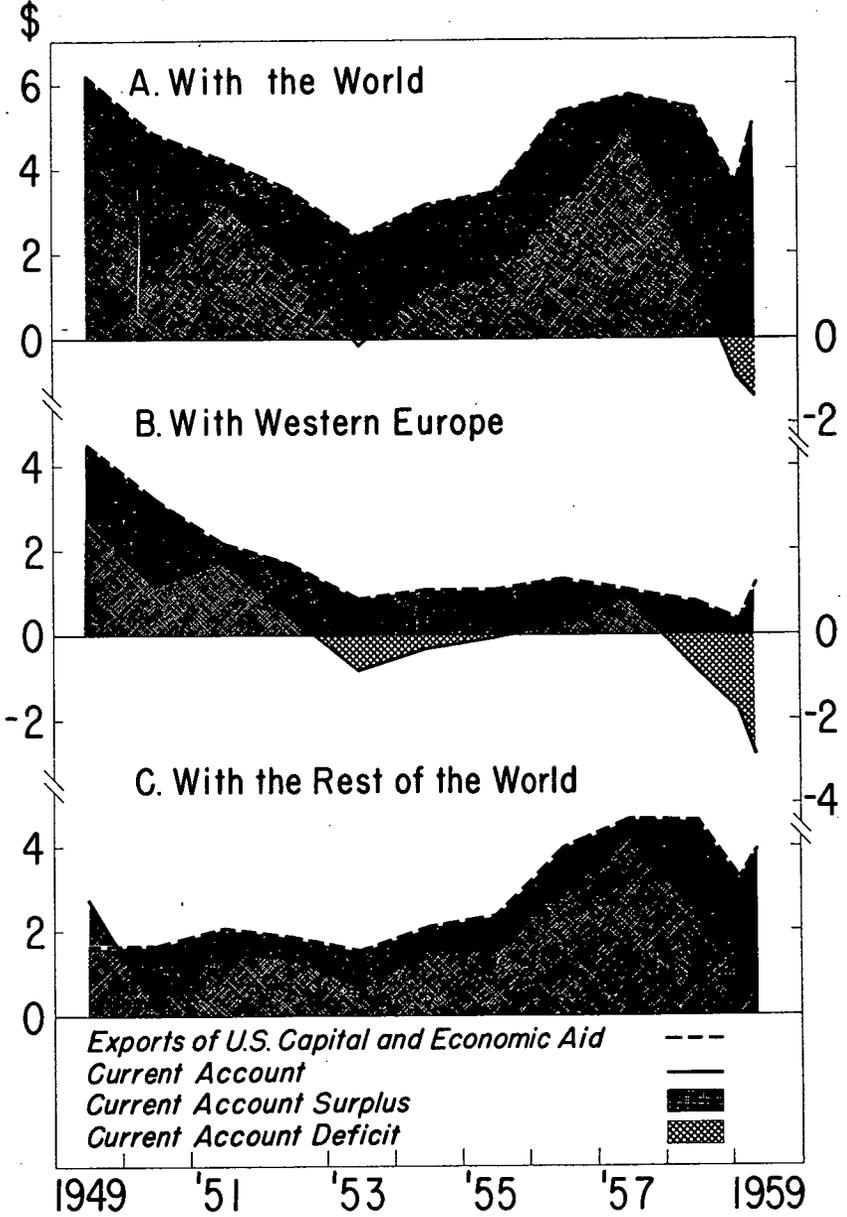
Before placing before you a number of disturbing facts and ominous danger signals, let me affirm in no uncertain terms that I do not believe for a minute that our present difficulties are either permanent or untractable. The strength and resiliency of our economy and of our policies make it certain that they can, and that they will be solved.

I have dealt rather briefly and inadequately, in my written statement, with the alarming deterioration in our balance of payments and the doubts which this may raise about whether or not we are pricing ourselves out of the world markets.

This topic, however, has already been covered at great length by other and more qualified speakers, and I think you will prefer to save time by leaving it out of my oral presentation.

Let me merely comment very briefly on a highly simplified chart which I am now placing before you. Each portion of this chart shows:

# BALANCE OF PAYMENTS OF THE U.S., 1949-59



(a) In dotted lines, our total exports of U.S. capital and economic aid;

(b) In full lines our current account balance:

- i. shaded surfaces showing surpluses;
- ii. solid surfaces showing deficits.

(c) In cross hatch, the excess of our capital exports and economic aid over our current account surpluses.

Three major observations emerge from this chart:

(a) The pronounced downward trend of our current account with Western Europe, interrupted only by the height of the European boom and the Suez crisis, strongly supports other evidence pointing to the persistent and growing deterioration in our competitive position vis-a-vis this area.

(b) This is veiled in the evolution of our current account with the world at large—in the top portion of the chart—by the growing surpluses which we enjoyed until last year with the rest of the world—as shown in the bottom part of the chart.

These surpluses with the rest of the world seem, however, to be closely associated with the level of the financing made available to these countries by our own exports of capital and economic aid.

The two lines of this portion of the chart are nearly parallel to one another. Their tendency to grow somewhat further apart in 1958 and 1959 might possibly be related again to the deterioration of our competitive position vis-a-vis Western Europe, other countries finding it more economic to use their financial resources to buy in Europe rather than here.

(c) Finally, our overall exports of capital and economic aid have been relatively sustained throughout this whole period of 10 years, at levels considerably in excess of our current account surpluses. This gap has been mostly financed by, and is responsible for, the constant deterioration of our net external reserve and liquidity position, though the gold losses and increasing short-term indebtedness abroad, depicted in the second chart which I am now bringing before you.

I have no really original advice to offer regarding the policies which we should follow to plug these persistent and growing deficits in our over-all payments balance.

I mention in my written statement some obvious reasons, shared by many other witnesses who have appeared before this committee, for doubting both the effectiveness as well as the desirability of some remedies which seem to me as dangerous ultimately as they are plausible at first view.

I have in mind any recommendations for drastic cuts in our capital exports and economic aid to the underdeveloped countries, for the tying up of such loans or aid to purchases in the United States, and, even worse, for a relapse into protectionist policies and import restrictions.

Our main problem is not to retrench, but to advance; not to cut our imports and our capital contribution to economic development abroad, but to restore our exports to levels sufficient to enable us to pursue in the future, on a sounder and more durable basis; policies which have abundantly proved their worth and which are indispensable to the maintenance of our economic and political position in the world of tomorrow.

Representative REUSS. What are the two dotted lines?

Mr. TRIFFIN. The bottom one shows the dollar holdings of foreign countries only, and is the more relevant. The other includes the dollar holdings of the international institutions, particularly the International and Monetary Fund.

We should now apply to ourselves the advice which we used to give Europe some years ago in order to cure its deficits; and Europe should similarly apply to itself the advice which it then gave us—to follow a good creditor's policies.

We must, first of all, strengthen, or recover, our competitiveness in world trade by arresting creeping inflation here, while stepping up our rates of growth and productivity by appropriate investments in research and technology.

We should, secondly, continue to press more and more vigorously for the elimination of remaining discrimination on dollar goods and the further reduction of other obstacles to trade and payments by foreign countries—and particularly by prosperous Europe.

Thirdly, the liberalization of foreign obstacles to American exports should stimulate our own producers to devote more attention than they do now to prospecting foreign markets and expanding their sales abroad.

Fourthly, we should do everything to prod European countries to assume their fair share of development financing abroad, particularly through multilateral assistance programs rather than through bilateral, tied loan, procedures.

Last, but not least, the current relaxation of world tensions may possibly enable us to reduce the terrifying and disproportionate defense burdens, internal as well as external, which probably account, more than any other single factor, for the revolutionary shift which has taken place in the international dollar balance from prewar to postwar days.

This, however, is only a hope yet, and one about which I feel totally incompetent to hazard any guess or suggestion. If it were to be disappointed once more, we should probably reexamine with our allies the problem of a fair allocation of our joint defense costs.

All that I have said so far, and much more which I have left unsaid, has become, by now, trite and familiar to the members of this committee. Let me, therefore, center my testimony on two other closely interrelated problems on which I feel, rightly or wrongly, that I have something to say that will be both new and constructive for your committee.

Even the most successful readjustment of our overall balance of payments will leave in its wake two major problems, of vital concern not only to us, but to the rest of the world as well.

Both have to do with the functioning of international monetary convertibility in an expanding world economy.

The satisfactory functioning of such a system necessarily requires an expanding pool of world monetary reserves and international liquidity to bridge temporary and unavoidable fluctuations in each country's external receipts and payments. Such fluctuations would, otherwise, force widespread and recurrent recourses to deflation, currency devaluation, or trade and exchange restrictions.

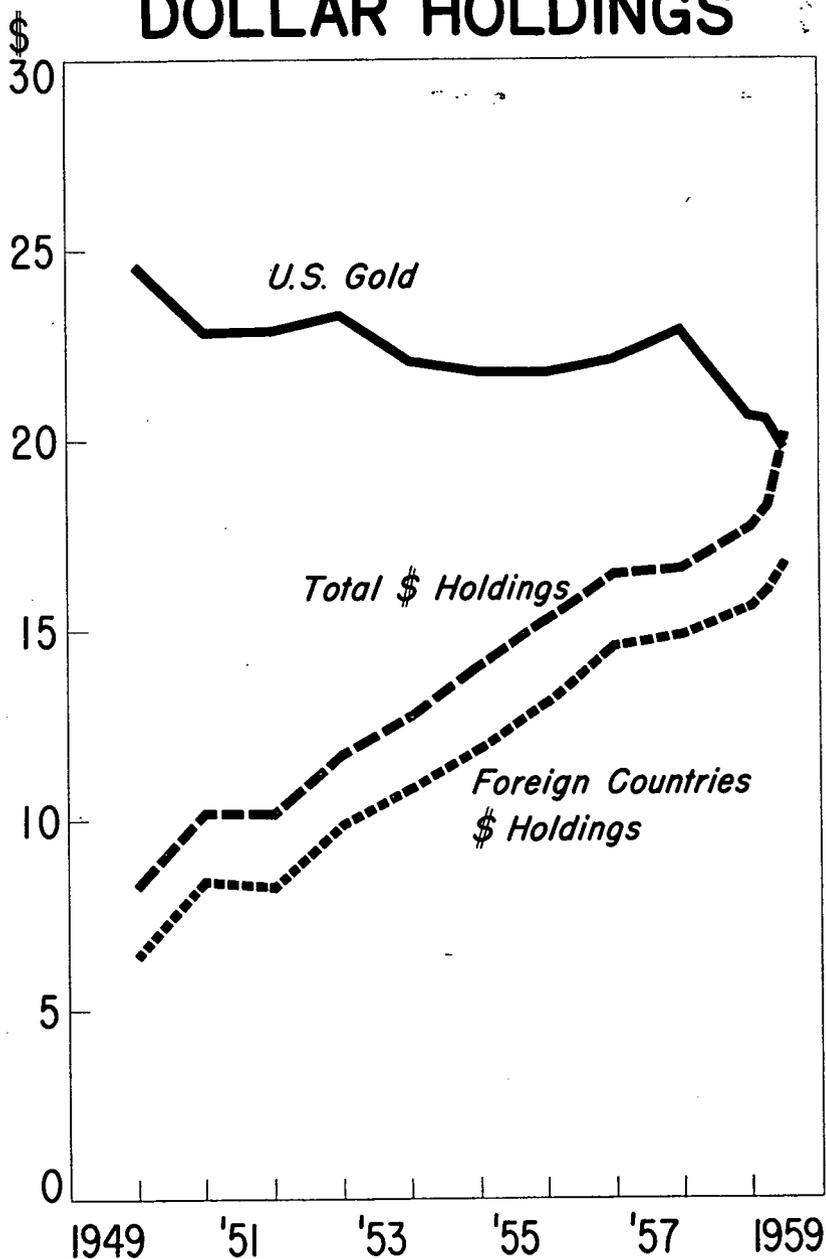
Gold has long ceased to provide more than a fraction—maybe one-third to one-fourth—of the minimum requirements for the preservation of adequate reserve and liquidity levels.

Most, although not all, countries, however, have shown themselves willing to accumulate a substantial portion of their monetary reserves in the form of foreign exchange, primarily sterling and dollar balances, alongside with gold itself.

The trouble with this solution, known as the gold exchange standard, is that it is bound to undermine, more and more dangerously as time goes on, the international liquidity position of the currencies used as reserves by other countries; and, by way of consequence, to impart an increasing vulnerability to the world monetary superstructure built upon these so-called key currencies.

Indeed, the additions to international liquidity made possible by the system are entirely dependent upon the willingness of the key currency countries to allow their own net reserve position to deteriorate by letting their short-term liabilities to foreigners grow persistently and indefinitely at a faster pace than their own gold assets. This is exactly what this chart indicates.

# U.S. GOLD AND FOREIGN DOLLAR HOLDINGS



I recall, in my written statement, how this led, in 1931, 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.

Circumstances are undoubtedly different today. Yet two problems are inescapable:

The first is that the elimination of our overall balance of payments deficits would, by definition, put an end to the constant deterioration of our monetary reserves and deprive thereby the rest of the world of the major source by far—two-thirds to three-fourths—from which the international liquidity requirements of an expanding world economy have been met in recent years, in the face of a totally inadequate supply of monetary gold.

The second is that the huge legacy of short-term foreign indebtedness already inherited by us from the past is likely to place a heavy handicap on sound policies for economic growth and stability in this country.

Refugee capital has flown here in large amounts after the Second World War, as it had flown to London after the First World War.

Some of it may return home as currency conditions become definitely stabilized in Europe, just as it left London in the late 1920's.

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.

We may then be caught, however, exactly as the British were in the 1920's between these legitimate and essential policy objectives and the need to retain short-term funds here in order to avoid excessive gold losses.

I cannot resist quoting an incisive remark of Santayana, most aptly used by the Managing Director of the International Monetary Fund in several of his recent speeches:

Those who do not remember the past will be condemned to repeat it.

Can we find a way out of the double dilemma which I have just mentioned?

I think we can.

The problem lies in both cases with the absurdities associated with the use of national currencies as international reserves. It can be met, most directly and simply, by the internationalization of the foreign exchange component of world monetary reserves.

Let the United States, the United Kingdom, and other major countries bar the use of their national currency as monetary reserves by other countries. Give all countries, instead, the choice of keeping in the form of international, gold-convertible deposits at the Interna-

tional Monetary Fund any portion of their reserves which they do not wish to hold in the form of gold.

Attach to these reserve deposits at the Fund exchange rate guarantees that would make them a far safer medium for reserve investment than any national currency holdings, always exposed to devaluation, inconvertibility, blocking, or even default by the debtor country.

Let them, finally, earn interest at a rate to be determined, and varied from time to time, in the light of the Fund's earnings on its own loans and investments.

These various features, combining the earning incentive of foreign exchange holdings with the safety incentive of gold holdings, should ensure in time a large and continuing demand for Fund deposits.

In order, however, to take account of initial diffidence and inertia, and to guarantee the system against the vagaries of sudden and unpredictable shifts between gold holdings and Fund deposits, all countries should undertake to hold in the form of Fund deposits a uniform and agreed proportion of their gross monetary reserves. They would be entitled, but not compelled, to convert into gold at the Fund any deposits accruing to their account in excess of this minimum requirement.

A minimum deposit ratio of 20 percent would probably be ample to initiate the new system, and would substitute for the present exceedingly complex and rigid system of national quota contributions to the International Monetary Fund capital.

This ratio might have to be increased in time, however, in order to provide adequate lending power to the Fund, and to ensure beyond any shadow of doubt the full liquidity and convertibility of Fund deposits into gold or any currency needed for settlements.

On the other hand, prudent management of the system would, in all likelihood, make it unnecessary to resort to compulsion for that purpose, as member countries' own interests would lead them to maintain with the Fund, rather than in gold, a much larger proportion of their total reserves than the minimum percentages imposed by the Fund.

I have spoken here of a minimum percentage of 20 percent. I might note in passing that countries outside of the United States and United Kingdom now hold in the form of foreign exchange, which is far less safe than Fund deposits would be, about 57 percent of their gross reserves.

The only major objection to this proposed reform in the Fund's operations would be the same as that raised against the Keynes plan for an international clearing union. Such a system would endow the Fund with a lending capacity which, if improperly used, might impart a strong inflationary bias to the world economy.

This danger, however, can be guarded against most effectively, simply, and directly by limiting the Fund's annual lending authority to the amount necessary to preserve an adequate level of international liquidity.

Various alternative criteria could be retained for this purpose. The simplest one might be to limit the Fund's net lending, over any 12-month 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 percent 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 percent 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 percent a year.

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.

A new and different category of Fund lending, however, would arise from the reform proposed here. This would consist of open market investments in the financial markets of member countries, undertaken at the initiative of the Fund itself.

The first investments of this character would result automatically from the initial absorption by the new Fund of the outstanding national currency reserves transferred to it by members in exchange for Fund deposits.

The bulk of these reserves would be in the form of bank deposits, acceptances, and Treasury bills previously held by the central banks themselves in New York and London.

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 wish to use every year—of liquidating such investments at a maximum pace of, let us say, 5 percent annually.

May I close now with a few words about the advantages, disadvantages, which such a reform would entail for the United States itself.

Its major advantage emerges clearly, I hope, from our previous discussions. The United States would no longer have to bear the burden, and court the dangers, inseparable from the use of the dollar as a reserve currency by other countries. This would, it is true, deprive us of unrequited capital imports which have, in the past 10 years, allowed us to carry a heavier burden of foreign lending and aid programs than we could have financed otherwise.

We would now have to share these responsibilities, and the political influence that might accompany them, with other countries, through processes of multilateral decisionmaking which would, at times, be irritating and frustrating.

We would, on the other hand, have consolidated in the hands of the Fund a large portion of highly volatile foreign funds, whose sudden and unpredictable outflow might otherwise unleash, at any time, an unbearable drain on our gold reserves.

Most of all, we would have shed thereby the straitjacket which the need to prevent such an outflow would impose upon monetary management and interest rates in this country, whenever the success of our price stabilization efforts allows us to give primary consideration once

more to the furtherance of maximum feasible rates of employment and economic growth.

A second, and closely related, consideration is that these reforms would put an end to an absurd situation, under which we have been in practice—with only minor exceptions—the sole net lender in the International Monetary Fund, in spite of our persistent deficits and of the equally persistent and huge surpluses accumulated over the last 10 years by other International Monetary Fund members.

We would, moreover, be able for the first time to obtain ourselves assistance from the International Monetary Fund—through the more flexible procedure of International Monetary Fund investments rather than loans—without triggering off the dangerous psychological reactions which would now accompany a U.S. request for a loan from the Fund.

The International Monetary Fund itself would need to look for safe investment outlets for its expanded resources, particularly during the initial years of the new system, and this would fit in particularly well with our own need to buy the time necessary for effecting, 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 deficits.

These, I think, are the essential considerations that should guide us. I should mention, however, two other points of a more technical character, but which may still be of interest to this committee.

Our minimum deposit obligation in this new International Monetary Fund can be calculated approximately, on the basis of our current position, as in the neighborhood of \$4.3 billion, which is just about equal to our present Fund quota. About half of this obligation would be discharged by counting as part of our required deposit the \$2.1 billion of net claims on the Fund accumulated by us as a result of past transactions.

The other half, however, would have to be paid in gold, but the International Monetary Fund would also cancel about \$2 billion of demand deposits and Treasury certificates which it now holds against us and are now counted, I believe, as an integral part of our national debt.

It should also be noted that our deposits with the Fund should be properly regarded in a very different light from our present subscription to the Fund capital. This subscription is not now considered, and should not be considered, as a fully liquid and bankable asset.

It is, therefore, excluded from the calculation of our monetary reserves.

Our deposits with the Fund, on the other hand, would be as fully liquid as gold itself, and as fully unstable in all international payments.

They should, therefore, properly be counted, in our case as in the case of other countries, as fully equivalent to gold for the calculation of monetary reserves and of legal gold cover requirements.

Our monetary reserves, after the cancellation of our present quota subscription and its replacement by a 20-percent deposit with the Fund, would actually have risen from its present level of \$19.5 billion to about \$21.6 billion.

Most of all, our short-term liabilities to foreign countries would have declined by approximately \$9 billion through the transfer to the Fund, and consolidation by it, of the liquid-dollar holdings now held by these countries, as monetary reserves.

These, I firmly and deeply believe, are extremely powerful arguments for a serious study of these proposals by the administration and by Congress.

I fervently hope that we shall be able to act in time, and to refute the disabused comment and dire prediction of a former colleague of mine in the administration:

"Triffin, you are very probably right, but, in this matter as in that of EPU, your proposals come several years too soon, and this time I don't honestly think you'll get anywhere until people are shaken into action by a real crisis. Then, maybe."

This, I must admit, is probably the most widely held view on this subject at present.

The CHAIRMAN. Thank you very much.

Mr. Bolling.

Representative BOLLING. I will pass for the moment.

The CHAIRMAN. Mr. Reuss.

Representative REUSS. I will not press you for the name of your anonymous friend in the administration, but I will say this in great seriousness:

I wish that either this particular friend of yours in the administration or some other qualified spokesman in the administration had given us last spring, when the Banking and Currency Committees of the Senate and House were acting on the administration's request, the broad total picture which you have given us today. It might have made for a more intelligent and forward-looking legislative approach than we were able to give the matter, in view of the very curtailed and narrow statements the administration has given us.

I will not press for the name of your colleague, because I can see he might not much longer be a member of the administration if you gave his name.

Let me ask you about this problem of tied loans, which you talked about so sensibly, I think, in your written statement. You make the point that to convert our loan program, such as it is, into a tied loan program will be a palliative at best, and the practical results are likely to prove very disappointing.

You go on to say, more than that, there may be retaliation which might leave us worse off than before.

Is that a fair statement?

Mr. TRIFFIN. Yes; it is. I would add to that possibly that I can see that one of the actions that is most urgently called for is the participation by Europe in this foreign financing.

I think it will be particularly unfortunate if by our own actions at the moment we induce Europe to offer such financing in the form of tied loans rather than in the form of untied loans.

I think what we have to gain by untied loans from Europe will be much greater than what we can gain really by tying what is not already tied in our own loan programs.

Representative REUSS. Would you agree with my view that one of the first requisites for foreign economic policy is to use our utmost

effort, much greater effort than we have so far used, to induce the dollar and gold-happy countries of Western Europe, and I will name Western Germany as a prime example of this, to bear a much larger and fairer share of the burden of developing underdeveloped areas?

Mr. TRIFFIN. Absolutely. I think many people are urging that policy upon Europe at the moment. I think it is very practical politics.

It is unfortunate that at the time that Europe seems to be on the verge of moving toward such a program we, ourselves, gave them a wrong example by tying our loans, with very paltry results, I think, particularly in the short term.

Representative REUSS. Let me get quite specific.

You, no doubt, have read in the press in the last few days that the Development Loan Fund, by its own directive, very largely has gone on a tied-loan basis. I believe the internal canon which they have adopted is that 75 percent of their loans has to be on a tied-loan basis.

While I thoroughly agree with you in your concern about our balance-of-payments position, and your felt need to persuade our allies to carry their share of the foreign aid burden and free up our trade, and while I look upon those as the royal road to get out of our dilemma, I, nevertheless, have a feeling that the Export-Import Bank is the vehicle traditionally used by this country for tied loans, and the Development Loan Fund was presented to the Congress by the administration as the white knight of international unselfishness.

This is the agency by which we were to show the other countries that foreign aid was not a way of giving other countries American surpluses, but to help them.

Would you agree with my impression at this stage that the attempt to convert the Development Loan Fund to a tied-loan agency substantially robs it of the helpful psychological effect which it had on the rest of the world and that we would be far better off if we expanded the tied loan function of the Export-Import Bank, perhaps amending that law to permit partial repayment in soft currencies, perhaps diminishing the dollar amount of the Development Loan Fund, at least not increasing it, and, of course, embarking upon a much more vigorous program in trying to get foreign nations to bear a fair share of the foreign aid burden?

Would you agree with me?

Mr. TRIFFIN. I could not agree with you more. I would say particularly at present when really we have a chance of moving in the right direction or in the wrong direction by what we do now at this moment.

Representative REUSS. You feel, then, that the action of the Development Loan Fund is in error and should be overruled by the President?

Mr. TRIFFIN. I would hesitate to give advice to the President, but I certainly think the action was not wise.

Representative REUSS. Do you think Congress would be justified, in the event that nothing is done about this matter, in moving to consolidate what is left of the Development Loan Fund with the Export-Import Bank on a soft-loan-repayable basis, rather than to have that which was originally offered as an agency to help underdeveloped countries to help themselves distorted into an adjunct of American export policy?

Mr. TRIFFIN. I would hesitate to give a very complete answer to a very concrete proposal of this sort. I think that certainly something should be done to reverse the action which has been taken if it can be done. What could be the best alternative proposal and the most feasible politically, I would not venture to say offhand.

Representative REUSS. Let me change the subject now to your equally cogent remarks about gold outflow and the mortgage on our gold stocks retained.

Among other things, you talk there of an unbearable drain on our gold reserves and no doubt you are looking at the point, when you referred to the chart, where those two railroad tracks cross next spring and somebody drives in the golden spike indicating that now the lien on our gold supply is in excess of the supply.

I would like you to look, if you will, to the reality of the danger of a run on the bank if you want to call it that.

I have heard before this committee, at least one witness, tend to discount that. In fact, I think the witness I have in mind says that if you are going to apply a straight balance sheet analysis to our gold position every bank in the United States would be, because there the claims equal the assets.

Mr. TRIFFIN. That is a very difficult point. If I may deal with this last observation, I think the situations are extremely different.

If there were a run on the banks in the United States, there is a Federal Reserve system which can always bail them out, and properly in such a case.

So there is there a feature in our national banking system which is totally absent in the international monetary system because the Fund could help to some extent, but you can imagine, yourself, what would be the reaction if we were to ask for a loan from the Fund at the time that there is a run on the bank.

It would only aggravate matters.

Representative REUSS. What kinds of circumstances, psychological and otherwise, on the part of holders of the foreign dollar holdings would have to come about before there would be a mass movement to withdraw?

Mr. TRIFFIN. May I point to the fuller written statement which I have prepared, because I also think that that chart can be very easily misinterpreted and too pessimistic conclusions could be drawn from it.

As I say here, there is nothing necessarily alarming or even unusual for a country like ours, in this rough equivalence between our gold stock with these foreign liabilities.

Sterling, as you know, was made convertible last December at the time when the sterling balances were not equivalent to the United Kingdom gold stock, but three to four times larger than the United Kingdom gold stock.

Yet the pound sterling has been doing extremely well ever since. Therefore, I would be less of an alarmist than some financial writers have been about this problem. I think that basically the strength and weakness of our international position cannot be gaged from any simple formula of this sort.

We should take account, also, of our own short-term and even long-term assets abroad, although we might not be able to mobilize quickly those assets, which are very largely in private hands, at a time when

we would need to do so because of the run which you are contemplating.

Moreover, we should also take into account other things. There are also long-term investments on this market by foreigners, and under certain circumstances those assets might be liquidated by them for repatriation to their country or for investment elsewhere, not simply because there is no confidence in the dollar, but again because of mere differentials in interest rates, which I pointed out before to be very important. Finally you could, in other circumstances, I think, if we did nothing to cure the present situation, come to the point where even the U.S. citizens might become alarmed and export capital abroad, and there the sky would be the limit.

Now, I do not for a moment anticipate those developments. I think the situation could be remedied very easily.

Our strength is so enormous that we should not worry unduly about it.

As we speak of the \$4 billion deficit, that figure is slightly exaggerated because it does not take into account the inflow of long-term foreign capital into this country, but even taking the figure of \$4 billion this is less than 1 percent of our gross national product.

And there is nothing very difficult in remedying that situation. It will take time, however, if we do it the right way rather than the wrong way.

The CHAIRMAN. As I am not an expert in this field, and my mind moves very slowly. I want to see if I understand your proposal.

Are you proposing that we have an international central bank whose relations with the national central banks shall be parallel to the relationship of the national central banks to their member banks?

Mr. TRIFFIN. I think in essence you could describe it like that, and this is exactly the way my proposal was described by a journalist in *Business Week* some weeks ago.

But I do not like to put it that way for only one reason, that the use of such words is exactly what scares the hell out of central bankers. Those people are very conservative.

The CHAIRMAN. It does not frighten me at all and I am not as timid as the international bankers or as the international central bankers. I want to know if this is really what you are proposing.

Mr. TRIFFIN. It is, essentially.

The CHAIRMAN. Now, you say that each central bank would deposit 20 percent. Of what?

Mr. TRIFFIN. Of its gross gold and foreign exchange reserves.

For us that would be, as of now, 20 percent of \$19.5 billion.

The CHAIRMAN. How would you equate the foreign exchange of the various countries? With the ratios as of a given day?

Mr. TRIFFIN. This would take place continually. That is, each country would always have to keep a certain portion of its total reserves with the Fund.

While now many of them hold a large portion of their reserves with, let us say, the Chase Bank or in Treasury bills, they would now pass this on to the Fund and then the Fund itself would hold these Treasury bills or these deposits with the Chase Bank.

The CHAIRMAN. Could this be computed in terms of dollars?

Mr. TRIFFIN. I think it would have to be, as it is now in the Monetary Fund, a gold dollar. Or it might be something a little more complex.

The CHAIRMAN. Does this furnish the capital or furnish the reserves for the International Central Bank.

Mr. TRIFFIN. It would provide it with a certain amount of lending capacity essentially. It is exactly the same thing as what happens in our national banking system.

It is on the basis of the deposits of individuals in the banking system that the banks can lend and put those funds to use.

On the other hand, the funds which you hold in deposits remain perfectly liquid. You can draw on them whenever you want to; and this would also be true here.

The CHAIRMAN. Now, suppose that the International Central Bank has \$10 billion in gold and foreign exchange equivalence of dollars, what would its lending capacity be?

Would you have the 100 percent reserve system or a fractional reserve system.

Mr. TRIFFIN. It depends on what we mean by "reserves" in this case. Let us suppose that there are \$10 billion of deposit liabilities in the new Fund, to the central banks of the world. As against that, the Fund would have in its assets a certain proportion in gold and another proportion in foreign exchange.

The CHAIRMAN. I understand. That is how the international central bank gets its \$10 billion.

Mr. TRIFFIN. That is right.

The CHAIRMAN. Now, will the International Bank make loans to the national central banks?

Mr. TRIFFIN. That is right.

The CHAIRMAN. What will be the total limit on the loans? Could they only loan out the amount of their reserves, thus having a 100-percent system or a dollar on reserve for every dollar loaned out, or could they, as under our system, loan out a multiple of this—say a dollar on reserve for every \$6 loaned out?

Mr. TRIFFIN. In practice, they would certainly lend; they would be able to lend. It would not be a hundred percent reserve system. The limitations would depend, of course, on the total amount of deposits which are left with them by their customers—that is, by the central banks—and secondly, since the lending capacity that would result from this, Mr. Chairman, could be conceivably very large, I have suggested here, to reassure the people who were properly worried about this inflationary danger, that you would limit by statute in the new agreement the lending power of the institution.

The CHAIRMAN. Mr. Triffin, I am not deterred by fears. I am trying to understand.

Mr. TRIFFIN. Yes.

The CHAIRMAN. What I am trying to get at is this: Will the international central bank have the power to create additional monetary purchasing power?

Mr. TRIFFIN. Yes, I see your point exactly, yes.

The CHAIRMAN. This does not frighten me, but I want to understand this.

Mr. TRIFFIN. It would frighten other people.

The CHAIRMAN. It might frighten timid central bankers, but it would not frighten sensible people.

Mr. TRIFFIN. I don't think it should.

Let me take a concrete example, which I think will make this clear to you.

Suppose that the Fund wants to lend \$10 million, or the equivalent of \$10 million, to some country.

The CHAIRMAN. Million or billion?

Mr. TRIFFIN. I said "million," but make it \$100 million, if you like, or \$500 million. It will write in its assets an additional amount of \$500 million of new assets which is the claim which it now holds against the borrowing country, and it will write in its liabilities an equal amount of \$500 million of new deposits credited to the account of that country. That is what happens in our own banking system.

The CHAIRMAN. You are starting on the old investment-banking analogy that deposits come first and the loans come later; but commercial banking is of a different type.

The loan comes first and that creates the deposit.

Mr. TRIFFIN. No, sir, Mr. Chairman; I think I did not make myself clear. I said it would be exactly as in the commercial banks. The Fund would lend first and credit the amount of that loan as a deposit to the borrower. That is exactly what you have in mind.

The CHAIRMAN. I see. Do you have any reserve ratio which it should maintain? Assume that it has \$10 billion of reserves in gold and foreign exchange. What would be the total it could lend out?

In this country it would be about \$60 billion, because you have roughly a multiple of six.

Mr. TRIFFIN. Well, this would be somewhat different. I don't think we could calculate it in the same manner because, while the Fund can always make new loans by creating new deposits, I envisage here that countries, including our own, would probably refuse to accept such an agreement unless there was a limit on the amount of deposits which they are compelled to leave with the Fund and, therefore, I suggested here that to start the system at least countries should be compelled to hold only about 20 percent of their total reserves with the Fund. They would have the right to convert in gold any deposits accruing to them in excess of that amount.

Now, that would expose the Fund to a certain outflow of gold and this would determine the limits of the Fund lending capacity.

In practice—I may say, I have discussed it at great length in an article of mine which I mentioned here—I think it would endow the Fund with considerable lending power for many years to come.

The CHAIRMAN. But the 20 percent would be something that they could not withdraw.

Mr. TRIFFIN. That they could not withdraw; that is right.

The CHAIRMAN. The question I want to ask is: What is the volume of the additional deposits that you can build up on that initial 20 percent which, according to my rough figuring, is somewhere around \$10 billion.

Mr. TRIFFIN. That is right; about \$11 billion today.

The amount additional to that would depend really on how the Fund is able to attract deposits and to retain them.

If, for instance, every country tomorrow felt very diffident about this institution and decided to convert into gold everything that they are not compelled to leave with the Fund, this would limit the Fund lending capacity.

The CHAIRMAN. Let me ask you this question: Would the international central bank have the power of open market operations?

Mr. TRIFFIN. Yes, very definitely.

The CHAIRMAN. This, as a matter of fact, is the way in which the reserves in the Federal Reserve System have been built up—not so much by voluntary deposits of the member banks as by purchase of Government securities and the payment for these takes the form of the creation of a deposit in the central bank credited to the banks which hold the accounts of the sellers; is that not true?

Mr. TRIFFIN. That is right.

The CHAIRMAN. Congressman Reuss has been edging very close to being convinced that we should expand our reserves and our total monetary stock through open market operations rather than through the lowering of reserve ratios.

Have you thought who should get the profit from the creation of this monetary purchasing power?

Mr. TRIFFIN. In the case of this new Fund?

The CHAIRMAN. Yes.

Mr. TRIFFIN. I think it would have to be distributed probably as interest or earnings on the deposits which are left with the Fund.

This is the way in which countries will find it very advantageous to keep reserves there. At the moment they keep large reserves in foreign exchange because that allows them to earn interest, which they do not earn on gold holdings.

You have to keep the same incentive to have them deposit with the Fund.

The CHAIRMAN. Now, this is very suggestive and I want to pursue this matter of analogy a little further.

Are you saying that you are trying to prevent runs on countries in the same way, or reduce runs on countries in the same way we have reduced runs on member banks by (a) the creation of a Federal Reserve System and (b) the Federal Deposit Insurance Corporation?

Mr. TRIFFIN. Exactly. That is exactly the meaning of it.

At the moment you have about eight to nine billion dollars of reserves held in short-term dollar holdings by foreign central banks alone, not counting private holdings. These can shift at any time from dollars into sterling or gold.

The CHAIRMAN. In other words, that national monetary systems are now at the mercy of international depositors?

Mr. TRIFFIN. That is right.

The CHAIRMAN. This puts a premium upon the influence of those who hold "hot" money or those who manipulate reserves for political purposes, or people who are anxious to make a fast dollar.

Mr. TRIFFIN. Absolutely.

The CHAIRMAN. Or the people most given to fear.

Mr. TRIFFIN. Absolutely.

The CHAIRMAN. In other words, you say that the national monetary systems are now at the mercy of the least dependable elements in the community?

Mr. TRIFFIN. I would not go quite as far. They are at the mercy of any elements in the community.

The CHAIRMAN. The listing of these groups would indicate they would not stand high in any category of socially desirable classes in society.

Mr. TRIFFIN. No, but let me say why I say there would be other elements also. There would undoubtedly be some foreign central banks which do not want to speculate particularly, but which are tied by their own legislation in keeping reserves against their own currency. Their currencies are defined in terms of gold and theoretically if they were unwise enough to keep foreign exchange deposits on the eve of a devaluation they would lose money on this and they would be accountable to their own people.

You will remember—and I think this is something which we should keep very much in front of our mind, Mr. Chairman—what happened in 1931, from 1928 to 1931, the hot money which had gone to Britain from the Continent—

The CHAIRMAN. What is your definition of hot money?

Mr. TRIFFIN. I would not try to dream up a new definition on the spur of the moment, but I was thinking primarily in this connection of funds which have moved out of their own country primarily because of fears, and justified fears at that time, of currency depreciation in Europe.

Now, in addition to that, you might expand the definition of hot money to include short-term money which seeks a higher return in terms of interest rates.

But the first one is the one about which I am particularly concerned, because I think that there are large amounts of funds of that character which have been building up since the war.

The CHAIRMAN. I suppose the voting power in the new International Central Bank would be in proportion to the relative reserves turned over to it; is that right?

Mr. TRIFFIN. Yes, I made some calculations there of what this might be initially. I think the Fund would start its operation, this new Central Bank, with roughly \$5 billion of gold as a minimum, assuming that nobody keeps any free deposit.

The CHAIRMAN. Five billion dollars of exchange.

Mr. TRIFFIN. It will be more than that. It will be about \$10 billion of exchange, I believe.

The CHAIRMAN. Ten billion dollars.

Mr. TRIFFIN. Yes, I think so. Or even more. I would like to check my figures on that if the whole proposal as I have put it before you goes through.

The CHAIRMAN. Now, to be nationalistic for a time, what voting power would that give the United States?

Mr. TRIFFIN. I am sorry—

The CHAIRMAN. What voting power would the United States have?

Mr. TRIFFIN. In this institution?

The CHAIRMAN. Yes.

Mr. TRIFFIN. I assume that in order to change our present voting power in the Fund, we would have new action taken on that account.

The CHAIRMAN. I understand.

Mr. TRIFFIN. I have not suggested any change in the present voting power.

The CHAIRMAN. What is our present voting power?

Mr. TRIFFIN. In the Fund? Again I can check that quickly for you if you want, but I suspect it might be of the order of 25 percent or more of the total membership. I think even more than that.

The CHAIRMAN. It must be more than that. We furnish more than 25 percent of the assets, certainly.

Mr. TRIFFIN. I can quickly give you the amount.

It is roughly 2.8 divided by 9.2. It would be about 30 percent.

The CHAIRMAN. Is that on the basis of the actual contribution or the hypothetical contributions?

Mr. TRIFFIN. No, this is on the basis of the past contribution.

The CHAIRMAN. Actual contribution?

Mr. TRIFFIN. Actual contributions. Here you could not really make it on the same basis. If you did, you would have to readjust it every year because the amount left in deposits would change from time to time. It would no longer be a fixed capital subscription.

The CHAIRMAN. Well, there are worse things than that.

Mr. TRIFFIN. May I interrupt for one clarification, Mr. Chairman?

I believe that total monetary reserves throughout the world today are of the order of \$60 billion. The U.S. reserve is of the order of \$20 billion.

Therefore, our voting power as of now under the new system, if it were readjusted in the way you suggest, would be roughly 33 percent. It would be maybe slightly larger than it is in the present Fund. It would not be smaller.

The CHAIRMAN. Am I correct in thinking that one reason why you advocate this is that you think that the present rate of increase in the gold supply is inadequate to maintain growth?

Mr. TRIFFIN. Yes.

The CHAIRMAN. This is 1½ percent a year, roughly?

Mr. TRIFFIN. That is right.

The CHAIRMAN. Though you did not mention this, to raise the price of gold would enrich, I suppose, the Union of Soviet Socialist Republics and South Africa?

Mr. TRIFFIN. I discuss this quite at length again in that article and mention quite a number of objections to the proposal to raise the price of gold, including that very one, that the two countries that would benefit from this most would be South Africa and Russia.

But there are many other objections also.

The CHAIRMAN. The first of the countries has the worse racial system of any country in the Western World.

Mr. TRIFFIN. Certainly.

The CHAIRMAN. And the second is certainly hostile to the United States?

Mr. TRIFFIN. Exactly.

I think those are the most powerful political arguments against any such a proposal.

As I indicate in my article, I think there are also many other objections to it. It is really a red herring.

The CHAIRMAN. What you are trying to do is to create an international currency through an international agency with an increase in the total supply?

Mr. TRIFFIN. Yes.

The CHAIRMAN. These loans would be made to individual central banks not to individual enterprises?

Mr. TRIFFIN. Not to individual enterprises, although again there I would not presume really to dictate in concrete detail how the negotiation might turn out in the end.

The CHAIRMAN. Is it a banker's bank?

Mr. TRIFFIN. It is a banker's bank, although I would consider quite proper—but this is open to objection on the part of more conservative elements in the central banking world for the Fund to invest in other first rate securities—those of the International Bank, for instance—any access reserves which it may have on hand.

So you could really in that way help channel money into development and reduce to that extent the burden of development financing throughout the world.

The CHAIRMAN. Now, this opens up great possibilities. Assume that the United States has one-third of the reserves and the voting power in the new International Central Bank and that it loans in the order of what, a billion dollars a year?

Mr. TRIFFIN. Yes; that is the rough average which I have estimated. If you assume that reserves, as a conservative estimate, should increase on the average—not every year, but on the average—by about 3 percent each year, well, 3 percent of \$60 billion is \$1.8 billion. You have about \$800 million of production of gold each year going into central banks. So the rest, \$1 billion, is the amount which might now come from Fund lending and investments.

The CHAIRMAN. Yes, but that is only a fraction of the amount which you can lend because you are using the fractional reserve system, not the 100 percent.

Mr. TRIFFIN. The Fund should use its full lending power.

The CHAIRMAN. I understand, but you could lend more than that.

Supposing you have a 50-percent reserve system which is three times our ratio, then you could lend \$2 billion a year.

Mr. TRIFFIN. Yes; you could.

The CHAIRMAN. Then one-third of the American share would be \$667 million a year profit. This would help very much in financing the Government.

Mr. TRIFFIN. There is one problem, of course. If you used this lending power to the full, you would then certainly run into the objection that you are increasing world reserves at too fast a rate and that this is promoting inflation.

The CHAIRMAN. What you are saying is you are not afraid of inflation, you are afraid of deflation.

Mr. TRIFFIN. That is right, but I am quite willing to recognize both dangers.

The CHAIRMAN. You are saying that the world monetary reserves and the world currency may not increase as rapidly as the potential increase in productivity?

Mr. TRIFFIN. That is right.

The CHAIRMAN. And that productivity may be held back by an obsolete banking system.

Mr. TRIFFIN. Absolutely.

The CHAIRMAN. And, therefore, you create an international system which would enable more monetary media to be created and the profits from this would be obtained not by the private bankers, but by the central banks?

Mr. TRIFFIN. That is right.

The CHAIRMAN. And we would get a third of it, or \$667 million a year, in the situation we have discussed.

I commend this to the attention of Mr. George Humphrey and Mr. Robert B. Anderson.

(Subsequently the following letter was received from Professor Triffin clarifying the above discussion of loans and interest earnings made by the Fund:)

YALE UNIVERSITY,  
DEPARTMENT OF ECONOMICS,  
New Haven, Conn., November 2, 1959.

Senator, PAUL H. DOUGLAS,  
Chairman, Joint Economic Committee,  
Congress of the United States,  
Washington, D.C.

DEAR SENATOR DOUGLAS: I wish to thank you very sincerely for the most enjoyable, stimulating and encouraging afternoon I spent with your committee. I hope it will prove useful to you and to our country.

In rereading the transcript, I notice that I failed to clarify a point which you clearly misinterpreted in your comments on pages 361 and 362. If the Fund lent \$2 billion a year, such loans would not be allocated on the basis of each country's existing deposits, but would probably go largely to the countries with low, inadequate reserves. It is most unlikely that those loans would be made primarily to the largest deposit holders. The ownership of the deposits held with the Fund would merely determine the distribution of interest earnings made by the Fund on its loans. In your example, the United States would get one-third, not of the \$2 billion lent in any 1 year, but one-third of the interest paid by borrowers on this sum and on loans similarly made in previous years. You may possibly wish to modify your statement in this respect, and I apologize for not having drawn your attention to it immediately, as I forgot it while trying to discuss the broader issue of the Fund's total lending capacity.

On this point too, which very rightly interests you very much, I may possibly make a little simpler and clearer my verbal answer to you.

Whenever the new Fund would lend, this would merely create additional deposits. If these deposits could never be withdrawn in gold—as in the Keynes plan—but merely drawn upon to pay another country, the Fund's lending capacity would be unlimited. All that could happen would be a reshuffling among members of the larger and larger deposits created by the Fund, but the Fund could never go broke. In exactly the same way, a national central bank could lend unlimited amounts if it were not prevented to do so by specific legal cover or reserve requirements, designed to prevent inflationary abuses of such power.

My proposals limit this inflationary danger, not by setting up reserve requirements—I do not propose any—but more directly and simply by placing a ceiling on the authorized annual lending of the Fund.

This allows me also to authorize deposit holders to limit to 20 percent of gross reserves the deposits which they are compelled to leave with the Fund. While this proportion would probably be ample in practice for a long time to come to give the Fund sufficient lending power, it might have to be increased in time, as production expands and demands a further expansion in international reserves and liquidity.

If this is not clear, I'll be glad to discuss it again with you, or you may wish to glance at pages 27-29 of my June article.

With many thanks again, and very best wishes,

Yours very sincerely,

ROBERT TRIFFIN.

The CHAIRMAN. Now, I regret that no members of the minority are here, but their very able members of the staff who serve as advisers to them and who are specialists in this field, Mr. Frucht, is here. I am going to ask that he take part in the questioning.

Mr. FRUCHT. Thank you, sir.

I want to say, first of all, that I have been for some time very much impressed with your diagnosis of this problem and your solution. I think that if this problem is to be solved, the solution is going to lie very much along the lines which you have indicated.

I have, however, a number of questions which relate in part to points that you made in reaching your solution that I do not think are necessarily tied to your general outlook but do fall into the pattern of steps toward resolving these problems which you worked out in your article for the Italian Bank Journal and are also mentioned here.

For instance, you suggest that it would be desirable to increase regionalism as a partial step in the direction of your final solution.

Mr. TRIFFIN. Yes.

Mr. FRUCHT. I have a number of questions to ask you along this line. For instance, does this not court the danger that we might create international autarchy instead of international liberalization?

Mr. TRIFFIN. I would like to pursue that discussion much longer, but this would take a lot of time if we went into all the technicalities of it.

The objection you mentioned is exactly the same as was made against OEC, and especially against the creation of the European Payments Union, if you remember.

At that time, people who were supporting this move were meeting all the time with the objection that this would create a sheltered, high-cost, soft currency area protecting itself from competition by the rest of the world.

As you know, EPU has turned out completely opposite to that and you do not hear that objection today from anybody, even from Professor Kindelberger, or from the people in the Treasury who were so violently opposed to EPU on that ground. EPU had indeed the opposite effect, and Europe has become a much more competitive area in world trade, to the point where it begins to worry us.

I think there are very sound economic reasons why this could have been predicted. I tried to explain that at length in my book on "Europe and the Money Muddle." In fact, after all, if the liberal economists believe in the virtue of freer trade, one of the results of this kind of integration and lowering of barriers, even on a regional basis among those countries, must be to strengthen their economy and therefore to make them more able to do without those crutches which were the restrictions against the dollar area and so on. And this is exactly what has happened. After having liberalized among themselves they have extended, gradually, liberalization to others.

May I mention again a broad historical example in this connection. Some people say that this sort of integration on a regional basis would lead to more protection and to a slower rate of progress for the countries which enter into such an agreement.

I just put the broad historical question to you. Would Germany today occupy the kind of economic position it occupies in the world if it had never united into a Zollverein? Would the United States be in the position it is today if we had 48 separate tariff areas in our country?

To ask the question is to answer it. Yet all the weight of academic opinion has been on the other side ever since Viner wrote on this problem 20 years ago.

I think there is a perfectly valid and obvious answer to the technical points made by Professor Viner.

I shall be glad to take this up with you after the hearings.

Mr. FRUCHT. I think perhaps you would not deny that at the outset, say, in the Common Market with its still very heavy specific dollar discriminations plus global quantitative discrimination, plus bilateral dealings and soon with a common external tariff with lower tariffs within, that we do face, at least for a while, a rather formidable wall of discrimination?

Mr. TRIFFIN. Yes.

Mr. FRUCHT. Not only the United States, but Japan and South America are particularly mentioned. Can you say that the position of Japan is not seriously harmed by such devices as this.

Mr. TRIFFIN. I wonder if I can make two comments about this really which would help clarify this issue.

Let us suppose at the worst that the new European Community becomes a high protective area. What would be the result, nearly necessarily? It would mean that their own gold and foreign exchange reserves would continue to increase at a terrific pace. I do not think that this could happen for very long without inducing those countries to remove some of the discriminations and restrictions which had been placed there at the beginning to protect them against balance of payment deficits.

On the other hand, I think that it also is true that because those countries were so sold on the dollar shortage by all economists in the postwar, they have been probably too conservative and too careful about their general policies, and really what I would expect now over the next few years is that wage rates and demand for consumption in those countries must adjust upward to the enormous increases in productivity and in the strength of their monetary position which have taken place since the war. I would expect that to happen nearly automatically. There is also no doubt that, although it could happen automatically, it could be defeated by the wrong policy. We should therefore continue to exert strong pressure on those countries to follow their own interest in his matter, and this would lead to a liberal external policy.

Mr. FRUCHT. This problem of discrimination of course has a particular bite in view of our balance of payments problem, in view of the position which you have so ably diagnosed. It takes on a peculiar importance. We are not in a position such as we were 5 years ago.

What could the United States do, do you feel, to see that dollar discrimination and other discriminations would be removed very fast?

I must mention that these countries have solemnly covenanted to remove those the moment their balance of payments position is strong; yet they talk of removing them in 5 years.

Mr. TRIFFIN. I think the movement will be much faster than that. Certainly, there are already quite a large number of important countries in Europe which have no discrimination today on imports from the dollar area except in the matter of agricultural commodities where there is no free market.

I believe that the French have already raised their rate of liberalization to 80 percent and I have been told that this would be raised further before the month is over. But I think we should probably continue to press them on that.

I understand that the present discussions in Tokyo are going pretty well. I think we should certainly have given much more support to GATT than we have been giving.

It is a mystery to me to understand why the proposal for it is no longer called ITO, there is another name for it—

The CHAIRMAN. GATT.

Mr. TRIFFIN. Yes, but there was a proposal to make this more permanent.

Mr. FRUCHT. You mean OTC?

Mr. TRIFFIN. That is right. I think we should give more consideration to our support for this consolidation of GATT into an OTC arrangement, although I do not think that it is of major significance. Let us support GATT.

Mr. FRUCHT. I wonder if you would express your opinion on the present fiscal policy of our Government in acting positively to stimulate the flow of American private investment abroad?

Do you feel that this is justifiable and desirable under the present circumstances?

Mr. TRIFFIN. I would like to confess first that I have no real competence in this matter, and I do not know exactly what is the status of the present projects on this in Congress.

Let me simply make a comment which I would say should not be particularly forceful because it is not a matter with which I am familiar, but I believe there really is no reason, there is no longer any reason today, to try to stimulate capital exports by this country to the rich countries of Europe. Nor is it desirable to stimulate any further than it is already going now the exportation of American industry and employment opportunities to Europe. I think we should make a distinction there between the underdeveloped areas where some of those policies may still be relevant and the export of American capital toward the developed countries. I think there is no justification for the latter. There is no justification certainly for special fiscal favors in that respect.

Mr. FRUCHT. Going to the question that you ended up with, the possibility that it might take a crisis to shake us out of our complacency, I wonder if there is not also a danger that such a crisis might shake us into a position of very strong protectionism.

Mr. TRIFFIN. Yes. That is what really frightens me because, if this were the way in which we react in a sort of spirit of panic rather than cold judgment, I think that not only would this be unfortunate for the world as a whole, but I think also it would largely prove ineffective from our own point of view.

You remember that chart I showed you, for instance, about our capital exports to the underdeveloped countries. This shows very clearly that if we were simply trying to reduce those capital exports we would at the same time reduce our exports and it would not help at all our gold problem. So that we would really follow a will-o'-the-wisp there and think we are really fighting a problem when we are only running away from it and not solving anything. That, I think, is a very grave danger right now.

The CHAIRMAN. Of course, this is precisely what happened in the thirties, that countries became more and more nationalistic. England abandoned its free trade policy and went to protection. Germany developed Naziism which had autarchy as one feature.

Mr. TRIFFIN. I am very much afraid of that also. I am much more afraid of that than I am of a financial panic at this stage.

Mr. FRUCHT. I heard on the Continent a good deal of talk about the desirability of a very broad, a very strong surge on the part of all these countries picking themselves up by their bootstraps and going towards trade freedom in a hurry, liberalization in a great hurry. We have a terrific problem here in that present legislation only allows us to reduce our tariff 20 percent over the next 4 years.

Mr. TRIFFIN. Yes.

Mr. FRUCHT. It would seem that we might fall into a serious trap in the problem both internally and externally if we were unable to move as fast toward liberalization as the rest of the world.

The CHAIRMAN. I do not want to scare off Mr. Frucht, but I will say, if you can make those fears known to your colleagues to my right, it will be very helpful because some of us fought, bled and died to even get the authority to bargain for tariff restrictions of 20 percent in 4 years and needed a major blood transfusion to really compensate for it.

Mr. TRIFFIN. May I comment on that, something which I think may be particularly relevant and which I think will give you further information? I know that there are a number of extremely influential people in the European Economic Community who are very much aware of this fact you have mentioned, but who are also forward-looking enough to suggest this solution, temporarily at least: that the European Economic Community should go ahead, even unilaterally if necessary, because they realize how difficult it would be to get from the Congress the legislation necessary to authorize the reciprocal negotiation of large tariff cuts. Therefore, they would go ahead without waiting for us, and they would cut their tariffs unilaterally, and then expect us to follow suit as soon as we can. If, of course, this was not done after a reasonable amount of time and they ran again into difficulties on that account, they would then reserve the right to re-trench and to withdraw the unilateral concessions which they had made.

I think that is something we should encourage, but we should at the same time try to put ourselves in a position to follow suit and to consolidate this broad movement.

Mr. FRUCHT. I would like to shift a few degrees away from this line of questioning to another line, another problem.

There is a good deal of talk in Europe about international stabilization of primary product prices, and I notice in the paper that the administration is considering moves in this direction. What I would like to know is whether you feel that the industrialized nations should take steps to stabilize the incomes of the primary producing countries. If so, what kind of steps do you feel we ought to take?

Mr. TRIFFIN. I think again this is a problem on which I have not studied very deeply in recent months at least.

I feel certainly that this is the most hopeful approach and at the same time the most difficult as everybody knows. I think the fact that it is difficult should be no excuse for postponing a more serious examination of that problem forever and forever. There must be solutions to it, and I think Europe has a very large part to play, because I think they import themselves an even larger portion of the raw material exports of those underdeveloped countries than we buy, ourselves. So, some united action between Europe and the United States, I think, would be of enormous value to the world.

Everybody knows, of course, I repeat here what everybody has said, that many countries complain that they lose through those sudden changes in the price of primary products far more than the billions that they received from us in the form of aid.

The CHAIRMAN. Granted that the primary product fluctuates more violently than the prices of consumer goods and therefore the economic conditions in the countries which produce raw materials go up and down more rapidly than other nations, still I had always thought that price stabilization is an attempt to deal with the general price level rather than with the stabilization of each individual price, and would it not be dangerous if you stabilized more or less the price of sugar, but if, in addition to this, you stabilized the price of wheat, tin, copper, coffee, cocoa, rubber, and jute. Where do you stop?

Mr. TRIFFIN. It would certainly have to be a very flexible agreement which makes room for progressive price adaptations. There is no doubt about that.

I think one consideration is this: that even though you might say those countries themselves should take proper action to iron out those fluctuations, it is extremely difficult for any of them to act alone.

The CHAIRMAN. Brazil in connection with coffee is proof of this.

Mr. TRIFFIN. Yes.

Mr. FRUCHT. I wanted to ask you whether you felt that the appropriate device was to stabilize particular prices or the balance of payments income of the country as a whole which has somewhat different implications?

Mr. TRIFFIN. It does, yes. I would really think that it would take us a long time to examine this fully, but I feel that it would probably be much more difficult to stabilize incomes because the measures that would have to be taken might vary very much from country to country while, if you deal with prices rather than incomes, you have at least an easier approach. It may be somewhat less logical and less desirable in certain ways but I think it is probably more feasible.

The problem is already so immensely complicated that I would hate to add to its difficulties. This is just thinking aloud—I would not necessarily commit myself to this—but I think it would be unfortunate to complicate our problem further at this stage by trying to do the ideal. Let us at least do something better, even if it's not the best.

Mr. FRUCHT. I am not sure that stabilizing particular prices is better.

Mr. TRIFFIN. No. Stabilizing income might be better than that, but so much more difficult to achieve that I think it would be a progress if we could eliminate the most violent fluctuations in some of those prices, without stabilizing them at any rigid level, obviously.

The CHAIRMAN. Any other questions?

Representative REUSS. I just have one, Mr. Chairman.

In your paper, Mr. Triffin, you made the point that at least until we get some long-term solution to the problem of international liquidity there will be necessity here, I think you suggest, for a rather high interest rate policy in order to keep the holders of the \$17 billion foreign holdings from taking their money elsewhere to draw interest.

That is a rather appalling prospect to me: that we have to have a high interest rate, growth-defeating policy here because of the large amount of foreign investment. Therefore, I want to explore with

you whether we really are caught up in this. Suppose we adopted an interest rate policy which, to my mind, would be more sensible in terms of domestic economic growth; namely, the policy of somewhat lower interest rates, and do our inflation fighting to a large extent by sounder fiscal policy?

Mr. TRIFFIN. I agree, yes.

Representative REUSS. Suppose we did that, you still would have the problem, according to your thesis, of the overhang of the 17 billion foreign dollar holdings. Suppose we lowered our interest rates and some of our foreign creditors then lit out for Switzerland or Turkey to earn more interest on their money, taking their gold with them, would civilization collapse? Why could not Congress pass an unobtrusive little bill switching the present four to one gold ratio to whatever is necessary? Nobody would ever know the difference. Life would go on.

Mr. TRIFFIN. Let me, first, make it perfectly clear that my remedy for this problem is not to keep our interest rate high. I am trying precisely to have a solution which involves a funding of a great deal of those funds so as to be able to recover the freedom to adjust our interest rates to our own domestic concerns.

Representative REUSS. I appreciate that your long term solution—

Mr. TRIFFIN. It could be done as quickly as people can negotiate. In the meantime, I do not think again I would insist on that—I do not think that there is an immediate danger, an acute danger in that respect. As long as interest rates remain relatively high also in Europe that would minimize the danger. But let me comment, why can we not simply get rid of this antiquated gold cover requirement, that was the other question you put and I would like to answer. I think we should have done so a long time ago undoubtedly, but I would be somewhat worried to use that weapon of lowering our legal gold requirements at the time when you feel there is danger really of a run on the bank, because the introduction of such legislation at a time when we are precisely under pressure might trigger off more demands for conversion. You see, it might have very unfavorable psychological repercussions.

I think it is very unfortunate that we did not remove this kind of handicap, or albatross, at the time when nobody worried about the stability of the dollar. To introduce such a change at the time when foreigners are to some extent concerned, I think, might be introducing it at the most unpropitious time.

Representative REUSS. It is a factor, is it not, that we could lose a good deal of gold and still, under the present legal 4 for 1 ratio, have an adequate support for foreseeable currency needs?

Mr. TRIFFIN. Yes, I think so. After all, what do we have there? \$19.5 billion roughly, and I imagine that our legal gold cover requirements now must be in the neighborhood of \$11 or \$12 billion. So that we have still ample room to meet any foreseeable conversion of foreign dollar holdings into gold.

Representative REUSS. Then, that I may be clear on the advice you are giving this committee, you do not really suggest, do you, that even now, for the short term, we should jack up the interest rates as a matter of national policy in order to attract foreign investment?

I would hope that you would not feel it necessary so to advise this committee, because it would seem to me an awful tail-wagging-the-dog proposition.

Mr. TRIFFIN. As I say, I would like to escape from the dilemma essentially. As of right now, I believe that still the main purpose which dictated the policy which has been followed in that respect was the concern with our domestic inflationary developments. But, as I point out in my paper several times, I see this conflict arising and it may arise very soon.

I wish that we could really get out of the dilemma rather than have to sacrifice our external policy in order to preserve our internal policies, or vice versa. If we are to make a choice finally between the two, certainly I think probably the choice should go the other way. But I think we can escape from that.

Representative REUSS. I take it your suggestion for an escape is precisely the constructive suggestion you have made today that the International Monetary Fund constitutes itself a central bank.

Mr. TRIFFIN. May I add to that possibly this: I realize, of course, that a reform of this character, although it is extremely simple in essence, might take some time and some debate. Therefore, it might take a long time before it could be implemented, possibly 1 year or 2 years, I do not know, but in the meantime, of course, you could achieve a great part of those purposes by a simple gentleman's agreement with the major reserve holders. An agreement between us, let us say, the British, and half a dozen European countries, the countries of the European Economic Community would be sufficient to give us the time necessary for a complete revamping of the Fund.

Representative REUSS. In connection with your fundamental suggestion today, which for shorthand purposes we call the central bank feature of the International Monetary Fund, would there be any objection on your part if that suggestion were formally put by members of the Joint Economic Committee to the Secretary of the Treasury, the President, the Managing Director of the International Monetary Fund and people otherwise interested in the matter for their comment?

Mr. TRIFFIN. I would say nothing would delight me more because I believe it would be the most constructive step and one of the most important ones that this committee might take to solve that dilemma about which you have been talking and which concerns me very deeply.

Representative REUSS. Thank you very much.

The CHAIRMAN. Doctor Eckstein, the director of our study, has some questions.

Dr. ECKSTEIN. Dr. Triffin, one of our earlier witnesses, Mr. Dufrey, made suggestions which might accomplish some of the objectives that your proposal has and some of the more conservative. He suggested in his paper one might devise some sort of guarantee scheme in which the major central banks guarantee each other's reserve. He mentioned both the United States, common market, and the United Kingdom.

Do you see any merit in this proposal?

Mr. TRIFFIN. It is also supported in some ways by Professor Harberler, I understand.

First of all, this would raise some legislative problems but I think we could get around that in a different manner.

You could not necessarily give a gold guarantee to those countries but you might tell them informally that you promise that you would let them know in advance of any intention to modify the value of the dollar and you would achieve thereby the same purpose.

I do not, myself, support it at all by itself, for two reasons: One is that this would indicate a doubt on our part as to whether or not we will maintain the value of the dollar and this might increase the doubts of others.

Secondly, I do not think that any such guarantee would in the end reassure people sufficiently. If they feel that our position is deteriorating constantly, they would feel that we would be unable to honor that guarantee, no matter what we have said. After all, this has been evidenced many times in history.

On the other hand, again, I would consider possibly that in an informal manner it might very well be that a move of this sort might help us hold the line while negotiation for a permanent solution is proceeding.

As a transitory device and as part of a general negotiation, I think it would have a proper place, but by itself it is no solution, I assure you.

Dr. ECKSTEIN. Another proposal which was presented here was some revival of the Tripartite Agreement.

Mr. TRIFFIN. That is exactly in the line of the second suggestion I was making, you see. You give them 24 hours to convert any dollar balance they would acquire at the rate at which they had bought it. That is the essential meaning of the Tripartite Agreement.

Dr. ECKSTEIN. Thank you.

The CHAIRMAN. We want to thank you for your very brilliant papers.

I believe Congressman Reuss has a suggestion.

Representative REUSS. If it is in order, I would like to suggest that the committee refer this most constructive suggestion, which ought to be fully examined, to our executive branch, the President, the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve, and also to the Managing Director of the International Monetary Fund for such comments as they may have. Since we are short on members, I do not want to make it too broad. It may be that perhaps the three members present would feel like doing it.

Representative BOLLING. I think we ought to include the groups to which we refer the appropriate committees of Congress since there is no Republican member present, I think, unless we get clearance from Republicans, we ought to do it individually.

Representative REUSS. I think if I may amend my suggestion, it could be very informal.

The CHAIRMAN. I would ask that a letter be drafted and if we get clearance from the Republican members, it become an official letter from the committee.

If we do not get concurrence, it will be a letter from the individual members.

(Subsequently, concurrence being obtained the chairman transmitted the record of the day's proceedings and statement to the officials specified above.)

Mr. TRIFFIN. Mr. Chairman, I would like to indicate something, of course, which worries me a little bit about this.

In making this presentation, I streamlined it and made it as simple as possible. I have been compelled, of course, not to enter into all the many objections which I know will be posed to this proposal.

The CHAIRMAN. This is not unfamiliar to any politician.

Mr. TRIFFIN. To which I hope I will have some answers but which I did not try to develop today.

The CHAIRMAN. Doctor Eckstein will prepare such a letter of transmittal. I suppose that the articles, as such, and the cross-examination this afternoon should also be included.

Mr. TRIFFIN. May I also suggest that this letter might draw attention to the lengthy article in which I developed some of the technical aspects of the project.

The CHAIRMAN. If you have any more reprints to furnish us, we shall be glad to receive them.

Mr. TRIFFIN. With pleasure.

The CHAIRMAN. This has been one of the most interesting afternoons I have had for a long time.

I want to thank you very much.

Mr. TRIFFIN. Thank you very much, Mr. Chairman and members of the committee.

I have enjoyed it, also.

(Whereupon, at 4:30 p.m., the committee recessed.)

# EMPLOYMENT, GROWTH, AND PRICE LEVELS

THURSDAY, OCTOBER 29, 1959

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, at 10 a.m., pursuant to recess, in the Old Supreme Court Chamber, the Capitol, Honorable Richard Bolling, of Missouri, presiding.

Present: Senator Douglas (chairman of the committee), Representatives Bolling, Reuss, and Curtis.

Representative BOLLING (presiding). The committee will be in order.

Our witness today is Robert A. Gordon, professor of economics and chairman of the Department of Economics, University of California, Berkeley.

Mr. Gordon, you may proceed as you wish.

## STATEMENT OF ROBERT A. GORDON, PROFESSOR OF ECONOMICS, CHAIRMAN OF THE DEPARTMENT OF ECONOMICS, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIF.

Mr. GORDON. Thank you. Mr. Chairman and members of the committee: I take it that the purpose of this final set of hearings is to explore how we may reconcile and simultaneously attain the three objectives of high level employment, rapid growth, and substantial stability of the price level. This can be resolved into the following three questions:

1. Under today's conditions, how compatible are these three objectives?

2. If full compatibility cannot be achieved within the framework of institutions that we want to preserve, what combination of objectives should we seek to attain? How much growth or employment are we prepared to sacrifice for greater stability of prices, and vice versa?

3. Given the answer to the second question, how do we use the policy instruments now available, and what new policy measures do we need to develop, in order to attain this "workable" combination of objectives?

### COMPATIBILITY AMONG THE OBJECTIVES

I share the view expressed by a number of witnesses before this committee that, given the kind of economy we have had since World War II, there is a long-run upward bias in the price level. The more

successful we are in achieving rapid growth and substantially full employment, the more likely is it that there will be a significant upward trend in the price level—more of an upward trend than most of us would like to have. This basic incompatibility is likely to continue unless there are some fundamental changes in the structure of the American economy—changes which, on the whole, most Americans would not be willing to accept—or unless we can make more effective use of the policy tools now available or develop some new tools to add to those we now have.

Here are the more important reasons why I think an inflationary bias now exists in the American economy. These reasons are stated very briefly in order to allow enough time to consider the second and third of our three questions.

1. The strength of organized labor has increased greatly since the 1930's. Given this strength and what we may call the internal dynamics of the trade union movement, there has been a persistent pressure to raise money wages at a rate that drives up unit labor costs. This pressure has been self-reinforcing. The succession of wage increases in the last 15 years has created a set of expectations such that union leaders feel compelled to insist on significant wage increases every year—or wage reopening date—and employers feel obligated to grant a substantial part of what is asked.

2. In this connection, employers have come to be willing to pay a high price for industrial peace. More accurately, employers want industrial peace, and developments during the last decade and a half suggest to them that the price that has to be paid can be shifted to the consumer. The greater resistance to wage increases shown by the steel industry this year may or may not represent the beginning of a change of heart in this respect by large-scale employers.

3. I do not know whether the extent of "administered pricing," a phenomenon which is difficult both to define and to measure in practice, is now greater than before the war. But this much can be said: The prevalence of markup pricing, which extends through a large part of the economy and is not confined to the so-called concentrated industries, enhances the effectiveness of union pressure for higher wages and increases the likelihood that cost advances will be passed on as price increases. Administered pricing has always been widespread. Since the war it has interacted with demand influences and union pressures to raise prices as well as wages. This is related to the previous point that employers have come to feel that industrial peace can be bought by wage increases that can be passed on as price increases.

4. While administered pricing has always been with us, it is probable that its character has changed somewhat in the last generation. Not only has there been a weakening of employer resistance to wage demands but there has also been a growing resistance to reducing prices when demand declines in particular sectors. Not only wages but also prices have become more rigid in a downward direction. As a result, the economy has shown an increasing tendency to take on those asymmetry characteristics so ably described by Professor Schultze in his study paper for this committee (study paper No. 1, "Recent Inflation in the United States").

Excessive demand in particular sectors pushes up wages and prices in those sectors; these wage and price increases are transmitted to other sectors, leading to a general rise in costs. If aggregate demand is not excessive, excess demand in some sectors means deficient demand in others. Yet prices tend not to fall in the latter. Indeed, they may rise because of the general rise in costs initiated in those industries facing an exuberant demand.

Another aspect of this asymmetry is that nonagricultural prices generally have been showing increasing resistance to decline in business recessions. Thus, we are faced with the widely discussed ratchet effect. The price level moves up during cyclical expansions; it falls little or not at all, and may even show a slight rise during business contractions.

5. Overhead costs per unit of output have risen significantly in the postwar period. This has probably accentuated the tendency in oligopolistic industries toward full-cost pricing. It has probably also led some labor unions to exaggerate the increase in productivity of direct labor, giving rise to wage increases that have forced up unit labor costs and prices and led also to an increase in the price of overhead labor and of other overhead inputs.

6. For a variety of reasons, the economy during the postwar period has been more resistant to cyclical contractions than before the war. This, of course, is as we want it to be. But the weaker are cyclical contractions in aggregate demand, the less likely are price increases in boom periods to be offset by price declines in recessions. In addition, both business and labor have apparently come to count heavily on the guarantees offered in the Employment Act. The effect on expectations is such as to increase the resistance to both wage and price cuts, and these expectations may also tend to make the recessions milder than they otherwise would be.

7. It is probable that, under the conditions that have existed in the postwar period, different rates of productivity increase in different industries contribute to the inflationary trend. At least, this is likely to be true if there are strong trade unions, particularly in industries with relatively high rates of productivity increase, and if aggregate demand is high enough to maintain a fairly tight labor market. Under these circumstances, the wage increases that set the pattern are likely to reflect above average increases in productivity. Wages rise more or less correspondingly in industries with less than average increases in labor productivity. Prices must, therefore, rise in the latter sectors. Thus, we may get a situation in which relatively few prices decline and many rise, those that rise most sharply being in industries characterized by strong demand and little increase in productivity. I think a process somewhat of this sort has been responsible for part of the particularly rapid rise in the prices of many services and also for the extent of the rise in some types of construction costs.

This is only a partial list of the factors that have helped to push up prices in recent years. I have neglected the fact that the combination of forces operating on prices in 1946-48 and 1950-51 was significantly different from those at work from 1953 on. I have not stopped to point out that some of the factors emphasized would have had much less inflationary consequences had not the level of aggre-

gate demand—and of the demand for labor—been, on the whole, high and rising during the postwar years. Neither a simple demand pull nor an unqualified cost push explanation can account for the movement of cost and price levels during the last 15 years.

But the important point is this: If we do succeed in keeping aggregate demand high enough to permit something close to full employment and a reasonably rapid rate of growth, then the institutional arrangements which today impinge on the pricemaking process are virtually certain to impart a significant upward tilt to the trend in the price level. In short, under today's conditions, high level employment and rapid growth are not consistent with a secularly unchanging price level.

#### WHAT COMBINATION OF OBJECTIVES SHOULD WE TRY TO ATTAIN ?

Using my own scale of values, I should place the three objectives with which we are concerned in the following order: first, a satisfactorily high level of employment; second, rapid growth; and third, price stability.

I should like to say a few words about each of these goals.

*Employment.*—We have to make a reasonable provision for fractional unemployment, allow for the fact that occasional minor business recessions are inevitable, and take into account the nature of the unemployment that may exist at any particular time.

Given the way we measure unemployment, I should say that full employment implies about 3 percent unemployment. Unemployment will inevitably be higher in business recessions, no matter how promptly countercyclical measures are taken. Over a decade at a time, we should consider that we have done fairly well if the average rate of unemployment is held down to 4 percent. We have not done quite that well during the last decade.

We also need to look at the *composition* of unemployment. Unemployment rates always tend to be relatively high among younger persons, older workers, and nonwhites. Anything that we can do to improve job opportunities and reduce discriminatory hiring practices, particularly with respect to the last two groups, should have a beneficial effect on total employment.

Pockets of chronic unemployment should be attacked directly. I do not believe that a somewhat high unemployment rate brought on by distressed conditions in particular industries or localities requires expansionary measures aimed at substantially raising total demand. This is likely to make us pay a good deal in the form of rising prices for a very small increase in employment.

*Growth.*—There is no magic figure representing just that rate of growth which we should always seek to achieve. If we maintain a high level of employment, growth in total output will automatically occur as long as the labor force continues to expand and output per worker keeps on increasing. It should also be remembered that, given present propensities to save, high level employment implies a high level of investment, and this, in turn, implies growth in both productive capacity and labor productivity. But output has grown at various rates in the past, and the rate of growth will almost certainly continue to be variable in the future.

In this connection, consider the following simple formula:

Output per year equals proportion of the population in the labor force *times* population *times* hours worked per worker per year *times* output per man-hour.

All of these variables can change and have changed in the past. Before we set any particular rate of growth as our objective, we should consider the likely trends in these variables and whether the resultant of these trends yields a potential rate of growth that seems on the whole satisfactory.<sup>1</sup> Of course, different people have different ideas as to what is a satisfactory rate of growth. My own notion of a satisfactory growth rate is probably somewhat more modest than that of some other witnesses before this committee. I should be satisfied to see total output in the private economy grow over the next decade at an annual average rate of about 4 percent a year, which the prospective trends in the variables listed above should permit—especially if public and private policies are such as to encourage a continued rapid increase in output per man-hour.<sup>2</sup> This is the factor affecting potential growth on which we should concentrate. But if the free choice of Americans should create trends in the other variables that reduce the potential rate of growth, I should be prepared to reduce my notion of a satisfactory growth rate accordingly.

Given whatever growth rate we agree on that is compatible with the supply variables listed above, we must then see that aggregate demand expands at the rate which will make this potential growth rate a reality.

*Price stability.*—It is clear that we do not want runaway or galloping inflation, but how much of a creeping rise in prices are we prepared to accept, if necessary, to achieve satisfactory employment and growth? I share the view expressed by the late Professor Slichter and others that the dangers of a mild upward trend in the price level have been exaggerated. While recipients of fixed incomes may suffer somewhat, interest rates are likely to rise with rising prices—unless deliberately held down through monetary policy—debt contracts do not run in perpetuity and adjustments can be made in pensions and in social and private insurance provisions. Nor is there much evidence that an upward trend of 1 or 2 percent in the price level causes people to “flee from money into goods.” On the other hand, mildly rising prices help to maintain optimistic business expectations and provide an additional incentive for a high level of real private investment.

*Combining the objectives.*—Taking all of the above considerations into account, my recommended package would be about as follows:

Let us seek to keep the average unemployment rate over a series of years at less than 4 percent, depending on how successful we are in combating structural unemployment and minor recessions; let us try to achieve an average rate of growth in real private gross national product of 4 percent; and let us be prepared if necessary, to pay for these objectives with a price level—Consumers Price Index—that rises, on the average, by not more than, say, about 1 percent per year.

<sup>1</sup> A complicating factor is that these variables interact with the rate of growth. They not only affect the rate of growth, but are also influenced by it.

<sup>2</sup> Output in the private sector grew at an annual rate of about 3.7 percent per year during 1948–57, or slightly faster than during the preceding 70 years. The rate was higher than this during 1948–53, and much lower during 1953–57. During the 1960's the labor force will grow at a faster rate than during the 1950's.

This is my "4-4-one" formula. If necessary, I should be willing to pay a slightly higher price in terms of the price level, but we should see if we cannot develop policies which will hold the cost in terms of inflation down to 1 percent per year.

#### SOME SUGGESTIONS AS TO POLICY

We need to show some discretion and flexibility in interpreting our objectives. For the most part, we are concerned here with long-term goals. But long-term economic trends emerge out of a dynamic process that also results in short-run change and cyclical fluctuations. Some short-run instability is inevitable; the problem is to keep it within reasonable bounds, not to eliminate it completely. This is why I have put the employment objective in the way that I have. This is also why we must not rush in with strong antideflationary measures if the Consumers Price Index rises by more than the agreed rate during a cyclical boom. A price rise of 2 percent during a boom year, followed by no rise during a mild recession year, would meet our objective of an average of 1 percent per year. On the other hand, a modest rise in the Consumers Price Index in a recession year, particularly if food prices are falling, may be alarming if it suggests still larger price increases when business picks up again.

My next point is that policies aimed at stabilizing and expanding aggregate demand cannot by themselves give us the combination of objectives we seek. Indiscriminate attempts through monetary and fiscal policy to expand total expenditures in order to accelerate growth may involve too high a cost in terms of inflation and lead to maladjustments that will make the next recession more intractable. On the other hand, overall monetary tightening to prevent inflation during booms may unnecessarily impede growth and hasten the onset of recession.

There are two reasons why merely seeking to control the level of aggregate demand, particularly through the conventional instruments of monetary-fiscal policy, is not enough to give us the desired combination of goals.

First of all, there exist powerful price-determining groups—for example, in labor, business, and even in Government—that are not very sensitive to moderate fluctuations in aggregate demand.

Second, some kinds of unemployment and excess capacity are more intractable than others. To secure the maximum amount of employment and growth consistent with a given degree of price stability, we are likely to need selective measures aimed directly at particular trouble spots.

Let us look at the policy implications of each of these two points.

*Administered wages and prices in relation to monetary-fiscal policy.*—The stronger are the autonomous wage and price determining influences in the economy, the less independence have the monetary authorities if they are committed to maintain a high level of employment. Organized labor and large-scale business have to some extent taken control of the price level away from those in charge of monetary and fiscal policy. This problem is magnified by our farm policy and by the fact that some branches of Government, through procurement policies that increase the likelihood of wage and price increases, make the problem of monetary control of inflationary tendencies more difficult than it would otherwise.

It seems to me that, within the framework of existing institutions, we should try harder than we have to exert some influence over these autonomous pricemaking forces so that they will more closely conform to the goals of national policy. This is admittedly difficult to do, and even to raise the question is likely to stir up a good deal of controversy.

The following proposals seem to me to deserve serious consideration:

1. At least once a year, probably soon after submission of the President's Economic Report, a representative group of labor leaders and businessmen should be brought together for intensive meetings with Government officials. The latter would presumably be drawn from the Council of Economic Advisers, other departments of the Federal Government, and, I should hope, from the Board of Governors of the Federal Reserve System. Exhortation should be kept at a minimum; but the current and prospective economic situation should be explored thoroughly, current Government policies should be discussed, and there should be consideration of what private policies—including, but not confined to wage and price policies—are most consistent with the goals of high employment, rapid growth, and a workable degree of price stability.<sup>3</sup> Through such meetings as these, or through some other form of regular conference, the attempt should be made to bring about better coordination between monetary-fiscal policy and private wage and price policies.

2. In this connection, there needs to be a closer working relationship between the Federal Reserve System and organized labor. I gather that the Board of Governors does not have any systematic procedure for regular conferences with labor leaders. No representative of labor sits on the board. The Federal Reserve Act states that, in his appointments to the board, the "President shall have due regard to a fair representation of the financial, agricultural, industrial, and commercial interests. \* \* \*", but no mention is made of labor.

A somewhat similar situation prevails with respect to the boards of the individual Federal Reserve banks. I should like to see labor representatives at least on the boards of the 12 banks, and I believe that both the Board of Governors and the banks should arrange to meet regularly with representatives of labor. The monetary authorities need to be sensitive to the interest of workers in the level of employment and the rate of growth, and labor must be made to recognize the interrelations between its wage demands and the stabilization objectives of monetary policy.

3. The President's Economic Report should be made into a more effective instrument for bringing public pressure to bear on private wage and price decisions. The Economic Report, virtually from the beginning, has tended to run in terms of broad generalities, well meaning exhortations that ask to be ignored, and innocuous platitudes. I have not noticed a great deal of difference between Republican and Democratic administrations in this respect. I should like to see the Economic Report be more explicit about the objectives to be sought

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<sup>3</sup> See the similar suggestion made by John Dunlop in the American Assembly, "Wages, Prices, Profits, and Productivity" (1959, pp. 148-149). The same proposal is included in the final report of the assembly at which Dunlop's paper was presented, and it was repeated in the Western Regional Assembly, called to discuss the same range of problems in October 1959.

during the coming year and the combination of public and private policies needed to attain these objectives.

In this connection, the Administration should not be afraid to state frankly what range of wage increases it believes to be compatible with price stability; what needs to be done to accelerate increases in productivity; what policy measures it is prepared to take under various contingencies, and so on.

There are obvious risks in such frankness on which I do not have to elaborate. But we cannot get away from the fact that, given the economic power now residing in private groups and our desire to maintain existing free institutions, we must find ways of bringing public opinion to bear on the parties at interest in order to supplement the conventional instruments of economic policy. I agree with John Dunlop that—

the full potential of the leadership of the Federal Government has never been used persistently and imaginatively to shape decisions by private parties on wages and prices or to influence the climate of ideas within which such decisions are made.<sup>4</sup>

4. It would probably strengthen the Government's hand somewhat to have the goal of price stability written into the Employment Act. But this should be done in such a way as to permit a somewhat flexible interpretation of price stability and so as to recognize the prior status of high employment and satisfactory growth.

*The need for selective measures.*—We need to make a more selective use of monetary-fiscal policy and, in general, to rely more on the rifle and less on the shotgun. The more it is true that our recent inflationary problems have arisen for reasons other than an overall excess of total demand, the more essential is it that selective measures be used. I am in favor of giving the Federal Reserve authority to exercise control over consumer credit and mortgage debt,<sup>5</sup> and, if we have a recurrence of the capital goods boom of 1955-57, it might be a good idea if the Federal Reserve were to apply some direct "moral suasion" to hold the boom in check. Selective tax measures, for example, with respect to depreciation, might also be used.

I do not think that there is any such thing as a completely non-discriminatory monetary—or fiscal—policy. Generally tight money markets discriminate against those types of business that rely relatively heavily on external financing. They also discriminate against small business, home purchasers, and State and local governments. If we must discriminate in any event, let us direct our shots against those sectors which seem to contain some of the main trouble spots.<sup>6</sup>

The same considerations apply if what is needed is to raise the level of employment or speed up the rate of growth. Apart from the effects of the steel strike, the present level of unemployment is too high considering the fact that the low point of the last recession is a year and a half behind us. But the answer does not lie simply in inflating aggregate demand through monetary and fiscal policy. We need to analyze the nature of the unemployment and utilize measures

<sup>4</sup> Op. cit., p. 148.

<sup>5</sup> The machinery for direct control of mortgage credit now exists in the FHA, VA, and FNMA, but these controls are not always used in a coordinated way, or in a manner to further overall stabilization and growth objectives.

<sup>6</sup> As these remarks may suggest, I have always thought that the bills-only doctrine of the Federal Reserve was not a wise approach to monetary policy. I see no reason why the monetary authorities should lean over backward in an attempt to be neutral with respect to the structure of interest rates.

that will attempt to cope with particular situations—specific forms of aid to distressed areas, measures to increase the mobility of particular groups of workers, steps that will reduce the degree of job discrimination against older workers and minority groups, stepped-up training programs to speed up the absorption of young recruits into the labor force, et cetera.<sup>7</sup>

*Other policies.*—Most of what else I have to suggest has been said many times before, and hence a brief listing should suffice:

1. We can do more than we are now doing to improve labor productivity—through larger expenditures on education, greater support of scientific research, measures to reduce restrictive labor practices and to improve labor mobility, etc. In connection with labor mobility, more can be done to extend severance pay, put seniority provisions on a companywide basis, provide for vesting of pension rights, and offer better counseling and training for young people entering the labor force.

2. To be in favor of a more competitive economy is like being in favor of virtue in general. Like most economists I favor vigorous enforcement of the antitrust laws. It is fair to say, also, that our agricultural support program comes close to being a national disgrace. And we should move toward further liberalization of our tariff policy.

I should like to offer a few comments about this last point. There are some signs that we may be thrown into a panic by the growing evidence of foreign competition in American markets. To me, this competition is a very healthy sign and helps to provide the kind of discipline that both business and labor need if we are to retain an efficient, private enterprise economy. There is danger, however, that this will increasingly come to be the minority view. I have a suspicion that this country is slowly, and in somewhat hypocritical ways, becoming more protectionist. I need not elaborate upon some of the economic forces, such as the industrialization of the South, that are tending to bring this about.

Perhaps I should explain my use of the word "hypocritical." We continue to preach the need for a liberal, nondiscriminatory trade policy in our relations with other countries, but we are not above using discriminatory quotas ourselves and even enlisting the support of the exporting country to enforce them.

3. The various agencies of the Federal Government need to do a better job of coordinating their activities insofar as they bear on our triad of objectives.

This means coordination of monetary and fiscal policy: closer coordination between the Treasury, the Federal Reserve, the agencies concerned with mortgage credit, and so on. Attempts at such coordination have been made, but I think they need to be carried further. A troublesome question here is how far we should go in protecting the independence of the Federal Reserve System. This is a question on which I find myself of a somewhat divided mind.

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<sup>7</sup> I suspect that this will be a serious problem in the 1960's. Growth of the labor force will accelerate as a result of the sharp rise in the birth rate after 1940. Absorption of these young workers may create serious problems, leading both to some rise in recorded unemployment and to a temporary drop in overall productivity. For projections of the labor force, see Gertrude Bancroft, "The American Labor Force" (1958), particularly p. 145.

4. While I should be hard put to be very explicit, beyond the suggestions I have already made, I do not think that the executive agencies are doing as much as they might in the way of research and public education on the range of problems with which this committee has been concerned. More might be done to draw public attention to the issues and to make the salient facts better known. More vigorous and imaginative programs should be developed to improve labor mobility, to raise management and labor efficiency, and to publicize clearly established facts regarding the relation between wage changes and productivity increases, the prevalence and consequences of "markup pricing," et cetera. Unfortunately, it is not always clear what the facts are, and there is always the danger that the Government agencies concerned will appear to be unfairly favoring particular economic groups.

5. Let me conclude this list with some negative recommendations. I do not believe that the attempt should be made to break up industry-wide bargaining where it exists. On the other hand, I do not think that there is anything to be gained by seeking to adopt the system of economywide bargaining that has been used in some European countries. I do not favor trying to use the antitrust laws to weaken organized labor's power in the normal processes of collective bargaining. While, again believing in virtue, I am in favor of a "democratic labor movement," I do not believe that more democracy in trade unions will reduce the pressure for higher wages—rather the reverse.

This is an incomplete list of suggestions, and there are important aspects of the problem that I have not tried to cover. But perhaps I have said enough to indicate, in a general way, how I think we need to proceed to attain a workable combination of the three objectives with which the committee is concerned in these hearings.

That is the end of my statement, Mr. Chairman.

Representative BOLLING. Thank you very much, Mr. Gordon.

Mr. Reuss, do you have some questions?

Representative REUSS. I might call your attention, Mr. Gordon, to what you just said about coordination of monetary and fiscal policies. You end up by saying that you find yourself somewhat of a divided mind on the question of protecting the independence of the Federal Reserve System.

I would like to explore that a bit with you. I presume you do believe in a degree of independence for the Federal Reserve System, as I do, and that you think that they should not be under the direct control of the executive branch and that they should not be required to follow the directives of the executive branch, if it ultimately came down to that.

Or would you not go that far, Mr. Gordon?

Mr. GORDON. That is a very difficult question to answer, as is suggested by the fact that I spoke of myself as being of a divided mind. We want to protect the Federal Reserve from political influence. At the same time, I have a feeling that over the years the Federal Reserve, because its independence has been so well protected, has become somewhat insulated from the kind of pressures I have tried to summarize in this statement.

Ideally, I would like to keep the kind of political protection the Board now has, but find some way to make them more sensitive to some of the changes I see occurring.

Representative REUSS. A device aimed at that end is contained in a bill now before the Congress, introduced by Senator Clark, of Pennsylvania, and myself, which would get at it in the following way, and I would like your opinion on it:

It would in no way affect the independence of the Federal Reserve in terms of making it by law required to do what the Executive, the President, and the Secretary of the Treasury, say it should.

However, it would attempt to repair what seems to be a gap in our present economic machinery by requiring the President in his activities under the Employment Act of 1946, particularly in the Economic Report, to take into account monetary policy just as he takes into account fiscal policy, price policy, and everything else.

We have noted that, particularly in the last 5 or 6 years, the administration has tended to say, "Monetary policy, that is not for us; that is for the Federal Reserve and we are not required to have any position in the matter or make any conclusions in our Economic Report." The Clark-Reuss bill which would say that while the Federal Reserve, of course, does not have to do what the administration says it thinks it ought to do, nevertheless, the administration is dutybound to include its views on how we ought to carry out a monetary policy and communicate them to the Federal Reserve just as it does in the Economic Report include its views on what State, local, and government and private business ought to be doing.

What do you think of that as a device to get a greater degree of coordination and responsibility in our economic life without putting a Federal Reserve at the mercy of politically elected Executive?

Mr. GORDON. I have not read the Clark-Reuss bill and therefore the comments that I make are not to be taken as speaking specifically to the terms of that bill, but I should say that the general idea which you have described conforms with my own views.

It seems to me to be blinking the facts to believe that the Chief Executive, in his Economic Report to Congress, can ignore monetary conditions. I feel also that under the Employment Act the President has responsibility to say what range of monetary conditions are consistent with that kind of economy which under the Employment Act we are trying to achieve.

In this respect I think I would prefer to see a coordinated statement as to all the kinds of policy needed, including those that bear on the actions of the Federal Reserve. Any disagreement between the executive agencies and the Board of Governors will have to be argued out, preferably in public, just as there have been these differences of opinion in past years.

Representative REUSS. You have stated exactly what the Clark-Reuss bill tends to do. It does it in a very simple way, by simply amending the Employment Act so that when the Employment Act talks about the Economic Report and supplementary reports the Clark-Reuss bill would add the words: "including monetary policy," in the area that the President has to make a recommendation on.

Mr. GORDON. I see no harm in that, and it might do some good.

Representative REUSS. May I now direct your attention to what you said on the dangers of our foreign economic policy becoming inadvertently or perhaps hypocritically protectionist.

Have you noted the recent activity of the directors of the Development Loan Fund in requiring that a large percentage, at least, of the loans made by the Development Loan Fund must be tied to purchases of goods in this country?

Mr. GORDON. Mr. Congressman, if I had been able to think of a nice and pointed enough phrase as I was reading, I would have interpolated something to that effect in my statement.

I think this is another example of precisely what I am referring to here.

Representative REUSS. Let me ask you this:

You do recognize, I am sure, that we are faced with a different balance of payments situation than that which we have been faced

I do not recognize that there has been such a drastic change in our allies to take over to some extent the burden of the foreign aid program.

We also get countries with whom we trade who have had up to now discriminations against U.S. trade in the forms of tariffs and quotas which were necessary because of their dollar shortage to constrict or eliminate those restrictions because the dollar and gold position has now changed.

You would go so far, would you not, in recognizing that as a new thing in our foreign trade?

Mr. GORDON. New only in the extent that we have to work a little harder in our international trade position vis-a-vis the rest of the world.

I do not recognize that there has been such a drastic change in our international competitive position that measures which we condemn in other countries are now justified when we take them.

Let me say also, if I may, with respect to some of the points you raise, that our present balance of payments position and, more importantly, the balance of payments position of other countries, particularly western European countries, justifies us in saying that we believe the time has come for our allies to share more of the financial burden. The time has also come, since the dollar shortage is largely a matter of the past, for them to reduce their own discriminatory provisions with respect to American goods.

This certainly we should say.

Representative REUSS. And those—if I may interrupt at this point—those two emphases in our policy are in the direction of liberalization?

Mr. GORDON. Yes, but unless people in Washington feel that the suggestions regarding "Buy American" are a tactical weapon which we do not mean except to induce foreign countries to make their own trade policies more liberal, I would say that we are simply going in two directions at once.

We are asking other countries to liberalize their trade policy while we advertise to the world that ours will become more illiberal.

Representative REUSS. I notice in yesterday's White House press conference Mr. James Reston of the New York Times asked this question, and got this answer:

Mr. President, is there a danger that if we tie our loans that other countries like Germany and Japan will also tie their loans to purchases in their countries?

The PRESIDENT. Well, what I am saying is that each of these things is handled

on a case-by-case method. There is, so far as I know, no suggestion yet that a policy be made that we will not make a loan unless X amount of it, or all of it, is used in purchases in our own country.

Does that indicate to you that the President was aware of the action of the Development Loan Fund in recent days?

Mr. GORDON. May I beg off by saying as an economist I am not competent to judge the quality of communication among the various agencies in Washington?

Representative REUSS. Would you think that it would be a good idea if the order of the Development Loan Fund recently reported in the press; to tie a majority of this loan proceeds to sales in this country, were speedily revoked?

Mr. GORDON. Let me say this: I am thoroughly opposed to the policy which has been suggested, that our aid program should be tied to purchases of American goods exclusively.

Representative REUSS. By which I gather your view, to the extent that the suggestion is crystallized, is that that order should be done away with?

Mr. GORDON. Yes; it would be my view that the order was a mistake and not in the interest of either international prosperity or the long-run economic and political interests of this country.

I might say also, to comment on another point you made in passing, or reference you made, which I believe was in the President's reply to Reston yesterday, I think that one of our dangers is the step-by-step or ad hoc approach to this problem.

Steel cutlery is in trouble; therefore we put a discriminatory quota on that. Something else is in trouble, and that leads to another restrictive measure.

We either have a policy which we are pushing both for ourselves and the rest of the world and we stick to it, and then look for ways of softening the effects on particular industries that may be hurt, or else we do not believe what we preach.

In fact, I am not at all sure that we fully believe what we preach. That is why I made my reference to hypocrisy in my statement.

Representative CURTIS. Mr. Chairman?

Representative BOLLING. Mr. Curtis?

Representative CURTIS. Mr. Chairman, I will make the observation, after having listened to this excellent paper, that these hearings have certainly been very worth while because now with the summary papers we have had in the past few days, including this one, I think that the format is one on which I have reached an agreement. I would like now to start holding further hearings on some of the details we have brought out on these matters, because I am sure that in the details there will be considerable disagreement.

One thing that is encouraging, we have our staff papers that are going to be printed shortly going into much of the details of these various problems which may enable the committee to write a meaningful report.

I am extremely pleased with these final papers that we have received and getting these problems at least so that we know what we are talking about and where we can agree or disagree.

I want to direct my attention, as much as possible, I believe, to the cost aspect which you have discussed and your feeling that we are going to continue to have a cost increase.

I believe you make the distinction between what is a cost increase and what we might refer to as traditional inflation, which also can bring about the cost increase. Am I correct?

Mr. GORDON. It is pretty traditional now to make a distinction between so-called cost-push influences and demand-pull influences. I sense also that the sophisticated view is coming to be that it is artificial to make too sharp a distinction between these two. Some of both are usually at work; sometimes more of one and sometimes more of the other.

Representative CURTIS. Do you not feel that foreign competition is entering into this picture more and certainly would be a deterrent to keep prices down?

Mr. GORDON. I said in my statement that I felt that foreign competition exerted an important discipline on both business and labor in retarding the increase in costs and prices. Enough of it in particular industries might not lead unions to reduce their initial wage demands, but it would probably stiffen the resistance of employers in meeting those wage demands, with the result that the final settlements would be less than they otherwise would be.

Representative CURTIS. In posing my question I emphasized the increased amount seems to be occurring, in fact, the very fact that there seems to be this movement toward further protectionism you have described would indicate that there is an increase.

Would that increased amount of competition would affect your projections on this question of whether we are going to continue to have 1 percent a year as a sort of ceiling?

Mr. GORDON. My guess is that, even with some increase in foreign competition, with the forces making for the same kind of wage and price increases in Europe that are occurring in this country, and with prices generally going up more rapidly there than here, the 1 percent average price increase is consistent with a moderate increase in foreign competition.

If I had to guess, and I am a pessimist at heart, it would be that the pressure to restrict foreign competition would become so strong that we would not get a great deal of help from imports in holding down prices.

Representative CURTIS. Would not a more vigorous enforcement of antitrust legislation tend to keep down the price level?

Mr. GORDON. I look on antitrust as a kind of minimum condition. Without it we might be a good deal worse off than we are. But a continued use of our antitrust laws in about the way they have been applied during the last 20 years, during this last period of more active implementation, is not going to bring prices down. It is going to keep us about where we are and permit us to think up other measures to use.

Representative CURTIS. In that context and getting a little bit over into another field, I was not surprised at but I was interested in your recommendation on page 5:

I do not believe that the attempt should be made to break up industrywide bargaining where it exists—

and then also, of course, not extending antitrust laws which will weaken organized labor's power in the process of collective bargaining.

Of course, as I understood many of the recommendations on anti-

trust laws to be applied to labor, it is where conditions are quite limited, to just breaking up industrywide bargaining, broken up both ways on the part of labor as well as on the part of management.

It just strikes me that the economic forces that come into play in labor-management bargaining and in effect tend to force labor and management to come to some conclusion, those economic forces, many of them, lose effectiveness when you get into industrywide bargaining.

In fact, so much so that I wonder if there are sufficient economic forces at play that will bring about a conjuncture by labor and management on their own power.

Mr. GORDON. May I indicate the reasons why I think somewhat along different lines.

Representative CURTIS. Yes; that is why I asked the question.

Mr. GORDON. I don't think that industrywide bargaining is responsible for the kinds of wage and price increases we have gotten in the last 6 or 7 years.

Let me go back for a moment and refer to my statement about administered pricing. I do not think administered pricing is something we can identify only with the most concentrated industries. It does not have a perfect correlation with what we call degree of monopoly. We find it even in industries in which there are many firms.

To come over to the labor side, there are many industries in which there is not industrywide bargaining but in which the same kind of wage increases have taken place as have occurred in those industries where you get industrywide bargaining.

A good example is the construction industry. Wages in the construction trades are determined on a craft by craft basis, region by region, and the regions sometimes are quite small.

I have been struck, for example, that in my own part of the country, the San Francisco area, the settlements made this year in the various building trades have been by my standards extraordinarily high, running in terms of 2- and 3-year contracts at between 20 and 30 cents an hour per year.

Representative CURTIS. Could I ask a question?

Mr. GORDON. Yes.

Representative CURTIS. Do your building trades out there have great restrictions on new entries into these skills? In my own area in St. Louis the labor unions in the construction field have such control over the labor market that it is almost impossible for any new entrants to come in without the OK of those who are in control.

It is a joke in our area that your grandfather has to have been a bricklayer if you are going to be a bricklayer, yourself.

The only reason I interrupted to pose the question is that I wondered if that could not be the reason.

Mr. GORDON. I would doubt whether that is the whole reason. I cannot speak from first-hand knowledge about the details of the restrictions on entry into any of the trades in the San Francisco area, but it is my feeling that they vary, being more restrictive in some cases than in others.

But suppose that entry were somewhat freer than it is. I think that under the conditions existing, with fairly strong unions which complement each other so that if anyone walks off the job it ties up the complete construction job, with a high level of construction, with

contractors having, particularly on large scale jobs, quite a bit of overhead that they have to carry even if the job shuts down, the contractors, as employers fairly generally in the United States today, have a high stake in industrial peace, as I say in my statement.

They are prepared to settle, particularly if they feel that they can pass the price on.

I have a little difficulty here separating my reactions as a professional economist from my reactions as a small-scale employer. I happen to be one of those academic economists who do help to meet a payroll. In a recent construction job my organization had to let, we found that the lowest bid was \$100,000 higher than we had budgeted for the job. At the same time we were so far committed in our expansion plans that we had to go ahead, and we looked for ways of raising the additional money.

Every contractor had already put into his bids the wage increases he expected to pay in negotiations that were then going on. We were anxious for industrial peace so that we could go ahead with our business. The contractor, feeling fairly confident that he could pass it on, was prepared to pay. The result is that our customers are going to have to pay for a much higher price of that building than we had planned on. I think this is a fairly general situation.

It comes about from strong unions, which happen to be in key positions, in this case where any one union could close down the job completely, where employers feel that they can pass the price on, and where the nature of the pricing mechanism is such that you get administered pricing.

This, combined with a high level demand situation, which is what we have in construction generally, gives us the kind of picture that I have been describing.

Representative CURTIS. Now, to get back more directly to costs again, I have theorized about this, that when we have a rapid increase in growth along with it comes considerable obsolescence, both of skills as well as machinery and capital goods and the recouping of these costs seems to come early in the period of these new innovations, new services and new goods.

In fact, they seem to precede the other recouping that we would gain from increased productivity.

Can we then not almost count axiomatically that the more rapid growth we have during that period or at the time growth is occurring we are going to have increased costs, real costs, from the obsolescence that has been created from the amount of research and development moneys that have been spent.

Mr. GORDON. I am not sure that there is a drastic change in that situation compared to what we have had over the past century. This country has been blessed with rapid technological change almost from the days of the Founding Fathers, and particularly since the period following the Civil War. Obsolescence is a price we pay for rapid growth.

Representative CURTIS. Does not that cost tend to come in pretty quickly and then the spread is not an even spread?

Incidentally, may I ask this:

One of the papers, I think it was Tuesday, pointed out that during one of the periods of the greatest growth in this country, 1870 to 1890, that we actually had price decreases.

Mr. GORDON. That is right.

Representative CURTIS. It seemed to me that possibly there it might have been increased productivity coming in a little earlier.

I do not know. This is all in contrast with your statement that you thought we were going to continue to have this rise in costs.

Mr. GORDON. It is certainly true that periods of rapid growth have been associated both with price increases and price decreases. In this country since the Revolutionary War we have had two quarter centuries of falling prices—from the period roughly following the War of 1812 until the 1840's, and again very roughly from the period immediately following the Civil War until the 1890's. Both were periods of rapid growth, just as the whole 19th was a period of rapid growth.

The last quarter of the 19th century was a period of large immigration, no labor organizations to speak of, and agricultural conditions that made for rapidly falling agricultural prices. While real wages certainly increased somewhat—there are some figures available on that, but I am not familiar with them in detail—there was nothing like the increase that has occurred in the last generation. Industries were just beginning to take on the oligopolistic form that has been so characteristic in the 20th century. And, also, there were monetary changes that fitted in this picture. Under those conditions, we had rapid growth and a secularly declining price level for about one generation. I do not think that this combination is in the cards at the present time.

It is true that, regarding the matter of obsolescence that you raise, one important thing that has been going on for probably three-quarters of a century is that business capital has been taking increasingly the form of equipment of relatively short life and less the form of building which have a long life. This tends to increase the amount of depreciation which has to be recouped out of the price charged the consumer. But presumably this has all been part of a process which brings down other kinds of cost sufficiently so that the net effect ought to be, if the prices of the factors did not rise, lower cost per unit.

Representative CURTIS. I had thought that perhaps with the very rapid growth we might expect cost rises in that particular period that might be recouped later.

Now, one final question, if I may, Mr. Chairman, on prices.

Your constant reference to administered prices always leaves me in a quandary when it is mentioned. I am not just sure what is meant. Sometimes the use of administered prices seems to have the overtone that it is the resistance to economic forces at play, in fact, the denial of the effect that they normally would have.

On the other hand, if that is not what is meant and, administered prices seems to mean simply a more adequate study of what economic forces are at play and an attempt to conform to them, then I will relax about it.

In other words, these very companies that are accused of administering prices are the very ones that do a great deal more marketing research and a great deal more study before they set their prices.

If that is so, they really are just doing a more adequate job, I would think, of trying to reflect the market price as the ultimate determinant of what the price is.

I wonder if you would comment on the observation I make.

Mr. GORDON. I am not sure that in making my comments about administered pricing I was not arguing with some of my colleagues in the profession more than I was seeking to enlighten this committee.

I do not use the term "administered pricing" with any invidious connotation. I do not believe that it is associated in any peculiar way with highly concentrated or so-called monopolistic industries. The shoeshine stand uses administered pricing. The owner charges a quarter or some other given price. The price does not fluctuate between 51 cents and 18 cents, depending on how many people stop by his shoeshine stand.

Economists in their theorizing about prices got started a century or more ago with a particular model of the economy in which every market had so many sellers that each one was only a tiny part of the total. In seeking to maximize profits, each seller, under perfect competition, had to take whatever price was set in the market, in the same way that prices are determined on the stock exchange or the board of trade. If he tried to charge some other price, he would do no business or else he would take all the business away from his competitors.

Things actually don't happen that way. Firms look at their costs, and they make guesses about their demand. They also take account of other factors, and out of this elaborate process comes a price.

This price may last a few days; it may last a year or two at a time. It reflects judgment as to how to recover costs and how to stay in business, given the firm's evaluation of demand conditions.

This is what I mean by administered pricing.

Representative CURRIS. I appreciate that.

I wonder if there ever has been anything other than administered pricing?

Mr. GORDON. I don't think there has been. I said that I did not know to what extent the degree of administered pricing or the extent of it has changed, and in addition it is a very difficult thing to measure.

But I think this much is true. If this is the way prices generally are set, and particularly if firms use the technique which I referred to as markup pricing, in which they look at their average cost based on some standard volume of business and try to get a price which reflects these costs plus what they think is a fair markup, then it is more likely that wage increases will be quickly passed on under this machinery of pricing than under some other possible ways that the market could be organized.

That is all I do mean.

Representative CURRIS. The question, then, that remains in my mind, is whether there is any other possible way of fixing prices or pricing. Whether there has been any other way in the free market system, at any rate, of fixing prices.

Mr. GORDON. I think perhaps the difference between prewar and postwar conditions in this country in that respect is simply this:

We have always had administered pricing in the past. But particularly when labor was weaker, employers had more control over their costs and, therefore, there was not—

Representative CURTIS. I see what you mean. But it still would be reflecting the economic forces at play. That has been my only disturbance at the term used, that is the connotation that administered prices somehow or other are not reflecting the economic forces at play.

As long as they are reflecting forces at play, I am relaxed on the thing, but if it actually were such that there could be an ignoring of those prices and not pay the penalty for having ignored the natural laws—

Mr. GORDON. Let me put it this way, even if it runs the risk of leaving you slightly less relaxed. In classical economic theory, a good deal of what we say about the virtues of the competitive system implies that the businessman is neutral with respect to these economic forces that you are talking about. If demand raises prices, he is merely reflecting that economic force. If a certain kind of input factor is scarce, costs go up and he reflects this influence.

It is my own belief that here the size of the industry and the firm does make some difference, that the businessman is not necessarily completely neutral. He can resist some economic forces. Sometimes he can resist them effectively. Sometimes he is completely powerless.

In the kind of situation we have had since the war, and this hits at one of the points in my paper, with a generally high level of demand, with a cost situation that the businessman had not faced in quite the same way before, at least before the middle 1930's, with quite powerful trade unions, particularly in some sectors, the businessman has to make some decisions. This is the point economists emphasize about so-called administered pricing, that there is some discretion open to the businessman.

The businessman has to make a choice. Do I give in quickly? Do I give in, but slowly? Or do I not give in, but fight? We can almost see the thinking processes apparently going on in the steel industry during the last 6 months on that score.

To that extent, therefore, the businessman is not a completely neutral medium reacting automatically to demand-supply forces. He has some influence over them.

When the economist talks about the independent effect of the institution of administered pricing, particularly when considered in connection with collective bargaining, that is in good part what he means.

Representative CURTIS. Thank you.

Representative BOLLING. Do you have some questions, Mr. Frucht, you would like to ask?

Mr. FRUCHT. I have a couple.

If this markup pricing is so invidious, what can public policy do about it to overcome the bad effects which might be caused?

Mr. GORDON. I have made a few, not very good, suggestions in my paper. Let me elaborate on a few of them.

If a businessman has some discretion as to how hard he works to control his costs and how much of a markup he tries to take over his costs, the tougher he thinks the demand situation is the more he will seek to control his costs and perhaps the less of a markup he might be content with.

The discipline of foreign competition is one thing that I suggested. Another is vigorous enforcement of the antitrust laws, so that there is, so far as we can create it, considerable competition in every in-

dustry not completely under Government regulation as in the case of utilities. By seeing to it that the large firm has competitors to worry about who can undercut him, create or introduce new products, and so on, effective enforcement of the antitrust laws will help.

This does not, however, necessarily mean that we should automatically break up all industries in which there are now only three, four, or five sellers. If we were to do this, we might sometimes so increase costs that whatever we gained through competition we would more than lose through greater inefficiency.

Bringing the spotlight of public opinion to bear would, I think, also help. I made a plea in my statement that in the President's Economic Report, in conferences called with business and labor leaders, and in the normal day-to-day operations of the executive agencies, this be kept continuously in mind. The Government should publicize the combination of public and private policies which it thinks will give us the objectives we seek during a given year, and then, through attempts to influence public opinion, should seek to bring about these objectives.

I am not a political scientist. Here I speak a little bit outside my bailiwick, but let me fumble a bit for what I think is the basic notion that is involved here.

We have moved from the kind of competitive, market-oriented society which we thought we had in the 19th century to what we sometimes refer to as a pluralistic society, in which economic activity results from the decisions of strong blocs or power groups bargaining with each other. The influence of this concentration of power into blocs, whether it be labor, large-scale business, the farm bloc, or what-not, is such that we can get the kind of price trends and so on that we are worrying about.

At the same time, living in a democracy and believing in the right of the individual to make certain kinds of basic choices on his own, we believe in the right of a free association, so that we have a situation in which our underlying institutions are changing but our processes of government and the range of policies available to us are to some extent geared to a different kind of society.

What I have suggested in my statement that we need to do may be difficult, or even impossible. While continuing to live in this kind of pluralistic society and while preserving the rights of free choice and free association, we have to develop rough and ready instruments that will be consistent with our democratic institutions and yet give us the objectives that we seek.

While there may be other ways that are compatible with existing institutions that I have not thought of, an attempt—if you will permit me to use the expression, and if it is not misinterpreted—an attempt deliberately to manipulate public opinion to achieve socially desired ends is about what we are left with.

Mr. FRUCHT. When you say "manipulate public opinion," it frightens me.

Mr. GORDON. It frightens me in a way, but I used the word deliberately to bring out the dangers in what I am suggesting.

Mr. FRUCHT. You could mean two things when you speak of desired social ends. You could be implying that you do, in fact, want to use the instruments of Government to change the ways the people

look at the economy, or their own behavior; or you could imply that you were trying to remove or resolve inconsistencies of public opinion, which is something else.

There are two kinds of things here. One is outright manipulation and the other is attempting to inform the public as to the implications of its own expressed desire.

Do you mean one of those, or both of those?

Mr. GORDON. Well, let me try to put it this way:

Through the election of its representatives in Congress and the election of a President, as well as in other ways, the American people give a rough-and-ready indication of the kinds of policies that they are presumably in favor of, and this can be further tested in various ways—for example, through public reaction to congressional measures.

Assume from this evidence that we are able to achieve some sort of workable agreement on a set of objectives such as these now before us—that is, growth, stability, and a high level of employment. At the same time, we have the interests of particular private groups, and these groups are in some cases strong enough so that in attempting to achieve their goals they interfere with these broad social goals about which there is rough agreement in the Nation as a whole.

I suggest that it is the responsibility of the administration to bring these facts and these inconsistencies in an effective way before the public, with the aim of influencing the actions of the parties at interest.

Mr. FRUCHT. On the information side, I could not agree with you more.

Mr. GORDON. And the information side implies saying frankly what the Government believes is the best way of making these objectives consistent. That is why I made some suggestions as to a more positive and vigorous presentation in the Economic Report of the President, which, it seems to me, might be made into a powerful instrument in this respect.

Mr. FRUCHT. I would like to shift briefly to a point you made. You suggested that perhaps a 4-percent average unemployment over a decade is a proper target and that 5 percent is too high.

You also have pointed out to us that technological change, changes in the composition of demand and so forth, can influence the level of unemployment.

Presumably these kinds of changes do not go on at a constant rate through any 10-year period, from decade to decade.

This would suggest to me that the target figure of 4 percent might be appropriate for one decade, and perhaps five for another, and perhaps three for another.

Would you like to qualify perhaps the implication that we should use public policy to generate no more than an average of 4 percent as a rigid figure?

Mr. GORDON. I think that my view would be that the full-employment figures should be interpreted flexibly just as I urged that the growth figure be interpreted flexibly.

It is my judgment, and it may not be a very good one, that, given the kinds of problems we have on the structural side, and given my guess as to how often we will have the kinds of dips in business that we had in 1954 and 1958, we could shoot for not more than 4 percent

unemployment, on the average, during the next decade and also achieve the other objectives of a satisfactory growth rate and only a modest rise in the price level.

In a footnote which I did not read, I did point out that we shall have a problem in the middle and late 1960's arising out of the change in the age distribution of the labor force toward younger workers. This is likely to affect both the unemployment rate and productivity. It is something we should be worrying about now, and we should be planning training programs, etc. so that the economy can absorb these young people with minimum difficulty.

If we do not succeed in planning properly and we do run up against this problem, let us say, in the middle 1960's, and if we do not then seem to be able to get the unemployment rate even at the top of a boom down below 5 percent, this would suggest that 5 percent would be the best that we could do for the time being. While I should not be satisfied with such an unemployment rate arising from the fact that these young people could not find jobs fast enough, it would not necessarily follow that we should, therefore, inflate aggregate demand further. I don't believe that this would be the way to reduce unemployment in these circumstances, at least if we also wanted some measure of price stability.

Mr. FRUCHT. I was very glad to see the emphasis you gave to the whole question of improving labor mobility, retraining, relocation, and so on.

To move effectively in this area would this not take a great deal of the heat off many of the pressures that are responsible for some of our growth retarding and somewhat inflationary programs.

Mr. GORDON. I think so.

Mr. FRUCHT. In other words, might we not seek a coordination of a move in that direction and a relaxation of some of our restriction policies in another direction?

Mr. GORDON. That might well be.

Mr. FRUCHT. Thank you.

Representative BOLLING. Mr. Curtis?

Representative CURTIS. That was an area I wanted to pursue a little bit, your reference to consumer credit and the possibility of standby controls.

It always worries me when consumer credit is picked out as an area we should control.

I think consumer credit needs to be placed in a context as one aspect of spreading income over the lifetime, the earning lifetime of the individual. It is a postpayment process while insurance and pensions are prepayment.

It seems to me that is very healthy development in our society and I think it is rather new.

I notice that Russia is now going into consumer credit. But if it is new and something that is not yet complete and mature, I think we need to look at it from the standpoint of what it would be at maturity.

In other words, if our society had a method whereby the income of the individuals could be spread over, not the earning life, but spread over the total years of the individual. In this way I have never looked upon consumer credit as anything of any great danger as long as it was on a sound basis as far as each individual is concerned.

I think our consumer credit companies, the good ones, and that is the bulk of them, do a pretty adequate job of not allowing their customers to get beyond their depths, in fact it is bad business for them if they do.

If you do agree that that is the whole economic effect of consumer credit, why do you think that at a particular time we use that as a method of controlling other economic forces that might be out of line.

Mr. GORDON. I think we have to make a distinction between the long pull and the short run here.

I am not opposing the institution of consumer credit, nor am I expressing any alarm over the amount of it now outstanding. You may have seen the story that the Wall Street Journal ran very recently in which it surveyed the opinions of experts as to whether the volume of consumer debt was now alarmingly high. I was one of those economists cited anonymously as not believing it is alarmingly high.

I have in mind in citing the desirability of consumer credit controls, that purchases of consumer durables are one of the volatile elements in aggregate demand, along with inventory buying, private capital expenditures, and housing. I believe that we would have a more stable economy, with fewer price rises in booms and less unemployment in recessions, if we could average out the total volume of consumer durables made over a decade at a time, and thus avoid some of the wide fluctuations in buying that now occur.

Representative CURTIS. It seems to me that consumer credit actually does assist, in fact, both the prepayment and the postpayment.

Once you reach maturity it would produce stability.

Mr. GORDON. I do not see how that is so, frankly, but perhaps I am missing some point you are making.

Consumers' durables can be deferred. When things look a little bad or people are worried, they will put off their purchases. If the new automobile models look particularly attractive, they will buy. If consumers choose to buy at a time when residential construction is very high, and when a business capital goods boom is underway, then we get the kind of situation we had in 1955 and 1956. Aggregate demand was high, and demand was particularly high in the durable goods industries. Along with the other influences that I have described in my paper, this gave us more in the way of price rises and wage increases in particular sectors of the economy, which were then passed on to other sectors, than was good for the health of the economy.

We have built into the economy, I might point out, a stabilizing device in another volatile industry that I do not think is sufficiently noted. It came about largely by accident. We may not keep it, but at the moment it is working to help stabilize the economy.

I refer to the housing industry. Here we have had a set of institutional reforms in the last generation that make it possible for people to own their own homes and to get out of the slums in the centers of cities. As things have worked out, given the inflexibility of mortgage rates and the kind of ceilings that have existed on guaranteed and insured mortgages, as a boom develops steam and interest rates rise in other parts of the money market, it becomes more and more difficult to secure mortgage credit.

Therefore, new housing starts tend to fall off in the latter part of the boom, just as we are now predicting that they are going to fall off under the pressure of current tight money conditions. And, through a similar mechanism, new housing starts rise during the recession.

Representative CURTIS. They fell off almost entirely in the last recession in the Government financed sector and in the privately financed sector they did not fall off at all, in fact, there was a slight increase.

Mr. GORDON. They fell off in the Government financed sector because here mortgage rates were low and relatively inflexible.

Representative CURTIS. They did not do anything about the VA and FHA ceilings. It just strikes me that the problems that we saw in this consumer credit deal were not the institutions of consumer credit but the purchasing habits of the people. Actually, it produced a healthy thing.

I remember making a speech before the housing industry in St. Louis 3 or 4 years ago. I told them I thought their real competition was with the automobile companies, that they had to try to sell the consumer on the idea that they ought to buy a house before they bought an automobile.

Interestingly enough, they had quite an advertising campaign on that very point and there were real inroads in that competitive area.

As a sidelight on this, I have been intrigued about how housing and autos have met each other in the trailer business.

Our trailers, the way they are used today, probably ought to be counted part of housing.

One reason I think they went to trailers was because there was an easier, more flexible consumer credit in the trailer field than there was in the housing field, downpayments in particular.

To me, there is nothing dangerous about this at all. In fact, as long as the people who extend consumer credit are going to look at the individual to be sure he is not overextended, and if anyone would present a case that we were encouraging people to overextend their potential, in a way, they could not pay back, then I would not—

Mr. GORDON. This is not my argument. My argument is that when consumers decide to go on a binge in automobile buying, it may occur at the same time that business is going on a binge in capital expenditures and a boom is occurring, let us say, in residential building.

The sum of these demands may be such as to drive up prices rapidly, particularly in the durable goods sector of the economy, which is what happened in 1955 to 1957.

If we do not hold back the inflation of demand by working on particular sectors of the economy, we are going to feel obligated to hold it back through overall monetary and fiscal policy in the interest of stabilization, and then we may begin to hurt some sectors that we do not want to.

Representative CURTIS. That is what we have been doing and that is what has been bothering me.

It seems to me we are not attacking the thing that is in error. If anything, the error you describe is the automobile people who decided that they wanted to sell that big a market.

You can always increase your market temporarily by putting on a tremendous sales campaign.

Most companies know that, but is that not the area?

Representative BOLLING. I would like to interject: This is something I have been interested in and arguing with Mr. Martin of the Board for, lo, these many years.

It would seem to me that the point here is that this is a method of getting at, in a rather generalized, neutralized way, the problem that I think we would all be unwilling to get at directly. Perhaps the automobile companies were in error but we are not going to tell them how many cars they are going to produce directly.

The dilemma here, it seems to me, is not that they just bear the brunt of their mistake; it is the economy, in that it has a higher peak and lower valley, in that if you add a real intervention in the public interest on consumer credit.

The only reason I think Mr. Gordon and I are interested in this is that it is a tool that shows, at least to us, some signs of working effectively, fairly, and in the interest of the overall economic health of the country.

Mr. GORDON. May I interject a comment there? I do not know whether it will elucidate anything or not.

It seems to me that in this area we have three alternatives. One is to rely exclusively on what we think are the most neutral, impersonal, nondiscriminatory, aggregative types of policies. This has been the heart, for example, of the CED program in the monetary-fiscal field for years. This leads to the conventional instruments of monetary and fiscal policy.

We believe here that we are not being discriminatory. We are not telling anyone or any group what to do.

The second alternative at the other extreme is to introduce direct controls. In this case, we tell people what to do. Thus, we might tell the automobile industry, "You shall not produce more than 5 million cars this year." And we might tell them what price they should ask for their cars.

Then there is an intermediate position, in which we do not tell any individual or group what he shall do but where we make it easier or more difficult for him to do it, depending upon our evaluation of the overall situation.

That is my defense of consumer credit controls.

Representative CURTIS. In order to do that, you would do it through plant and consumer credit. One other way is tight money, when there is insufficient investment capital available to go around, they just do not lend.

Mr. GORDON. But then we are likely to wait until the thing has got almost out of hand. The monetary restrictions may need to be fairly tight, and possibly people get hurt that we do not want to hurt. Under general monetary restrictions, we lose control of where the effects will be felt.

Representative BOLLING. There is another point I would like to throw in.

Just take a look at the ads for hard goods by the chains. They do not advertise overall prices. They advertise weekly payment.

One of the dilemmas here is that too many people, I am afraid, buy on weekly payments with no cost consciousness of the overall.

With this tremendously high level demand you may have in a rather strange way a redistribution of product, of resources, of income, by this ignoring on the part of the individual of the overall cost of the item.

Representative CURTIS. That is why I say I think we are talking about something new. As consumer credit matures, goes by a few generations, which it has not yet, you will find that even more than today the individual person does not ignore what his weekly payments are. He has to total them up because he has to have a little bit left over after he makes all the payments. I find that there is a maturity in attitudes of individuals toward consumer credit, particularly those who use it, and people who have used it, many of them tend to shift from consumer credit to a prepayment, savings type of credit for their purpose.

It seems to me that it is entirely healthy.

I do not see why you figure that you can help them any.

Take an example that I can think of right now. I happen to be on the board of directors of a savings and loan company, I have been since 1940, I guess, and there have been times when we just did not have the money to lend. Now, that is tight money, certainly, and it is brought about by the lack of sufficient investment capital, lack of savings.

Maybe we had wished we had saved more so that the phenomenon did not occur. But it seems like an automatic check. Why do we have to move to a government level to bring that about if it is going to come about through the automatic or, rather, through economic laws being allowed free play?

Mr. GORDON. Let me admit immediately that a lot of people are perhaps trying to generalize too much from a relatively short bit of history, history since about 1953. But during the boom, especially 1955 to 1957, the period to which this committee's first staff report confined itself, we had a period in which prices rose uncomfortably rapidly and got a lot of us talking about a new set of force working toward cost inflation.

There was a period during which the demand for funds became so large that we got a period of generally very tight money in 1957.

I do not suppose we will ever sort out the influences at work enough to know precisely what role tight money played in the recession which then began.

This was also a period in which we got relatively little growth. The average annual rate of growth from 1953 to 1957 was much less than my goal of 4 percent.

Representative CURTIS. Measured in gross national product, but measured in actual productive facilities, we had tremendous growth.

Mr. GORDON. Quite; but this represented unutilized capacity as the boom went on.

I would like to have seen more rapid growth and much less in the way of price increases in the areas in which they seem to have been initiated, which was in the durable and capital goods sectors during those years. What I am suggesting is that if we had had more selective controls during that period, while this would not have been the whole answer, we could have held down the durable and capital goods boom, there would not have been quite as much excess demand in those

particular sectors, there probably would not have been the price and wage increases there which would have spread, there would not have been the need for the same tightening of monetary policy which in turn hurt other things in 1957.

This is a diagnosis and judgment which may be wrong, but it is the basis of my suggestion that if we had had, among other types of selective controls, consumer credit controls to use, particularly in 1955, we could have deferred some of that automobile demand to, let us say, 1958. This would have made for less unemployment in 1958.

Representative BOLLING. Thank you very much.

Mr. FRUCHT. What you are saying, if I understand you, is that when there is competition between the demand for business investment and the demand for, on the part of consumers, durables, that the Federal Reserve System should intervene to restrict the demand for consumer goods; is that correct?

Mr. GORDON. Yes.

Mr. FRUCHT. What puzzles me is why you feel it is so obvious that when it is clear that the public, say, wants more consumers durables, that we should intervene against the public wishes in favor of business.

It might be argued that the reverse should be done, that we should restrict, if we have to restrict anybody, we should restrict business investment.

It would seem that this is good evidence that the public does not want a rate of growth in the business sector, facilities, and so on, that perhaps some Government officials might want.

Mr. GORDON. Of course, a strong argument which has been advanced against selective controls of any kind is that it means that somebody has to try playing God.

It seems to me, as again I tried to imply in my statement, that the choice is not between playing God and not playing God but between playing God with some goals in mind and playing God and letting the results fall where they may, and to some extent falling by accident on groups that we do not particularly want to be hurt.

If we come back again to arguing that we will use only aggregative techniques which ostensibly are not aimed at any particular group and we have to tighten enough to hold the inflationary boom in check, some people will be hurt. One group that I think is hurt in such cases and which I think, to some extent, needs protection, are State and local governments in their school and other essential building programs. A period of extremely tight money makes it more difficult to float State and municipal bonds, for example; it slows up school building, something that we all say we are in favor of. Generally, tight money leads to a movement out of the Government mortgage programs into private securities. This might or might not be a good idea, depending on the circumstances.

Here I am expressing purely a set of personal value judgments. In the circumstances of 1955-57, if I had to say which part of this boom would I be willing to defer, I would have deferred some of the automobile buying rather than the house building or the State and local government building.

Mr. FRUCHT. This means, then, a shift from market criteria to personal criteria. In other words, this means that we shift, using the

signals as to the cost of social value of resources which the market gives us, to an entirely new set.

I, personally, am very much in favor of the spending of lots more money in education, but if the American people feel that the resources devoted to these purposes are worth only 3 percent and they feel that resources, capital resources devoted to other purposes are worth 6 percent, who am I to do anything but complain and perhaps argue with the American people about this choice?

Mr. GORDON. Do you think this choice is being made on a pure market basis, in, for example, our federally subsidized roadbuilding program? I think we are always exercising personal and social judgments.

This Congress has a set of value judgments in mind. It comes to a consensus when legislation is passed. When we get into the policy arena we are always expressing judgments about a set of priorities.

Representative CURTIS. There, of course, is where we really get into it, where the political debate in my opinion really lies, one of the big factors in tight money is the Federal deficit financing and trying to manage the public debt that goes into the same market for capital. That, in turn, is a reflection of Congress judgment on what needs to be spent in the society, whether it goes into education or a lot of other things.

My own judgment—and this is certainly a basis of real political argument, or it should be, and if the parties disagree on it, they ought to join up—is that we would do better to relieve tight money by stopping deficit financing at the Federal level and leaving the private sector of the economy free to work out these differentials. Let the market pay, except in the case of defense or something which is so essential to the society, or education, or highways, someone may put that into their values, but there is where it gets into the political arena.

Let me ask you, do you feel that it is not a deficit Federal financing that contributes greatly to any tight money situation?

Mr. GORDON. If you have the Government coming into the capital markets for funds at a time when private demand is very high, then obviously this will add to the tightness of the money market.

In general, so far as the whole Government budget problem is concerned, I take a rather conventional view today among economists that the Government should balance its budget in times of high level employment. If aggregate demand is higher than that, the Government should actually run a surplus. But a balanced budget should not be an important goal of social policy if unemployment is a serious problem.

Representative CURTIS. Even though it might contribute to the tightness of money?

Mr. GORDON. But you do not have tight money when you have a high level of unemployment.

Representative CURTIS. I will have to think about that. You are probably right. Is that so? I am really asking.

Mr. GORDON. I think I can safely say that is so because a high level of unemployment ordinarily means a low level of private investment.

Representative BOLLING. Mr. Gordon, I will start out by saying something that I feel in your presentation you have covered a great many of the points that I have felt very strongly about for sometime and you have said them rather better than I have said them.

You may be interested in knowing as a nonpolitical scientist you have mastered the discipline pretty well that you would be elected on this kind of economic program.

You say:

This problem is magnified by our farm policy and by the fact that some branches of Government, through procurement policies that increase the likelihood of wage and price increases, make the problem of monetary control of inflationary tendencies more difficult than it would otherwise be.

Now, the farm program, as I agree, is not a very ostensible situation. There have been very few sensible proposals made by anybody as to how to meet this problem without eliminating the farmer. But in the other area, do I assume correctly you are talking about the very substantial impact of wage-price increases in defense, road, and that type of procurement?

Mr. GORDON. Yes. In an earlier day, stockpiling, I think, also had an inflationary impact on the economy. Generally, I have the feeling that Federal, State, and local expenditure and procurement programs, frequently involving indirectly if not directly cost-plus contracts, with frequently the expenditures being made with some sense of urgency, whether it is in the military sphere or in roadbuilding, lead to contracts which help to push up wages and prices more than is necessary in the circumstances.

Representative BOLLING. Would you agree, generally speaking, that the Government is a weak monopsonist?

Mr. GORDON. Yes; I read that phrase in some recent set of hearings. Yes; I do agree.

Representative BOLLING. This could in fact be a very major force.

Mr. GORDON. I do not have any idea what weight to give it but I certainly think it is one of the contributing influences. Thus we have the somewhat sad picture of one branch of the Government trying its best to hold down prices and other branches helping to bid them up.

Representative BOLLING. You mentioned also in your statement, at another place, that there must be a good deal better coordination among the various branches of the Federal Government which also quite often are working against the same effect.

Now, you make this suggestion, such as is followed by the American Assembly sessions, of a meeting at least once a year.

Now, is the implication there that there should be more than once a year meetings?

Mr. GORDON. I honestly do not know. I would suggest that we start by trying them once a year. It may be that smaller or subsidiary types of meetings—I do not know how this would work out—might be held more frequently. But I think a fairly big show would be worthwhile trying once a year, and this might lead to suggestions about further conferences, perhaps with labor separately, with industry separately, later on in the same year.

I simply have no firm ideas on that subject.

Representative BOLLING. It could be that the time to do this thing would be before the economic report.

Mr. GORDON. I borrowed the idea for doing it after the economic report from sitting in on a regional counterpart of the American Assembly sessions to which you refer.

Before I heard that discussion, in which there seemed to be a good deal of agreement between labor and industry representatives, I was thinking possibly of doing it before the report. But also having seen something of the staff and members of the Council of Economic Advisers during hectic days when the report was being prepared, I thought it might not be wise to propose it for just that period.

Representative BOLLING. I certainly agree with your point that there needs to be a closer working relationship between the Federal Reserve and labor. There was one firm conclusion that came out of the Patman Subcommittee on Debt Management several years ago, that there was a great gap in the operation and it tended to make for the wrong kind of insulation, lack of contact.

In your statement, your need for selective measures, we have gone into several of these in some detail, particularly consumer credit. I heartily agree not only with that but also the point on capital goods.

I am not clear as to how that would be done other than by your suggestion of moral suasion.

Mr. GORDON. That is why I put it that indefinitely.

Representative BOLLING. I am hoping that someday somebody will come up with something more than moral suasion.

Mr. GORDON. Of course, we can come up with something more concrete immediately, but we back away from it because it gets pretty much into direct controls.

Representative BOLLING. That is right.

At that point, do I gather that your package is, in essence, and you have put it in very general terms, in essence designed to anticipate the situation well enough to try out these new tools so that we will not find ourselves moving from our generalized and obviously, it seems to me, relatively ineffective approach—I think in the last years that the tools in the hands of the Federal Reserve have not been adequate in their present use—so that we do not move from this situation to a situation where we find ourselves compelled to impose a drastic series of direct controls?

Mr. GORDON. I do not know how far we have to go or how long it would take for us to feel enough alarmed to do that, but it is a prospect I do not look forward to with any anticipation or liking. I feel, as I have suggested, that we need to move into this intermediate area between the overall and impersonal controls that have not stopped inflation and the direct controls that we do not want.

It is a new area. It is fraught with danger. It will lead almost certainly to severe criticism of the executive agencies that try it because it will be difficult if not impossible to avoid the appearance of favoritism, but I have no alternative to offer.

Representative BOLLING. That is the thing that has impressed me over the years, this tremendous reluctance to experiment in the field where the tools, it seems to me, obviously are inadequate which may, in the long run, result in the use of tools which are much more personal, much more open to criticism of fascism and so on.

As I have said earlier, I have been a sort of running wrangle with Mr. Martin on this, with no success.

Mr. GORDON. I wonder, Mr. Bolling, if I might raise a point more in the form of a question than a positive comment.

I was very much impressed by the effectiveness of the President's going to the public on the so-called labor reform bill. I do not suggest

that he ought to go to the public quite that strongly on every major price negotiation. But if there were within the administration a clearly formulated set of objectives in the area which we are discussing, would it violate in spirit our existing institutions if the President, either through his press conferences or in that kind of public statement, made it quite clear what he felt was in the national interest?

Representative BOLLING. Clearly, the answer is that it would not violate our institutions.

Now one other thing that is not mentioned here—and this is something on which I am by no means an expert, but I have been concerned about the problem—everybody seems to have accepted the countercyclical theory on the downside. I am talking about politicians now. All politicians seem to have accepted the countercyclical on the downside at least to a substantial degree. There does not seem to be that much acceptance on the upside, I would guess, in either party, certainly as it affects fiscal matters, and I wonder if on the basis of our experience we can expect the Congress, regardless of how strongly the President will give, to give to the administration in a timely enough fashion the power to remit taxes, to increase taxes, so that it would be effective in terms of the cycle, the economic cycles, and this leads me to wonder—I know some thought has been given to it—is it not conceivable that there could be worked out an automatic right on the part of the Executive to, within certain very well-defined and well-thought-out limits, put real flexibility in the tax structure?

Mr. GORDON. This has been referred to as formula flexibility, as something lying in between the automatic stabilizers, on the one hand, and completely discretionary policy on the other.

I have long been in favor of it. I am very much interested to hear you, as a member of the body which presumably wishes to guard zealously its right to say what taxes should be at all times, suggest this as a possibility, if I understand you correctly.

I believe it would be a wise thing to do within a modest range.

Representative BOLLING. How do you do it in modest ranges? I am not on the Ways and Means Committee but I am curious as to how that may be done.

Mr. GORDON. I have not looked into the details of it, but I imagine that, in the area of taxes, for example, the President might be given the power to alter the basic tax rate, the first bracket rate, by a maximum of a certain number of percentage points, depending on the employment rate or the price level or some combination of the two, and this could be done in a number of ways. He might be given discretion as to when and how much within limits.

I do not think at the moment that I would be in favor of tying his hands by saying to him that he must change it by 1 percent for every X percent change in some index. This, I think, would represent too much inflexibility. But he might be given the right to alter the rate, the first bracket rate, at his discretion within, let us say, 2 percentage points up and down, after consulting with whatever sort of control group Congress might set up. This would lead to much quicker action, of course.

Representative BOLLING. In theory, at least, we could do it by the negative method as we have done with several other pieces of legislation where we have a veto.

Do you have some more, Mr. Curtis?

Representative CURTIS. I was intrigued with your remark that during the period of unemployment we did not have a tight money situation which got me to wondering just what we did mean by tight money. I guess what you are referring to is simply the amount of reserves unused in the Federal Reserve system? Certainly you were not referring to the interest rate.

Mr. GORDON. I was thinking at the moment when you asked the question of the picture I carry in my mind of the chart of interest rates over a half century or so.

Representative CURTIS. I was looking at interest rates and that does not seem to conform; for other reasons perhaps interest rates were pretty high during the big depression, as a matter of fact.

Mr. GORDON. Interest rates were not high during the great depression in the thirties.

Representative CURTIS. What were they?

Mr. GORDON. At one time, short-term Treasury bills were being sold at a premium in the market.

Representative CURTIS. Possibly I am thinking in the area of consumer credit. That may be the difference.

Mr. GORDON. I will grant that, but the overall money market, as a general rule, tends to be easy when unemployment rises, as one would expect, and to tighten up as the overall demands for credit begin to rise again and unemployment begins to fall.

It is true, if I may go on, that there are types of credit that the economy has only slowly organized itself to take care of. One of them is mortgage credit.

During the 1920's, for example, we had only to a very limited extent amortized mortgages; we did not have Government guarantees or insurance. In particular, the principle of amortization was not as well established as it is now. The result was that mortgage rates were generally higher than they are now. It was difficult to finance a house completely with the first mortgage that could be gotten on the 3 to 5 to 7 year terms that banks were likely to require. The second or even the third mortgage was more prevalent than it is now, and the overall loan cost to the buyer or builder, therefore, tended to be high.

Representative CURTIS. The financing, too.

Mr. GORDON. Yes. What has happened is that we have had what we might call an organizational revolution. We have learned how to finance housing much more cheaply.

Now the same thing has happened in consumer credit.

Representative CURTIS. Of course, the figures do not go back too far but right on through the three recessions we had since the postwar, the amount of consumer credit continued on up. You could not tell from looking at that where the recessions were and where they were not.

Mr. GORDON. I think that if you look at the net extension figures, you can see some effect of the three recessions, particularly the last two we have had.

Remember that we have only slowly opened up what might be called the whole money market to the installment buyer. During the 1920's, when consumer credit was relatively new, commercial banks,

for example, were staying out of the personal loan field. The array of lenders available to the buyer was much less extensive than now. It has become a much more respectable kind of credit from the lender's point of view, and much more of the money market is available either to the buyer or to the people who are directly financing, so that again, because of organizational and institutional changes, we have brought down the cost of credit to the buyer.

This sort of broadening of the money market has been going on in this country since colonial days. There was a time when, to get almost any kind of money in the West, it took an interest rate of 10 percent or better. We have increased the mobility of funds around the country as we have built up the financial intermediaries about which this committee has heard in some of its hearings. We have increased the mobility of funds, made more of the total money market available to any kind of borrower, and as a result particular kinds of interest rates have come down and interest rates in particular regions have come down.

Representative CURTIS. I have been looking at this table on D-44, on page 191 of the January 1959 economic report of the President. This is short- and intermediate-term consumer credit outstanding. From 1945 on up it is just a constant increase, it was a constant increase, there is no deviation. The amount of increase varies a little.

I thought the problem you were referring to was probably in the Federal Reserve System.

In the context I was trying to develop the thing—the economic phenomenon of tight money is created more by the demand over supply.

Representative BOLLING. You certainly have a change in rate of growth.

Mr. GORDON. Yes. If you look at table D-44, the 1958 figure, the first column, 44,800, it is virtually identical with the year before, which means that repayments were as large as new extensions.

Representative CURTIS. Yes, the total of noninstallment credit—

Mr. GORDON. If you take installment credit alone, the second column, total installment credit outstanding in 1958 was a little smaller than in 1957, meaning that repayments were larger than extensions.

Representative CURTIS. Also take a look at automobile paper, that is where the difference is. That is where we both can see something occurring. It is not the tightness of money, there is some other ingredient that applies there.

Mr. GORDON. What I am suggesting is that if consumers had bought a few less automobiles in 1955 and saved some of that for 1958, we could have had installment credit go up in 1958, it would have gone up less in 1955, we might have had less price increases during the boom and we might have had more employment in 1958.

I gather that this, in a general way, is what we are looking for.

Representative CURTIS. Thank you.

Representative BOLLING. If there are no further questions, Mr. Gordon, we thank you very much for a stimulating paper and for a stimulating discussion.

With that, the committee will stand adjourned until 2:30 p.m., this afternoon, in this room. The witness will be Walter Heller of the University of Minnesota.

(Whereupon, at 12:20 p.m., the committee adjourned to reconvene at 2:30 p.m., this same day.)

AFTERNOON SESSION

The committee reconvened at 2:30 p.m., upon the expiration of the recess.

The CHAIRMAN. Dr. Heller, we are very glad to have you with us. We know you as a most unselfish economist in devoting a large part of your time and energy to public service.

I want to express my personal gratitude for your services in these respects and welcome you here this afternoon.

STATEMENT OF WALTER W. HELLER, UNIVERSITY OF MINNESOTA

Mr. HELLER. Thank you, Senator.

The CHAIRMAN. You may proceed in your own way.

Mr. HELLER. With your permission I will proceed with the reading of my statement.

Economic policy prescriptions are based on factual evidence and its interpretation, on analysis of the relevant economic relationships, on institutional realities, and on the priorities assigned various social goals.

To prescribe the complex therapy that will simultaneously stimulate growth, provide full employment, and prevent inflation calls for the knowledge of the specialist, the judgment of the general practitioner, and the confidence of the patent medicine man.

Given the heavy concentration in this area of research efforts which are almost daily turning up new evidence and new insights and upsetting established assumptions and preconceptions, one approaches the committee's assignment with a good deal of humility and hesitancy.

One derives some comfort, if not reassurance from the fact that policy itself must be made humbly and hesitantly in the light of imperfect knowledge. And policy decisions cannot wait until knowledge is perfected.

The CHAIRMAN. If you will permit me to interrupt, there was a famous saying of Justice Oliver Wendell Holmes:

Every year, if not every day, we have to wager our salvation upon some prophecy based on imperfect knowledge.

Mr. HELLER. That is a comforting reassurance.

Major emphasis in my statement will be directed to two policy areas and instruments. The first pertains to the desired uses and corresponding sources of growth, and, more particularly, our emerging awareness of the role of human capital investment as a source of economic growth, and its implications for Federal expenditures for education and related functions.

The second pertains chiefly to the problem of stability, some of the choices we face in coping with this problem, and the potential gains to be realized on this front by returning to first principles of taxation and fiscal policy and shifting emphasis from tight money to tight budgets.

No more than a series of brief observations will be offered on other facets of policy for growth, price stability, and full employment.

## A. THE GROWTH OBJECTIVE AND INVESTMENT IN HUMAN CAPITAL

Rapid economic growth, however pleasant its results, is an uncomfortable and costly process. It involves social and economic dislocation, restriction of consumption to enlarge the flow of savings and investment, and recurrent threats of inflation.

Surely, therefore, we seek to accelerate growth, not as an end in itself, but as a means to certain explicit and urgent national ends.

And just as surely, since growth is such a costly process, we seek to achieve those ends through policies that involve minimum dislocation, minimum diversion of resources from current consumption, and minimum inflation. This requires:

A. Careful attention to the structure, not simply the rate, of growth; and

B. Careful appraisal of the sources of growth and a proper balance between investments in tangible physical capital and intangible human capital.

*1. The uses of growth*

By multiplying goods and services, we seek higher standards of living and the elimination of poverty.

By multiplying economic opportunities, we seek to eliminate economic discrimination and restrictive economic practices.

But these contributions to material well-being and social stability will come in the normal course of events at the historical average annual growth rate of roughly 3 percent.

It is when we turn to forced draft growth for the purposes of national defense, scientific advance, and world leadership, that we must concern ourselves with the composition of investment and output, not just with its gross dimension.

If faster growth is truly urgent, its urgency lies primarily in the need:

A. To build our military strength, both in the sense of countering aggression and protecting our civilian population and productive potential in a nuclear war;

B. To share our technology and abundance with economically poor and politically vulnerable nations; and

C. To maintain, or regain, both moral and scientific leadership in the world.

Yet, in spite of these selective objectives, we seem to pursue growth for growth's sake.

Take, for example, tax policies which favor plant and equipment investment through accelerated depreciation and favor research and development expenditures through immediate expensing of their costs—even though the latter are, in effect, an investment in future income.

No distinction is made between investments which enlarge our supply of luxuries, amenities, and frivolities, and investments which enlarge the supply of urgent national necessities. I am not suggesting capricious interference with consumer preference patterns.

What I am suggesting is that if forced-draft growth is needed to meet supervening national objectives, the costs of that growth can be minimized by singling out for Government stimulus those investments which will serve the specified objectives rather than dissipating our bounties in growth without focus.

In part, of course, this is accomplished by Government procurement policies which tend to pull existing resources into the relevant uses. But to assure an adequate, i.e., rapidly rising, supply of the needed components, Government policy should anticipate future demands and pursue policies that will push educational, research, and investment efforts into the required pattern of growth.

As instruments of such policies, one may cite expansion of Government research programs and grants in the designated areas of interest, and perhaps also direct encouragement of appropriate types of investment.

Distasteful as such selective interference with market processes may be, the result may well be a sufficient reduction in the stresses and strains of growth to avoid even more distasteful measures to restrict current consumption and control inflation.

Another inference we may draw is the great importance of generating sufficient brain capacity, not just plant capacity, to fulfill the needs to which forced draft growth is oriented. Successful defense strategy and technology; effectiveness in the worldwide struggle for men's minds; sharing with the world's economically backward nations not just the fruits, but the sources of growth, especially human training and experience—these goals make huge demands on human comprehension, organizing ability, and scientific and technological training.

High-priority uses of growth may well call for a shift of emphasis from production of reproducible goods to production of trained minds.

## *2. The sources of growth*

To achieve the required growth with a minimum strain on resources and price levels, we need to concern ourselves not only with getting the right kind of growth, but with investing in the most promising source of growth.

It is even more as a source than as a product of growth that human capital is rapidly gaining recognition.

As a result, our preoccupation with investment in tangible capital as the royal road to growth is being increasingly challenged.

The 1959 annual report of the National Bureau of Economic Research, reporting on its various studies of economic growth, concludes that: "production in the United States has risen twice as fast as labor and tangible capital input combined, over the past two thirds of a century" that "a large part of the explanation of the rise in production remains to be determined" but it is already clear that the role of tangible capital goods in raising labor productivity, while significant, "has not been the dominant one," and the large and growing investments in education and in science and technology, i.e., in building up the stock of human capital, have been even more important.<sup>1</sup>

A somewhat different view of the same problem is provided by the National Bureau's study, *Basic Facts of Productivity Change*, by Solomon Fabricant.<sup>2</sup> This shows that in terms of average percentage rates of change, physical output increased 3.1 percent annually from 1919 to 1957, while total input of manhours and tangible capital increased only 1 percent annually, leaving a 2.1 percent annual in-

<sup>1</sup> See the 39th Annual Report of the National Bureau of Economic Research, Inc., "The Study of Economic Growth," New York, May 1959.

<sup>2</sup> Occasional Paper No. 63, New York 1959.

crease, or two-thirds of the total, to be explained in terms of increases in intangible capital and improvements in efficiency.

Prof. Theodore Schultz of the University of Chicago has been testing the hypothesis that the explanation for the remaining two-thirds is to be found largely in the rapid accumulation of human wealth represented by training, education, and additional capabilities based on health and new knowledge.<sup>3</sup>

Further, his preliminary studies lead him to the strong belief that the return on human capital exceeds "by a wide margin" the return realized on the stock of nonhuman capital.

Even though preliminary, these various findings call for a careful reconsideration of our policies to promote growth. The gains to be realized, for example, from giving up tax revenues in the form of liberalized depreciation allowances may not only be in considerable part the wrong kind of gains, but may be smaller than those we could achieve by investing an equivalent amount in the education, training, health, and welfare of human beings, or in the advancement of knowledge through more liberal support of both basic and applied research.

A careful and ingenious study of the development of hybrid corn shows, on the basis of quite complete records, that total private and public investment in the development of this innovation was \$130 million; it has yielded an annual consumer surplus of around \$900 million, a return of something like 700 percent per year on the investment.<sup>4</sup>

Developments in research and education in the Soviet Union would suggest that the government officials, scientists, and educators of that country have more readily accepted and acted upon findings like these than the policymakers in this country. The subdued or delayed reaction in this country is all the more puzzling when we take into account our traditional emphasis—and here, surely, we differ from the Soviets—on expenditures for increased knowledge, improved physical and mental health, greater skills and stamina, not only as production, but as consumption.

All of these outlays increase men's capacities not only as instruments of growth, but as "pleasure machines."

In calculating rates of return on investment in human beings we can reasonably subtract from the base that part of the cost which represents consumption, improvements in human well-being, and the quality of life.

This suggests that if we remove the consumption element from educational expenditures, for example, the rate of return on the investment part of such human capital outlays is ever higher than if we calculated it on the gross investment.

### *3. Implications for public policy*

All of this has vast implications for public policy. The high priority we have given to investment in reproducible capital goods must give some ground to investments in human capital.

<sup>3</sup> See his "Investment in Man: An Economist's View," the *Social Service Review*, June 1959.

<sup>4</sup> Zvi Griliches "Research Cost and Social Returns: Hybrid Corn and Related Innovations," *Journal of Political Economy*, October 1958.

As Professor Schultz concludes from the small proportion of total growth accounted for by physical capital—

it would seem impossible that even substantially higher incentives to increase capital in reproducible goods would result in a substantially greater increase in total growth.<sup>5</sup>

Our already very large investment in research and education should be stepped up. Federal aid to education is seen in a new light as an essential instrument for carrying out functions which are a direct Federal responsibility. Education is an investment in human resources from which we expect to reap positive gains in the form of higher productivity, more rapid advancement in technology, a better informed and better implemented foreign policy, and a stronger military establishment and greater military potential.

Here, the benefits of education transcend all State and local lines. They involve our national economic strength, prestige, and security, even our national survival.

For the Federal Government to assume part of the costs of public education to serve these ends is no act of largesse or charity to State and local governments; it is simply the best available method of discharging certain national obligations.

To be more specific, the obvious lead of the Soviet Union in missiles and space exploration can be overcome only by accelerated research and technological advance. In this sense, education is a powerful weapon of greater importance to our national defense than military hardware. It may well spell the difference between being the world's first-rate and the world's second-rate power, scientifically and militarily, let alone morally.

Our successful incentives, like accelerated amortization, price guarantees, and loan programs, must now be supplemented, perhaps in part supplanted, by equally strong and determined measures to expand brain capacity.

#### B. THE STABILITY OBJECTIVE

In formulating policy on stability and growth, one is forced to some uncomfortable judgments and choices. Let me state several of mine briefly as background for the remainder of my discussion:

1. Insistent inflationary pressures will accompany our efforts to speed economic growth;

2. Unless we are to use unemployment as an active weapon against inflation, and even if we do, the chance of avoiding all inflation is virtually nil;

3. To curb inflation with minimum interference with growth (and with superior distributive effects), we should shift our emphasis in part from tight money to tight budgets, i.e., to a combination of lower interest rates and greater money availability coupled with lower net deficits or higher net surpluses, and hence higher tax rates, than we would otherwise have;

4. Given economic uncertainty and imperfect understanding of the processes and determinants of inflation and employment, and counting the relative costs (in both human and gross national product terms) of inflation and unemployment, stabilization policy should

<sup>5</sup> Theodore W. Schultz, "Human Wealth and Economic Growth," *the Humanist*, 1959, pp. 71-81.

take greater risks of inflation than of unemployment (within reasonable bounds on both sides). Selected comments on these issues follow.

Apart from war-induced inflation, price data indicate that recent average price increases are reasonably consistent with historical peacetime trends; yet this record is not entirely reassuring. Price and wages have shown a decreasing responsiveness to recession.

If prices move only sideways and upwards with no interludes of downward movement, the risks of loss from betting on inflation may be reduced. The sensitivity of savings habits, investment patterns, and interest rates to inflation may be heightened, even though the average rate of inflation does not rise.

Downward flexibility of prices can presumably be promoted by measures to curb monopoly, reduce international trade barriers, recast farm programs in a form that will translate higher productivity into lower consumer prices, relax certain restrictive labor practices, and accomplish other structural changes.

However, the major downward pressure on prices and wages in the past has come from bigger and longer recessions. Few advocate this as a program of inflation control.

Yet unless we make structural adjustments and develop faster and more pointed policy tools than those we have used to date, we cannot hope to avoid spurts of inflation in a growth-oriented economy committed to full employment.

Whether from temporary excesses of effective demand, or from cost push, or from capital goods bottlenecks and burgeoning overhead costs—the special factors in the 1955–57 inflation—prices are nudged upwards. Subsequent back pressure runs into the force of the ratchet: Labor and management can hold the price and wage lines during recessions because they are bridging a narrower and shallower gap in economic activity than formerly.

The loss from giving ground—and gaining, short-run, a few more sales and jobs—has been shrinking relative to the gain from holding the line and betting that builtin regenerative forces, or a politically sensitive and economically alert administration and Congress, will quickly restore the demand for products and labor at existing price levels.

Whether the ratchets would be damaged or broken by a 1937-type recession—a great depression is no longer a realistic possibility—has not yet been tested. I doubt that we want to experience the test.

In short, we are paying the price for reduced (but still excessive) losses of production.

Historical price level comparisons suggest that we may be getting the better end of the bargain so far.

The better end of the bargain may be thought of in terms of exchanging less unemployment and loss of production for a given amount of secular price increase, or it may be thought of in more specific terms.

For example, Harry A. Bullis, retired board chairman of General Mills and an adviser of President Eisenhower, has recognized the investment boom as a prime cause of the 1955–57 inflation and expressed his opinion that the country did not strike a bad bargain.

Referring to the \$100 billion spent on plant expansion by business in 1956, 1957, and 1958, Mr. Bullis stated :

The modest price rise of those 3 years, about 8 percent, has been a small price to pay for the great expansion we are now getting. Having gone with a \$48 billion recovery in gross national product without any inflation, I predict a second period of great plant investment. For a while this may produce some modest "investment boom inflation."<sup>6</sup>

There are apparently quite a number of ways of coming to terms with inflation if it stays within its relatively modest peacetime bounds of the past 8 years and if the cost of halting its creep entirely is increased average unemployment and a slower pace of economic growth.

The really tough and intriguing question is whether we can hold the price trend to its modest post-Korean proportions and still further narrow the recessionary gaps and speed the rate of growth. The trick is to find a combination of measures that will press down on prices while pressing up on employment and productivity.

What we need is an economic overdrive that will slow the engine of inflation while it speeds up the wheels of production and employment.

Recognizing this as unattainable in any single control device, we need to select the package or mix which least retards production and employment in the process of holding price increases within very modest bounds. (Even if the goal is price stability, the fact will be a slight price creep.)

In striking the balance between growth, price stability, and full employment, we run the risk of overlooking the distributive aspect of the problem. I note that this aspect is implicit, rather than explicit, in the assignment to the witnesses before the committee.

Ideally, perhaps, we should separate the stabilization and distributive functions. But while this may be possible conceptually, it is not possible practically. We cannot separate them when the instability—inflation—itself redistributes income—indeed, when the assumed redistribution from the weak to the strong is a major cause for action against inflation—and when the major instrument now being used to fend off inflation also appears to have lopsided distributive effects.

If we replace the distributive pattern of inflation—its redistribution of income and wealth away from those who are dependent on stable or sticky salaries or transfer payments, and especially those who hold debt instruments—with the distributive pattern of excessively tight money, we are choosing between two instruments neither of which relates its bounties and penalties to the central criterion by which we typically measure people's status for purposes of distribution policy; namely, size of income and family obligations.

Suppose for a moment that we substituted a more powerful and flexible fiscal policy for part of our current monetary policy efforts, and suppose, further, that the impact on production and the effectiveness in controlling inflation were identical, we might still prefer the use of fiscal policy because of its distributive effect.

Actually, of course, it is not a choice between the two, but a matter of emphasis.

In my view, we have seriously underemphasized fiscal policy. For cyclical stabilization, we need greater tax flexibility; for trend sta-

<sup>6</sup> Quoted from a speech of June 8, 1959.

bilization—i.e., for leaning against the persistent inflationary trend without subduing growth—we need both tax reform and a partial substitution of tight budgets for tight money.

### C. TAX REFORMS, TIGHT BUDGETS, AND FLEXIBILITY

In spite of the demonstrated limitations of monetary policy, and its questionable distributive effects, no significant shift of emphasis toward tax policy has taken place in recent years.

Rather, it is to the contrary. In the light of the significant contributions that tax reform, tight budgets, and tax flexibility can make to the reconciling of growth, full employment, stability, and the distributive patterns we seek, this shift in emphasis is overdue.

The tax mechanism, and particularly the income tax from which we draw—corporate and individual combined—four-fifths of our administrative budget revenues and two-thirds of our cash budget revenues annually, has a great deal to offer in countering cyclical economic fluctuations, restraining longrun inflation, and mobilizing funds for capital formation.

Yet, probably in considerable part because we have undermined the base and, therefore, maintained unrealistically high rates of the income tax, we have hesitated to take the steps which would make it a more powerful instrument in converting consumption into investment and a more adjustable and flexible tool to gain short-run stability.

In my judgment, the greatest single contribution Congress could make to the multiple objective of full employment, growth, and stability would be a thorough recasting of the Federal income tax, both corporate and individual. This recasting would consist of three major parts:

1. Tax reform of the kind contemplated in the forthcoming Ways and Means Committee hearings, to restore the base (i.e., eliminate the vast number of income-tax concessions and preferences) and drastically reduce the rates of the income tax, with the following effects:

- A. Removal of the myriad impediments to growth which are inherent in the distortions of resource allocation created by preferential tax treatments of many kinds and sources of income.

- B. Improvement of the incentive impact of the tax by reduction of the marginal rates (which tend to discourage effort and risktaking by reducing marginal rewards) without reducing effective rates (which tend to stimulate effort and risktaking by reducing disposable income).

- C. An increase in the leverage of monetary policy, achieved by reducing the proportion of interest absorbed by the Federal Government through high marginal tax rates.

- D. Bringing the distributional impact of the income tax into the open as a subject of conscious decisionmaking rather than guesswork.

- E. Removing the present unreasonably high rates as a barrier to upward adjustment of the income tax during a cyclical inflation.

2. Strengthening the income tax as a source of revenue, in combination with other taxes, in order to—

- A. Exert steady counterpressure to inflation in a rapid growth economy.

- B. Make more funds available for capital formation either in the form of additional government programs (especially for the formation of human capital) or, as called for by stabilization policy,

through retirement of debt and consequent channeling of funds into the hands primarily of private investors.

C. Make possible a reduction of interest rates and monetary tightness.

3. Decisive action to take advantage of the flexibility potential of the individual income tax, to be accomplished—

A. By legislating prescribed upward and downward adjustments in income tax withholding rates and final liabilities, to be put into effect on short notice by congressional joint resolution on the recommendation of an Economic Stabilization Board representing both Congress and the administration, and possibly—and offered somewhat more hesitantly—

B. By permitting adjustment of depreciation allowances by the Stabilization Board to damp down inflationary pressures arising from the plant and equipment sector and stimulate lagging plant and equipment investment during recessions.

Although the second and third major steps can and should be taken even if the first is not, the whole program would become vastly more effective if a thorough base-restoring and rate-cutting reform could accompany the other measures.

Let me comment briefly and selectively on certain aspects of this proposed recasting of the income tax.

First, it should be noted that the proposed overall reform is thoroughly justified in economic terms alone. Yet, it would carry with it a great bounty in improved tax equity, both in the sense of eliminating unequal treatment of equals and thereby achieving greater "horizontal equity," and in the sense of removing the barriers of uncertainty, ignorance, and contradiction which now block the path to carrying out our preferences as to vertical equity, the distribution of tax burdens among taxpayers of differing income size, and family obligations.

(A further discussion of this point and of proposals to restore the base of the income tax is contained in my paper, "Some Observations on the Role and Reform of the Federal Income Tax," in the forthcoming Ways and Means Committee compendium.)

Second, the magnitudes involved in restoring the base of the income tax are very large indeed. Updated estimates prepared by Joseph A. Pechman indicate that the various exclusions, deductions, exemptions, credits, and unreported income under the Federal individual income tax now total more than \$60 billion. (Joseph A. Pechman, "What Would a Comprehensive Individual Income Tax Yield?," Ways and Means Committee compendium).

A rigorous program of restoring the income tax base would permit lowering tax rates from their present 20 to 91 percent range to a 14 to 60 percent range.

Corresponding calculations on the corporation income tax by William Hellmuth indicate that a comparable program of restoring the base of the corporation income tax would have added roughly \$11 billion to the base and \$5 billion to corporate revenues in 1956 if there were no reduction in rates.

In other words, a rate reduction from 52 percent to 42½ percent would be made possible (William F. Hellmuth, Jr., "The Corporate Income Tax Base," Ways and Means Committee compendium).

Third, although a program to increase the revenue productivity and the flexibility of the income tax to cope with both secular inflation and cyclical instability does not hinge entirely on the far reaching tax reform program proposed in point 1 above, restoring the base and cutting rates would make it far more feasible to make the income tax an instrument of tight budget policy and of flexible antifructuation policy.

Lowered rates and a more even-handed impact—both in economic and equity terms—would reduce some of the great resistance to increasing the rates of the income tax temporarily for anti-inflationary purposes.

Moreover, if the problem of, and controversy over income tax structure could only be removed from the policy scene—and I guess I am talking about the millenium—a major barrier to shortrun changes in rates would be removed.

Fourth, unless there is substantial base restoring tax reform, the assertion that the use of fiscal policy has decided distributive advantages over the use of monetary policy must be made with considerable caution.

To be sure, a tight-budget approach can more readily be made progressive in its impact than a tight-money approach even with the present deficiencies in tax structure.

But tax reform would make the effects on income distribution much more precisely known and determinable.

Fifth, the precise formula for increasing the flexibility of the income tax need not follow the suggested form under point 3, above. It could take any one of several forms.

But the central point is that there need to be standby individual income tax cuts and tax increases, specified in form and general magnitude so that the controversy has been wrung out of them. Only in this way can reluctance and delay in the use of tax adjustments for shortrun stabilization be overcome.

Finally, it is with some hesitancy that I have suggested the adjustment of depreciation allowances as a stabilization device. It may involve substantial complexities.

Nonetheless, if we are persuaded that the inflation problem is segmental in origin, we may be unable to cope with it unless we take a policy approach which involves segmental solutions.

We have not shrunk from putting an almost endless number of selective and segmented tax preferences into our income tax structure. I am not sure that variable depreciation allowances would be more than a difference in degree, rather than in kind, from the uses that have been made of the tax structure to date.

This is not an argument for those uses; it is merely a counterpoint to those who might oppose variable depreciation because of its selective approach.

This whole problem of instability arising out of plant and equipment investment is one that is devilishly hard to deal with by public policy.

As one casts about for solutions, one finds that the variable depreciation allowance is one of the few available devices short of direct controls. It should be thoroughly explored in the light of criticisms made by the accounting profession.

## D. OTHER MEASURES

Having directed my comments largely to an emerging area of understanding about investments in human capital, and to a longstanding area of difficult tax reforms, I have time and space left for only a few comments on the other tools we may use for reconciling stability and growth.

I know the committee will feel free to question me further on the following points, which are made in a rather cavalier and unsupported form.

1. As just noted at the close of my discussion of tax reform and flexibility, segmented sources of difficulty may require segmented solutions.

If inflationary excesses arise out of a particular segment, be it the consumer-credit segment or the housing segment, or the capital investment sector, we should not shrink from selective controls over consumer credit, mortgage credit, and depreciation allowances. Such controls are not an open invitation to direct controls over prices and wages, even though they depart from the complete impersonality of broad brush monetary and fiscal controls.

It is worth remembering that the broad-brush controls are themselves selective in impact and often involve a certain amount of non-price rationing by private economic units.

The potential net loss of market freedom seems relatively small in comparison with the potential net gain in controlling inflation.

In the last analysis, the selective controls issue must be resolved in terms of the severity of inflationary pressures, their source, and the net judgment as to the costs and damage done by inflation.

2. Just as we need more flexibility in tax policy, we need less rigidity in monetary and debt management policy.

Specifically, the bills-only policy of the Federal Reserve System seems to deny us some of the potential fruits of open market policy in economic stabilization.

Also, debt ceilings and interest-rate ceilings make little sense, except as symbols of frustrated hopes.

I favor removal of the interest-rate ceiling on Federal long-term borrowing, not because I favor higher interest rates, not because I believe that this will unleash a pentup flood of treasury bonds, but because I believe that—

A. Built-in barriers to, or excuses for not undertaking, long-term borrowing should be removed, and

B. The issue between tighter money and tighter budgets should be fought out on its merits.

3. When it is possible to intervene at the source of inflation without involving the Government in direct controls, there is much to be said for such action.

In particular, on the wage-push source of inflation, there is a place for factfinding bodies with powers of recommendation, but not compulsion, which could illuminate the issues and bring the force of public opinion to bear on wage bargains.

This instrument is needed not only when the public interest is jeopardized by a long and costly strike, but when it is jeopardized by excessively generous wage bargains, the cost of which is passed on to the consuming public in higher administered prices.

4. In Federal debt management, we should strive—

A. To neutralize debt operations in relationship to cyclical stabilization policy, and

B. To find ways to regularize debt management and pursue a borrowing pattern that may eventually permit debt management to become a positive force in economic stabilization.

A policy of tighter budgets, leading to lower deficits and larger surpluses, combined with lower interest rates, would facilitate the achievement of this objective.

The CHAIRMAN. Thank you very much, Mr. Heller, for an excellent paper.

I will ask that the discussion be opened by Congressman Curtis.

Representative CURTIS. Thank you, Mr. Chairman.

I again want to compliment our panelists for excellent papers in these summaries.

I found that there is much with which I agree, particularly the emphasis on tight budgets, and the feeling that you have expressed that so much can be done in the area of modifying our taxes. I suspect from our previous conversations and discussions that getting into the details of where the tax reform should occur, we would have many areas of differences. But I am satisfied that even there, if we explored it long enough, we might not be so far apart.

One question, would it not help in the income tax area, particularly would it not help along the lines you suggest if we set the first income tax bracket at 10 percent instead of 20?

I have always felt that the immediate jump to 20 did not give us the graduation we might have and particularly in the lower level where the graduation still would be beneficial. I wonder if you will comment on that?

Mr. HELLER. I will make two comments about that. First, as the income tax system now stands, the great bulk of our progression up to \$10,000 comes from the exemptions, not the rate, as you are aware, I am sure. The graduation by the time you reach \$10,000—20, 22 percent if you are married, maybe up to 26 or 30 percent for a single person—is so small that most of the progressive force comes from the exemptions.

Representative CURTIS. I might add there that because most people in those brackets use the short form and there is a rigidity there because they just take the straight 10 percent. So it is a lump deduction rather than a differentiated one.

Mr. HELLER. That is true. The net effect of these factors, in terms of effective rates is that there is a smoother progression than is suggested by the zero and the jump to 20 percent.

Representative CURTIS. Yes.

Mr. HELLER. The second comment is that splitting the first bracket and dropping the rate on first thousand dollars for a single, \$2,000 for married persons, to 10 percent, is an immensely costly affair in terms of revenue. It would have cost, the last time I looked at the figures, about \$7 billion of revenue because there is about \$70 billion in that first \$1,000 band of income.

Representative CURTIS. That is very true.

Mr. HELLER. Now, having said these two things, I must still express a predilection for this kind of split when, as, and if our revenue conditions permit. If we were to undertake a full-scale restoring of the tax base, I should think we ought to give very serious consideration to this split and the reduction of rates at the lower end, especially since the base restoring process, Congressman Curtis, would add a surprising amount of income to the taxable base of those in the lowest brackets.

Representative CURTIS. I think it would help your other suggestions if we had this in the system. I agree the real deterrent is that the immediate revenue loss, as you say, would be considerable.

I was thinking more in theory of having a good, sound structure.

One now get into an area where I think probably I have another detail. One of the problems that I find is often forgotten, it seems to me, in discussing this depreciation allowance, is that we have a constitutional question. The depreciation allowance is not in there just because we want to give it but because under the Constitution we cannot tax capital. This is a return of capital, simply a way of measuring how you get the return back.

Mr. HELLER. May I make a comment on that, a point I stress in my forthcoming paper for the Ways and Means Committee, that one has to differentiate carefully between that amount of depreciation allowance which is necessary in terms of a sharp and accurate definition of income, and that part which represents an acceleration for incentive purposes.

Now, where we cross the line and whether we have already crossed the line is a matter of judgment. I think that the majority judgment is that we have crossed the line from merely defining income accurately to providing more depreciation allowance than is required in terms of the actual economic wastage of the assets. In other words, we have used it as an incentive device going somewhat beyond the income definition line.

Representative CURTIS. Actually, if it were not for the impact of inflation and the anticipation of future inflation, it would not make any difference. In fact, it probably would hurt a taxpayer to too rapidly take his depreciation. Certainly a new company going into a new field, where it has new equipment, would make a big mistake trying to write it off the first few years when it was not making as much money as after it was established. But the real reason for wanting that depreciation is this fear of future inflation. Certainly past history has indicated that there is real advantage to getting in and out as fast as you can with your capital investment.

Mr. HELLER. On this point, I believe that there are relatively few companies that would not benefit by taking the rapid depreciation. If they did not have enough income to absorb it, it is true they would not benefit. Otherwise the taking of the rapid depreciation means that you reduce your tax liabilities. In effect, you have an interest-free loan from the Government, and unless your pace of investment slows down later on, that interest-free loan from Government is a permanent one.

Representative CURTIS. You have a certain rate which you might establish in the industry for new plant and equipment and the amount which you take out of that is your tax deduction. But I think indus-

try, once it starts its pattern, does not benefit by jockeying around with it.

I have long thought that if it was not for the impact of inflation, anticipated inflation, it would be just as well to let industry pick their own amortization rate which certain countries permit them to do with some degree of success, I would say.

Mr. HELLER. But I think one has to look at this in terms of the revenues that the Government would give up by this process and the alternative uses to which it could have put those revenues.

Representative CURTIS. The Government, over a period of time, does not gain or lose. You can only take the amount of depreciation of your cost, you cannot take more.

Mr. HELLER. I think that both the calculations made at the time of the introduction of accelerated depreciation in 1954 by the staff of the Joint Economic Committee and most discussions of this subject by people who are expert in it have agreed that it does result in a long-term revenue loss to the Government.

Representative CURTIS. I may not be an expert in it, but I took exception to that very thesis at the time it was first advanced, and I continue to take exception to it just on mathematics.

The CHAIRMAN. Would you permit me to make a comment?

Representative CURTIS. Certainly.

The CHAIRMAN. This discussion reminds me in a sense of Beardsley Ruml's proposal to shift the date of paying taxes from an annual to a quarterly basis. The question always came up, what would you do with the first year's taxes?

There was implicit in the Ruml proposal of forgiveness for 1 year.

Now, I think on this question of accelerated depreciation this is involved, too. There is an immediate loss of revenue. While later you being to recover, but in the long run you do not recover it all.

Representative CURTIS. I think the gentleman is correct. Here is the other countering point. As you take the life of a business as a tax paying unit perpetually that is true, but they phase in and phase out. When it phases out, in liquidation or whatever, then you recoup. But I agree with the gentleman, you do have that situation.

Mr. HELLER. I wonder if we could take a brief arithmetic example without getting too far afield here?

Suppose you have, let us say, \$10 billion of plant and equipment investment per year and it all has a 10-year life. Suppose you started out with straight-line depreciation, you were taking \$10 billion a year depreciation for tax purposes. Now, when you introduce accelerated depreciation, you temporarily move the \$10 billion up to 11, 12, 13 billion dollars a year over a period of transition. There is a bulge in the depreciation allowance and a corresponding reduction in tax revenues. At the end of that period, once you are on the new system, you do not fall back below the \$10 billion ever. The depreciation allowance under the new system is still \$10 billion a year.

As a consequence, the introduction of acceleration has cost the Government billions of tax dollars in the interim.

Representative CURTIS. That is on the assumption there never is a deceleration in the same industry.

Mr. HELLER. No, we have to deal in aggregates. This is on the assumption there is no deceleration in the economy as a whole.

Representative CURTIS. We are not dealing with aggregates. That is the point. If we were that would be true.

That is why I pointed out that individual businesses are not in perpetuity, they do phase in and phase out. Granted it may be 40 or 50 years. I do not know what the average might prove to be. But as the individual business units phase in and phase out, you affect the aggregate.

Mr. HELLER. I think we can reconcile our two points by granting that when the individual reduces his investments or goes out of business, he will have greater tax liabilities. But at the same time, as long as the economy as a whole does not grind to a halt, there will not be a longrun offsetting reduction in depreciation and consequent increase in tax liability to offset the transitional rise in depreciation and reduction in tax liabilities.

So, looking at it from the Government's point of view for a moment, one should look at the loss in revenue from accelerated depreciation more or less symmetrically with an increase in expenditure which might have been made with the higher proceeds from the tax system then the question is: would the economy have been better off to have given the benefits to investment, not in the form of tax savings to stimulate physical investment in plant and equipment but rather in the form of expenditures to stimulate more human capital formation by giving a billion or two billion dollars more support to education, research, development, and so on?

Representative CURTIS. I can see where we still are in some fundamental disagreement on this. But I want to get to another aspect of the same thing.

One of the reasons I have been very favorably inclined to further deceleration of depreciation is particularly in allowing for the rapid economic growth of obsolescence as opposed to just the wear and tear where you have to replace something because it is worn out. The more rapid your technological growth the more obsolescence you have which cannot be measured by your long-term depreciation schedules.

Mr. HELLER. Insofar as there is rapid obsolescence, you are quite right, that enters into this economic definition of income. If obsolescence becomes more rapid, the economic value of depreciable assets disappears faster and one has to allow faster depreciation.

Representative CURTIS. We have this situation: Under our tax structure and, particularly before we modified it, and this is one of the compelling reasons that urged me to try to get through successfully more liberal depreciation, we have incentives for a firm to patch up and repair its machinery rather than to buy new up to date machinery and get rid of the obsolete stuff, because of the tax treatment. I suspect we have thereby an economic deterrent built into our tax system and if you were right in your hypothesis, I think you would tend to agree that it is one of the impediments to economic growth. You call attention to the fact that there are impediments to our economic growth in our tax structure. I happen to think that is one of them but you may disagree on that.

One comment, Mr. Chairman, and then I will turn it over and come back after further interrogation.

Hitting this income aspect of the tight budget, it strikes me that your solution to some of it is not going to help the tight budget because you immediately put the problem over into the expenditure area.

When you come back I want to go into the expenditure area a bit.

The CHAIRMAN. Any questions, Mr. Bolling?

Representative BOLLING. I would take from your paper, Mr. Heller, that you would not be at all disappointed if there were a larger tax take.

Mr. HELLER. Not the least bit.

Representative BOLLING. Would you care to expand on that in terms of its economic implications?

Mr. HELLER. First of all, I indicate that part of my confidence in the economy being able to take a larger tax bite would be predicated on the tax reform; that is, I would have a lot more confidence in this if we had a thoroughgoing restoration of the tax base and removal of many of these anomalies which are pulling resources in uneconomic directions and which require, in effect, these unrealistically high rates. Second, and apart from questions of tax structure, in making a choice among alternatives, it seems to me that we would be well advised to consider a choice which would say, "Bring more of the tax revenues into the Government and use them either for added investment in intangible capital formation, or if inflation pressures require it, put the surplus into debt retirement, which will tend to channel funds from consumption to private investment.

Now, the mix between those two would be difficult to specify in advance, but it would mean that more funds, net, would be made available for capital investment and that if some pressure would be taken off of monetary policy, we could keep interest rates lower.

Representative BOLLING. So when you talk about a tight budget you use, as an accurate word, I would be inclined to say responsible, but it would not necessarily be a budget at a lower level, it might be a budget at a higher level.

Mr. HELLER. Yes, indeed.

Representative BOLLING. I was pretty sure that that is what you meant.

Now, the only other question that I have is in connection with (a) on page 13, at the bottom of the page:

Removal of the myriad impediments to growth which are inherent in the distortions of resource allocation created by preferential tax treatments of many kinds and sources of income.

I would like to take a few minutes to go over some of the more obvious preferential tax treatments, you know, some of the more exotic varieties.

Mr. HELLER. Every man has his own definition of "exotic."

Representative BOLLING. You do not need to be bound by the word.

Mr. HELLER. But I will try to give some illustrations of what I have in mind.

First, like Fortune magazine in its series of tax articles, I think tax reform has to start with percentage depletion. It is both a symbol and a major inroad on revenues. Percentage depletion for oil and gas and for other minerals is leeching away tax revenues that we should be receiving and using for other purposes, perhaps rate reduction, perhaps more capital forming Government activities. And it is drawing far more resources into the oil and gas industry, for example, than seems economically sound, short of national defense needs. The oil and gas industry is rather fond of pointing out that

motorists would pay a higher price for gasoline if we did not have percentage depletion.

My answer to that is it probably should cost more in terms of the amount of resources the economy should be putting into this industry.

Second, it seems to me we have put into the capital gains category a number of forms of income that are not truly capital gains: timber, coal royalties, certain cattle operations, and so forth.

The CHAIRMAN. We did prevent depletion for turkeys.

Mr. HELLER. That is right. We avoided getting turkeys into the law.

The CHAIRMAN. We closed the gate on turkeys.

Mr. HELLER. But there are a number of other forms of income that I would certainly classify as ordinary income which the law has classed as capital gains and favored with a 25 percent ceiling rate.

Third, moving into the financial sphere, we find that savings and loan associations and mutual savings banks, have excessively generous tax-free bad-debt allowances. We find also that banks have a very nice thing when it comes to Government securities.

The losses on these securities may be treated as ordinary loss and the gains as capital gains.

Fourth, the point I made about restoring the tax base does not refer only to tax erosion in the form of special tax preferences for specific forms of economic activity. Even the excess exemptions for the aged and the blind, for example, are in the last analysis an impediment to economic growth simply because they erode the tax base. They give a lot of benefit to many people who have perfectly sufficient income to take care of themselves. This is what has led me to say that a subsidy given through the income tax is an upside down subsidy because the higher your income the more it is worth to you. And in giving this relief, we require higher tax rates on the rest of the income, including the income that is actively used for economic growth.

That is why, when we are talking about the growth objective, quite apart from gains in equity, the base-restoring program ought to go across the board.

Fifth, it is really surprising how few of the deductions from adjusted gross income for tax purposes can stand inspection when you put them under the microscope. Take the deductions for interest payments, which probably trace back to the concern over usury in the early days of the income tax. To ease the burden of interest by allowing deductions for installment-payment interest, mortgage interest, and so forth, does not seem to me to be a function of the income tax. It certainly is not necessary to arrive at a sensibly defined net taxable income for tax purposes.

One could go down the line, to that total of \$60 billion that could be restored to the tax base if we took a really thoroughgoing approach to this.

Representative BOLLING. The Senator raised a very good point I would like your comment on. What would be your attitude toward a more rigid definition of business expense?

Mr. HELLER. My attitude to this would be very favorable. I think we are letting a great deal of our resources be frittered away in non-efficient expenditures through the overliberal definition of "business expenses." We are all familiar with the expense account economy which seems to promote kinds of activities, kinds of growth, that are

a far cry from any national objective that I think you and I might agree on.

Representative BOLLING. I think that is all, Mr. Chairman. Thank you.

The CHAIRMAN. Congressman Reuss.

Representative REUSS. Mr. Heller, you mentioned in your paper that you believe that abandonment of the bills-only policy would permit a better use of Federal monetary policy in economic stabilization.

Would you spell out why you think that that is so?

Mr. HELLER. Well, this has several aspects. It seems to me that the bill's only policy is in effect tying one hand behind the back of the Federal Reserve System, that operating across the market from the bills all the way to the longest term bonds would permit of a more effective monetary policy. For example, and perhaps this is not the most important aspect of this, if the Federal Reserve were working in not only the short but the long end of the market, it would be able to be of considerably greater help to the Treasury in determining what kind of debt management policy makes sense at any given time. It would be probing the market, giving better signals, as it were, for the determination of debt management policy.

While on that point, let me say that it seems rather curious that the Treasury is very much concerned about the balance between the long and the short end of the market, and that there is no corresponding attempt to fit Federal Reserve policy to the different segments of the money market.

Although operations in bills affect the cost and availability of credit in all segments eventually, they may do so only slowly and inadequately. Direct operations in different maturities would improve the speed on precision of the Federal Reserve impact.

In other words, the general tenor of my comment is that the inflexibility of the bills' only policy denies us some of the fruits, denies us some of the power of monetary policy.

Representative REUSS. I think you are quite right. I think the problem is largely a psychological one. I think the Federal Reserve, in its heart, probably agrees with you but having stuck to this so long it does not want to admit that it is wrong.

Can you suggest any face-saving psychological device?

Mr. HELLER. I am an economist rather than a psychologist. I suppose one has to grant the Federal Reserve certain things: first of all, that the great bulk of open market operations has to be in bills, in short-term securities, because that is where the market is thickest, that is where inevitably the Federal Reserve has to concentrate influencing the borrowing activities of banks. But I just do not know why the Federal Reserve should say to itself, "We won't operate on any substantial scale in the long-term market under any circumstances."

Perhaps if they are looking for face-saving devices, the investigation of the speculation in Government bonds during the 1957-58 recession and the possibilities of forestalling this by more flexible Federal Reserve action might provide one way out.

It seems to me that the steep fall in the long-term rate in 1958 could have been somewhat moderated if there had been enough activity in the long-term market to create a certain amount of uncertainty. This might help dull the kind of speculative fervor that we saw culminate in June 1958.

Representative REUSS. I would like to apply your excellent notion that we should deemphasize tight money and reemphasize tight budgets as a method of getting the maximum of growth with the minimum of instability—I would like to apply that with you to, let us say, the hypothetical next year's budget.

I gather that on the spending side you would want to spend some more money on what you think are the great national priorities.

You mentioned one—human beings and their education. You would want to spend more money on that?

Mr. HELLER. Yes, I would.

Representative REUSS. And you would want to raise more tax moneys in the first instance by plugging a great many of the inequitable loopholes which you have mentioned.

Mr. HELLER. That is correct.

Representative REUSS. And if that was not enough to yield a balanced budget, or, better, a surplus, at high level of employment and production, you would be prepared, after adjusting the total rate structure, to have the tax system yield more?

Mr. HELLER. Yes, I would. Actually, you give me a fairly easy assignment when you deal in the fiscal year 1961. If we achieve this half-trillion-dollar economy that we are well on the way to, with certain steel strike interruptions, I believe the Federal budget, at current levels of expenditure and even at the foreseen level of, say, \$81 billion in the administrative budget, will run a considerable surplus in fiscal 1961. I should foresee a surplus of \$3 or \$4 billion.

Representative REUSS. When you say I have given you an easy assignment by projecting it into the fiscal 1961 budget, what you are saying in effect is that now is a heaven-sent time to put into effect the change in emphasis which you have suggested and that if we do not take advantage of this golden opportunity it may be much more difficult or indeed may be impossible to do this?

Mr. HELLER. Yes; that is true with this proviso, that if the advent of the half trillion plus economy brings with it a resumption of inflationary pressure, I would not shrink from maintaining a \$3 to \$4 billion surplus at the same time that I expanded some of these programs, even if it required some tax increase.

I could not be consistent in my position and take a different view because a greater reliance on tight budgets for antiinflationary purposes, coupled with less reliance on tight money, means budget surpluses. The 1961 surplus is going to be large enough, potentially, to support some increase in Government programs of the type suggested and still leave an amount over for debt retirement. Whether that will be enough or not depends on the intensity of inflationary pressure.

Representative REUSS. Let me go on with you on this hypothetical spending and taxing budget and ask you this: How would easy money, i.e., lower interest rates, come about? Would they come about through running surplus, using that to pay off a portion of the national debt, which would presumably in large part be purchased back from commercial bank holdings with the result that commercial banks would thereby have earnings assets freed up to make loans; and more loans being available, the supply-demand factor would be altered and interest rates would tend to go down; is that how it would come about, or would it come about by that plus purposeful action by the

money machines to expand the money supply by any of the ways of doing that? Or would both be involved?

Mr. HELLER. Fundamentally, it would be a conversion of consumption into investment, that is of consumption into savings through running a Government surplus. The Government would be taking funds through taxes that would have been spent in current consumption and making them available for capital formation, either Government capital formation or the retirement of debt, private capital formation. This is the net impact.

Representative REUSS. If it is available for Government capital formation it does not do much about tight money and lower interest rates, does it?

Mr. HELLER. I should not have put it in either/or terms.

I should have emphasized the surplus and debt retirement aspect. This is the aspect that eases the pressure on the monetary mechanism because it curbs inflationary pressures from the consumption side and puts funds at the disposal of private investment.

As you have suggested, as far as the banking mechanism is concerned, you do free up some reserves for granting additional loans, just as you would by open market purchases of Government securities. So that the basic picture that emerges is an economy in which you use somewhat lower interest rates, and somewhat higher tax rates. My preference for that is based both on distributive grounds; that is, who benefits and who loses from tight money, and on the potentially greater stimulus for growth, especially through tangible capital investment, one may get from lowered interest rates.

Putting the emphasis on intangibles does not mean that we can neglect physical capital.

Pushing up tax rates is required in order to counter the inflationary consequence of the stimuli that you get from the lower rates of interest.

Representative REUSS. Which does which? You mean to push up the tax rates to counter the inflationary consequence of lower interest rate but you also need to push up tax rates in order to run a surplus to pay off part of the national debt, to free up the bank reserves, to create the lower interest rates. This is a real chicken and egg deal. Which would you do first?

Mr. HELLER. But the two come together. That is to say these are interlocking effects. You ease the pressure on money by running surpluses which enables you to hold interest rates lower. At the same time, easier money stimulates investment and requires a surplus to dull the inflationary effects of this stimulated use of money.

Representative REUSS. I think you are on the right track and have made a very useful contribution.

Mr. HELLER. Thank you.

The CHAIRMAN. In the more full cataloging of these impediments of growth through distortions of resource allocations, and especially preference tax treatment, what is your general opinion of the practice which is in the law, that while the 20 percent basic tax is withheld at the source for wages and salaries, this is not done in the case of dividends and interest. The volume of dividend and interest distributed, from the record of corporations and public bodies, is much greater than the volumes of dividends and interest reported by income recip-

ients. Therefore, presumably several million dollars' worth of income from dividends and interest which is received is, in effect, tax free and the tax is evaded.

Mr. HELLER. My reaction in a word is that I am shocked that we continue to let this evasion take place. There is such an easy way of stopping it by a very simple system of withholding, a system that was developed by the Internal Revenue Service in 1951, that was adopted by the Ways and Means Committee and by the House of Representatives and then blocked when it came across to the Senate.

The CHAIRMAN. In 1951.

Mr. HELLER. In 1951. My shock was increased when I compared the figures in a paper prepared by Mr. Pechman for the Ways and Means Committee hearings with the figures we were using in 1951.

At that time, the revenue loss from this lack of withholding was \$300 million. It is more like \$900 million today. That is the revenue loss, not the amount of unreported income.

The CHAIRMAN. Does that include both interest and dividends?

Mr. HELLER. And dividends, both.

The CHAIRMAN. I am very glad to hear you say that. I think I am one of the nine Senators who voted against the elimination of withholding provisions in 1951.

Mr. HELLER. May I address myself for just a moment to the simplicity of the system by which this could be handled.

The CHAIRMAN. Yes.

Mr. HELLER. You would not even have to have individual accounting for the dividends and interest. There would be a quite universal provision that 20 percent of every taxable interest and dividend payment would be forwarded to the Internal Revenue Service. At the end of the year, the taxpayer would report interest and dividend receipts in his tax return, the actual 80 percent amount received, and then gross it up by 25 percent to restore it to the 100 percent figure before withholding. That same 25 percent of the 80 percent, equivalent to 20 percent of the full dividend, is then taken as a withholding credit and he does not need to have any records on this.

The CHAIRMAN. Municipal and State bonds would be excluded?

Mr. HELLER. As long as they are tax exempt; yes. Of course, that is another exemption that ought to be terminated.

The CHAIRMAN. What about spinoffs and splitoffs?

Mr. HELLER. This is a field which I would rather pass. It is a technical field in which I do not consider myself proficient.

The CHAIRMAN. What about split incomes?

Mr. HELLER. As far as split incomes are concerned, it seems to me we have to make some decisions on the proper relationship between the family unit and the single person. After all, we effected a very substantial reduction in progressivity for married couples in 1948 when we split incomes for tax purposes. Offhand, it seems to me that we have opened too wide a gap between the curve of progression for single individuals and married couples and that we ought to find some way of narrowing that gap.

The CHAIRMAN. You do not say that two can live as cheaply as one, though.

Mr. HELLER. I have not found that to be the case.

The CHAIRMAN. What about the dividend credit?

Mr. HELLER. The dividend credit again is an example of our wrong way type of relief or correction. Even if we grant the double taxation argument—I want to lay aside the controversy over whether there is or is not double taxation—the form of our dividend credit is such that it relieves a great deal more of the “double taxation” for the higher income groups than for the lower income groups. We either ought to abolish it completely or change the form of the relief for double taxation.

The CHAIRMAN. What about stock options?

Mr. HELLER. Stock options are one of a whole series of fringe benefits, not just for the high income groups but for the low income groups, that have been removed from the tax base without any good rationale that I can see.

Stock options, of course, are not totally removed because they are put into the 25-percent bracket, bringing people down out of the 60-, 70-, and 80-percent bracket, but I think they bear a sibling relationship to the exclusion of pension contributions by employers, various kinds of wage supplements, and so forth.

If we want a comprehensive reform, all of these should be put back into the base, because these exclusions relate to various and sundry factors which have very little to do with the fundamental bases on which we distribute or try to distribute tax burdens; namely, income size and family size.

The CHAIRMAN. As you know, the Senate is under great pressure to pass a form of what was originally the Jenkins-Keogh bill—it is now the Keogh-Simpson bill—which our friends in the other body brought to a vote without debate.

Representative CURTIS. As you notice, I was in the minority and I voted against it.

The CHAIRMAN. We are discovering new points of agreement every day.

Representative CURTIS. If I could only win you over on the fundamentals, I would be happy.

The CHAIRMAN. Now, one of the arguments used in support of the Keogh bill is that other people are getting these exemptions, therefore the self-employed should receive them.

Mr. HELLER. This is the operation of what I have called the most-favored-taxpayer principle. That is, you give a special benefit or preference to one taxpayer and everyone else who can make himself look like that taxpayer tries to get under the same tent.

Representative CURTIS. Would you yield on that?

The CHAIRMAN. Yes.

Representative CURTIS. That is a lot more serious in this instance. I voted against it, yes; but the dangerous thing is that it really is hurting the professions, because a professional man—lawyer, doctor, or engineer—goes to work for a corporation and they can deduct his whole retirement program; he is working for himself. That is why I worry about it rather than agreeing with the argument that is used: “If you give it to Joe why not give it to Mike?” I see a more basic economic problem on this.

Mr. HELLER. I think the point is well taken.

May I make one additional comment on this that illustrates well the rocky road that tax reform travels. I saw the report of a speech

by a prominent member of the Ways and Means Committee, namely, the author of this bill, in New York.

Perhaps nine-tenths of the report dealt with his attack on tax erosion and the necessity for tax reform, but at the end the report noted that he said we must put through the bill to provide tax-free accumulation of pension funds for the self-employed. This, of course, is the schizophrenia, the split personality we have on many things. We want smaller budgets in general but larger appropriations for our specific pet projects, and, likewise, in the tax system.

Somehow or other we have to mount the large-scale attack that will give the lower rates to taxpayers as a whole as a counterbalance to this aggregation of special benefits.

The CHAIRMAN. You touched on a point which you mentioned in your paper which I think is extremely important; namely, that if we merely try to plug these loopholes without any alteration in rates of taxation, you will have against you the groups which benefit from the present erosions plus a group of the general public which says: "We do not want additional governmental receipts."

In practice, in order for any such program to have a chance to go through, you have to have sweeteners. The sweeteners which you propose, namely, reduction in some tax rates, seem to be essential.

Mr. HELLER. And they stand on their own in terms of the contribution to economic growth.

The CHAIRMAN. Yes. What you are suggesting is that, assuming that you do not need a larger total expenditure, you would say that the added revenues derived from plugging loopholes so that people with equal incomes will pay equal taxes would be devoted to lowering the rates.

Mr. HELLER. That is right.

The CHAIRMAN. You suggest instead of the present rates of from 20 to 91 percent, they would be from 14 to 65?

Mr. HELLER. Fourteen to sixty.

The CHAIRMAN. I have felt that we should reduce the upper tax brackets, also, and that these rates are uneconomic and they are largely inoperative.

Mr. HELLER. Therefore, it does not cost much money to reduce them. There is very little tax revenue up there.

The CHAIRMAN. But if you carried this all the way down, if you carried this reduction all the way down, there is a great deal of money. For instance, what does the reduction in the rate from 20 to 14 percent involve, roughly?

Mr. HELLER. In the first bracket alone, each 1-percent reduction must cost more than a billion dollars. There is more than \$100 billion of taxable income in that first bracket. It is enormously expensive.

The CHAIRMAN. What would you do with the excise taxes? You have been discussing tax reform almost entirely, reduction of rates almost entirely in terms of individual income and the corporate income tax?

Mr. HELLER. Yes.

The CHAIRMAN. We get about a sixth of our revenue from excise taxes.

Mr. HELLER. The income tax, of course, is the dominant source. As far as excise taxes are concerned, about 60 percent, if you leave

out the motor vehicle excises, comes from liquor and tobacco. I see no particular reason for reducing those. I think the others are questionable and you should examine them carefully and probably eliminate some of them.

The CHAIRMAN. Of course, it is probably true that the changes in the excise tax rates cannot be as flexible as changes in the income tax; that is, once you remove an excise tax it is going to be very hard to reimpose it.

Now you have a provision for alteration in the income tax rate and corporation tax rate in accordance with economic conditions. In practice, I do not think that could be done with the excise tax.

Mr. HELLER. No. I was interested in the reactions several years ago of Douglas Abbott, as Finance Minister of Canada, when he came to our campus at Minnesota to talk about tax policy. He said that after experimenting with flexible excise tax rates, he had decided that it was really unwise; that it upset the conditions in the industry to an extent that he would no longer favor jiggling excise tax rates for anticyclical purposes.

The CHAIRMAN. As I understand it, the Canadian sales tax is extremely high, it runs to a rate of 10 percent.

Mr. HELLER. This is the overall manufacturer's excise tax. He was talking about some of their specific excise tax rates.

The CHAIRMAN. Thank you very much.

Do you have additional questions?

Representative CURTIS. Yes, along this other line. I cannot resist the opportunity of discussing this tax subject further and I might comment on excise taxes. I think the law of inertia really applies there. It is hard to get them in but once you get them in it is hard to get them out.

Mr. HELLER. History bears you out, Mr. Curtis.

Representative CURTIS. And I have a bill, Senator, on dividend reporting. I also agree with you in that area.

The CHAIRMAN. We are getting together so rapidly, Congressman.

Representative CURTIS. I will now, however, get to someplace where we do not.

On community property, I would like to say again we are not involved in just the tax field. We have a problem of State-Federal relations and community property laws of the State. I do not know but what the community property philosophy is right, that a wife is worth something and that she performs some economic functions. Why is she not entitled to half?

Mr. HELLER. Mr. Congressman, I have stopped beating mine.

Representative CURTIS. That is what we get into. So many people keep talking about community property benefit if we extend it to the Federal level as if it is something to help the married families when, in reality, it was to try to solve an inequity that existed between community property States and those which were not. I do not see how we could do otherwise unless we could force the other State to abandon the community property approach.

The CHAIRMAN. Congressman, may I say I would place the elimination of split income very low on my priority list of reforms.

Representative CURTIS. There is no question but what it does perform the result that everyone points out: that the higher income

bracket people gain a tremendous advantage from split income but we have a more basic philosophical problem involved.

Mr. HELLER. This is what I tried to indicate in my answer to Senator Douglas' question, that we do have to resolve the basic question of the relationship of single individuals to married couples and, of course, of the community property States to other States. But there are ways of doing this and I understand, again to refer to Mr. Joseph Pechman, that he has a proposal in his paper for the Ways and Means compendium that would meet your objection and reduce the differentials at the same time.

Representative CURTIS. My only concern has been the discrimination problem. On the dividend tax credit I must make the point that the purpose behind that was in no sense to give the investor part of the public any benefit at all. The problem faced us in Ways and Means, and we were even talking about doing it at the corporate level at one time, of what were going to do to take the burden off equity financing as opposed to debt and retained earnings.

There is no question that corporations, if they are financed through retained earnings or through debt derive terrific tax advantages over issuing new equity securities.

If we could persuade them to issue more equity securities even with the tax dividend credit we would recoup more from the investing public in taxes than we would lose through that.

The issue at Ways and Means was that we were originally going to do it at the corporat level, then we got into this problem that everyone was worried back in 1938 when we had the tax on retained earnings, undistributed profits tax, and the complications involved made everyone shy off that.

Now I would go along with the gentleman in saying that if there is another way of doing this, maybe what we need to do—well, no, that will not do it—I was going to say, tax co-ops, give them double taxation, but that is not the point. The point is I think we need to encourage more equity, floating more equity issues.

How are we going to do that?

Mr. HELLER. My point is, as I said before, leaving aside the question of how much double taxation there is or is not, if we want to give some encouragement to equity capital let us do it in an equitable way.

Representative CURTIS. How would we do it? That is the problem.

Mr. HELLER. I would come right back and say a dividend credit of 4 percent at the corporate level would distribute the benefits of this in a far more equitable way. As it is now, we remove a much higher proportion, as I say, of the double taxation burden in the higher income groups than in the lower income groups.

Representative CURTIS. I will say this. At the time this came up in 1954, I had to rely more on my colleagues and the staff than I do now. They were shouting the horrors in doing it at the corporate level. I sort of took their word for the fact that we would get into some very serious complications in other areas if we tried to do it at the corporate level. It is worth reexamining but I do get very irritated to hear the constant talk about trying to benefit the rich against the poor.

The CHAIRMAN. I am sorry to irritate my good friend.

Representative CURTIS. The point is there never was that and you can disagree with the theory but let us at least discuss the theory.

Actually, after that was passed there was a shift in equity financing. I cannot claim that really was the cause but it might have been. But a shift of a billion dollars from debt financing to equity financing goes a long way in recouping any revenue loss to the Federal Government from the dividend credit. At least, I would like anyone who proposes changes in this—in fact, I would like to see it increased—anyone who proposes exchanges, I would like them to suggest some way we can remove the burden on equity financing vis-a-vis debt financing and retained earnings.

I do not think it is good, healthy economics to continue our corporate structure where they are getting more and more based on debt financing and equity financing is narrower.

I daresay, I have always thought, that the increase in the stock market came to a large degree from the limited amount of equity securities available and the demand for them. This would encourage floating more equity issues.

One final comment on the tax side. It seems a big area that has not been mentioned to broaden the base to get the Government out of business—that is where we might run into real disagreement—and return a lot of these endeavors to a tax base, starting with TVA and other operations.

The CHAIRMAN. What about some of the military commissaries?

Representative CURTIS. Yes, sir, right along down the line. There is where we could really enlarge it. I saw some comparable figures. The ratio of private capital investment in 1929 was 9 to 1 and the figures for 1954, which were the last ones I could compute at all, show it was reduced to 5½ to 1.

There is a tremendous area where Government has gone into commercial type ventures, mainly through the military, that could easily and should be, in my judgment, in the tax base and actually would cost us less money because it would cut back the expenditures at the same time.

Mr. HELLER. Of course, one has to test each one of them in terms of whether it is appropriate to charge for them through the pricing mechanism rather than through either the tax mechanism or a combination of taxes and prices. Then, the expenditure itself has to be tested in terms of cost-benefit ratios.

Representative CURTIS. The difficulty in doing it is that you get into the military's accounting system and you are just lost. Of course, it has improved much in the past 2 or 3 years. At one time you could not tell what it cost. They now are out of the coffee roasting business, thank goodness, and that was returned to the tax base. That was a sizable thing. I remember they reduced their supply of green coffee beans from a 2-year supply to 6 months and their estimates were a \$40 million saving.

The CHAIRMAN. You have never been able to eliminate the rope manufacture in the Charlestown Navy Yard due to the Republicans from Massachusetts. They defend that ropewalk with all the vigor and strength that they have.

Representative CURTIS. If the Senator wants to be fair, I will accept the charge against Republicans in Massachusetts if he will add our mutual colleague and a man whom I enjoy very much, Mr. McCormack from Massachusetts, who equally fought for the ropewalk.

I did want to get into the expenditure side. The thing that disturbs me about your approach on the expenditure side is the emphasis on the Government doing the spending in these areas that we need to stimulate for economic growth.

I am certainly willing to consider the possibility that the Federal Government might be the one to do it but it strikes me that your presumption is almost that they should. Of course, that gets back to the question that was posed in your tight budget; you do not necessarily mean, and I agree with that, cutting down on the expenditure side. You simply mean that the amount of revenue should exceed the amount of expenditures.

But take the very area that you emphasize the most and on which I agree we should do a great deal more, education. If you examine into that, I think you can almost see, at least I can, why tampering with our basic marketplace system in going to the Federal level to solve these problems is very dangerous.

One of the things in my own community is the proliferation of school districts. We have something like 42 around the St. Louis area, some of them so small that it is ridiculous for them to remain as a school district.

MR. HELLER. But the national movement is, of course, towards consolidation.

Representative CURTIS. Yes, it is, but if you continue to solve their problems instead of putting the pressure on them for consolidation, you solve their problems by waving the wand up here with Federal money, they are going to remain separate districts and they do. This is just one thing.

This business at the college level: We are now, at Dartmouth College, going through the four quarters approach.

The CHAIRMAN. The three quarter system was started at the University of Chicago in 1892.

Representative CURTIS. Maybe we are late in doing it but at least it has been hailed as a new idea.

The CHAIRMAN. Any idea started in the Midwest in 1892 becomes a new idea in the east when adopted in 1958.

The point, of course, is the increased productivity from utilizing the college plant 12 months instead of 9 months.

The discussions now of professor-student ratios used to be a fetish, that the lower your student ratio was, the better education. I am happy to see there is comment now as to whether that is good and whether there is an error here.

The introduction of TV is another.

In other words, there is a great deal of area in education for increased productivity. The resistance of teachers to new methods like TV and so forth is something that needs comment.

MR. HELLER. May I say on that score I have spoken quite a bit to education groups lately and in so doing I have stressed that they cannot simply look without for a solution of all their problems, that they have to look within for such increases in productivity. Yet, I thoroughly agree, with the Rockefeller Report on education, "The Pursuit of Excellence" when it says "All of the problems of the schools lead us back sooner or later to one basic problem—financing."

Representative CURTIS. Yes, but where is the financing to be done?

Mr. HELLER. Well, in my opinion, as you know, the Federal Government has a role to play that grows directly out of its responsibility for economic growth and military strength. If it is true, as economic research seems to be increasingly establishing, that growth and strength rest much more on intangible capital formation in human beings than we previously thought—

Representative CURTIS. We disagree on that aspect and you will never hear me arguing on any constitutional basis that the Federal Government has not got a real vital role. I am arguing on the basis of how best we can spend our money and how best we can go ahead.

I think our society is in a unique position. I think we are the first ones to really, as I have described it, have sort of solved quantity education and in concentrating on that we have neglected quality.

Mr. HELLER. Quality is expensive.

Representative CURTIS. I know it. I was just going to add we are in a position now for the first time to go into quality which I do not think you could have done until you had achieved quantity first. Now, granted it is expensive, it is the area that I think we should be devoting our attention to. That needs not something at the national level, that requires experimentation, it requires a lot of new ideas and trying them out. It is ideas, I think, in quality actually more than equipment and cost.

One of the Food Foundation studies made a remarkable statement that actually in some ways it is lucky we did not go into a massive school construction program as some advocated because with the advent of TV, the design for the primary schools and secondary schools is obsolete already as far as utilization of TV because there is so much glass in it. They have to shut off rooms with big curtains and so forth in order to make them available. That is something of course no one could anticipate but it is an indication that I do not think we can solve problems like this by a bureaucracy or group of people saying what is good and spending the money for that.

Mr. HELLER. But it is not the case here of the Federal Government specifying the activities that should be carried out by the State and local units in education with these funds. Essentially it is a case of using the channels of our federalism to make the kind of combinations which are its particular genius, on the one hand letting the operation and control and responsibility for education lie at the State and local level, which they can do best, and let the Federal Government do what it can do best in carrying out a national responsibility, namely, raise some of the funds.

Representative CURTIS. We agree on the guidelines and I can see where we disagree, and still do, in their application to this particular problem.

I want to go on to emphasize one other aspect of the thing, again using education, although it has to do with this expenditure of Federal funds.

Already the budget is tremendous. In many respects I think we need to do a better analysis job on how we are spending what we already are to see whether or not it is a shift in expenditures that we need rather than an increase.

I regret to say I was the only person who testified before the Senate and the House this year on the draft law trying to point out what it was doing to our education in this country.

There is no question as to the impact it is having on young people, 18, 19, even those who are not drafted. It is disrupting their careers, they do not know where to go.

It is creating uncertainty. I raised the question, was the draft law essential—and I do not think it is—and I think they would have a much stronger defense without it, instead of using it as a crutch. In the education area we have almost turned over to the military this business of vocational education, duplicating our classrooms, competing for our teachers. Believe me, in my judgment they do not know how to educate even in this area. Why can we not divert those funds to our vocational educational program, which would cost us about one-tenth of what we are spending now? The Navy, during World War II, used to procure the bulldozer operators by going to the civilian economy and seeing how many bulldozer operators they needed. Even if one was fat and 40 they could use him. Now they take a kid, 18 years old, and send him to a training camp and then to a bulldozer school for 6 months. We end up with a pretty poor bulldozer operator along with all the expenses in this thing.

That is the kind of analysis I mean on these Federal expenditures. We are already in the field but let us do a little analyzing how we are spending this money. I want to spend it if that is the way to do it but I find so much what I regard as loose thinking by people not even in the field of education. Not a person testified from the whole educational field before either the House or Senate on this thing. The church people testified on a moral basis.

I was in there on an educational basis.

That is the thing that is disturbing to me. If we are going to leave these things to bureaucrats and Congressmen like myself, why, we are going to do a lousy job of spending these funds.

I would much prefer to leave it to the local communities and let them sweat with some of these problems rather than have loose funds spent there that might damage some of the institutions that are fundamentally sound.

I did not mean to make a speech but I am so disturbed about these Federal expenditures and this idea that just by turning it over to politicians you can solve the problem, particularly at the Federal level, instead of getting in, as I know you want to do, and determining what you do need to do at the Federal level. I will spend money at the Federal level. I voted for school construction. I do not know whether I was wise or not. Why? Because I figured we had a unique situation brought about by a strange set of circumstances; one, no school construction in World War II; second, there was this terrific baby crop that came along that aggravated the problem.

Another thing that very few people talk about is suburbanization. The chamber of commerce was wrong when they said we did not need classrooms. The total number in the Nation was up but we were abandoning them in the rural areas because the population shifted to the suburban areas.

Then the fourth factor was the impact of World War II inflation on the tax structure of the school districts.

Mr. HELLER. Of course, the same factor is putting the entire range of State and local finance and school finance as a whole under just tremendous pressures.

Representative CURTIS. I know they are. I thought of it from that angle. As I say, I voted for it although I was worried because I felt there were a lot of people who wanted that as just an entering wedge to get the Federal Government in.

I simply mention that to demonstrate I am not opposed to considering these Federal expenditures on any constitutional basis. I think we have every reason in the world to have a deep interest at the Federal level. But I do want a little more analysis of whether that is the best way to do it to get the results we are after.

Mr. HELLER. Just one comment, if I may, on this:

It is very hard to state one's position in this area without being misunderstood, as I have found out by the misquotation of my position by some groups.

On the one hand, the citizens at the State and local level should do everything possible to tax themselves rather than running hat in hand to the Federal Government.

Indeed, they have been doing that.

As you probably know, this year's State tax legislation represents an all-time record in tax increase, somewhere between \$1½ and \$2 billion of tax increases throughout the 50 States in one year. I mean legislated tax increases, not tax increases from a higher tax base.

On the other hand, however, one has to factor out what part of the responsibility is the Federal Government's.

Here, as I say, there is a Federal responsibility which is quite distinct from the limitations in taxable capacity of the State and local governments.

You can make the case independently of those limitations, even though the limitations do increase the urgency of Federal support.

Representative CURTIS. I appreciate your point of view and in our discussions before I hope I recognized your point of view, and my own comment is that I do not think we would have any trouble hammering these things out. We might disagree in the end on certain things but at least we are not in disagreement on fundamentals.

You see a balance and a place for the local and State and private enterprise, which I do, too, and I likewise will recognize an area for the Federal Government.

It is just to try to attempt to evaluate how we best do it.

I am not against education, I am not against humanity in my arguments against a lot of this Federal expenditure. I just feel very strongly that we are not spending the money well at this level and I do not quite see how we can.

Mr. HELLER. But granting that we could make some savings in the educational expenditures in the military, I do not think we can wait. I think the problem is so urgent in terms of this provision of the brain capacity needed to deal with both our military and our scientific problems that—

Representative CURTIS. Again I agree with you.

You remind me now that I have a fifth argument on school construction, which was that education is something you cannot temporize on.

I have testified in behalf of extending our aid program to vocational education and I have predicated it on this. Until we get the military out of this field, I do not want to hear anybody talking about cutting back the aid that we are giving to the private sector or the local vocational educational program.

The CHAIRMAN. Thank you very much, Dr. Heller.

That was very good testimony as always.

Mr. HELLER. Thank you.

(Whereupon, at 4:40 p.m., the committee adjourned until 10 a.m., Friday, October 30, 1959.)

## EMPLOYMENT, GROWTH, AND PRICE LEVELS

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FRIDAY, OCTOBER 30, 1959

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, at 10 a.m., pursuant to recess, in the Old Supreme Court chamber, the Capitol, Hon. Paul H. Douglas (chairman of the committee) presiding.

Present: Senator Douglas (presiding), and Representatives Bolling, Reuss, and Curtis.

The CHAIRMAN. We are very glad to welcome you this morning, Mr. Friedman. I want you to proceed in your own way. Your statement is not too long, so why do you not read it as is and make such comments as you wish.

### STATEMENT OF MILTON FRIEDMAN, UNIVERSITY OF CHICAGO AND NATIONAL BUREAU OF ECONOMIC RESEARCH

Mr. FRIEDMAN. Thank you, Senator Douglas.

Goals stated in terms of employment, growth, and price levels are necessarily intermediate goals deriving their significance and, indeed, their very meaning, from the ultimate ends they serve. In a free society, these are the ends of the individuals who together compose the society.

The appropriate goal for employment is the fullest opportunity for each individual to use his own resources in accordance with his own aspirations and to develop his capacities to the fullest, subject only to the condition that he not interfere with the opportunity for others to do likewise. This is vastly more difficult to achieve and to describe than full employment, defined in terms of the number of people having something called a job regardless of its adaptation to the capacities and aspirations of the jobholder. There is little problem of achieving full employment in a prison or a slave state.

The appropriate goal for growth is the fullest opportunity for each individual to devote whatever fraction of his income he wishes to providing for the future, the opportunity to accumulate capital that will enable him to raise the future standard of life of himself and his children and to promote whatever social causes and activities he holds dear.

The strivings of countless individuals for a better world will produce some rate of change in the statistical aggregate we call national income or output, but there is no way in a free society to say in advance that one or another numerical rate of change is needed or desirable, or that a higher rate of change is better than a lower.

And there is no way to compare validly the rate of change in output that occurs in response to the demands and needs of freemen with the rate of change in output that occurs in response to the orders of dictators. Whatever rate of change in the statistical aggregate results from the effort of freemen to promote their own aspirations is the right rate.

Of course, these are ideals. Their attainment is inevitably limited by human imperfections. Unfortunately, their attainment is currently limited even more by exigencies of the cold war which threaten the very existence of our free society and which require us to devote all too much of our resources to maintaining the means of national survival rather than to satisfying the aspirations of individual citizens. This very necessity enhances the importance of shaping governmental policy wisely to promote our basic ideals. Mistakes that by themselves might be easily overcome by the strength and vigor of a free society may be the final straw if added to the departures we must make to survive.

The free societies of the Western World have come closer than any others to enabling individuals to use their own resources in accordance with their own aspirations. They have done so by relying predominantly on voluntary cooperation organized through private enterprise in a free market. This is the only alternative to coordination of economic activities through the coercive power of the state that has so far been discovered.

Economic freedom has produced an unprecedented development of the capacity and the productivity of individuals. It has enabled the masses for the first time in recorded history to be freed from drudging toil and backbreaking labor.

The state has played an essential role in this process by providing a legal framework, preventing physical coercion of one man by another, and helping to keep markets free. At the same time, the state has been kept in check by the market. The market has protected political freedom by enabling economic power to offset rather than reinforce political power.

Wars aside, the chief economic threats to the preservation of a free society have come from the sharp fluctuations that have occurred from time to time in economic activity and in prices and that have threatened to tear the social fabric asunder. These partly account, of course, for this committee's concern with employment, growth, and price levels, and for the present hearings. In devising means to prevent such fluctuations, it is well to be clear about their source.

One view, which the great depression did more perhaps than any other single event to instill and reinforce, is that a private market economy is inherently unstable and has been the source of the major periods of economic instability in our history.

On this view, only a vigilant government offsetting continuously the vagaries of the private economy, has prevented or can prevent such periods of instability. This view seems to me fundamentally mistaken.

As I read the historical record, including the record of the great depression, I reach almost the opposite conclusion. The major inflations and depressions in the United States have in almost every instance been produced, or at the very least, strongly reinforced, by

the failure of government to discharge properly the tasks assigned to it, in particular the task of providing a stable monetary framework. Perhaps the most remarkable feature of the record is the adaptability and flexibility that the private economy has shown under such extreme provocation.

This conclusion is almost self-evident for the major inflations of our history. These have all been associated with war and were quite clearly produced by use of the printing press or its equivalent to finance governmental expenditures.

But it can also, I believe, be shown to be in accord with the major contractions in the history of our country, from the contraction of 1839 to 1843 which was greatly exacerbated by the aftermath of the bank war; to the contraction of 1873 to 1879, which was intensified by the deflation incidental to creating the monetary conditions for resumption of gold payments at pre-Civil War parity; to the unsettled conditions of the 1890's, which owed much to agitation for free silver and uncertainty whether the Government could maintain the gold standard; to the major price contraction after the post-World War I inflation, resulting from the inexperience of the Federal Reserve System in handling its new tools; to the great depression, in which a system established in large measure to prevent a banking panic permitted the most severe and widespread panic in our history to occur and by its actions helped to produce a decline of one-third in the stock of money, although it had ample power to prevent either development; to the severe contraction of 1937 to 1938, when a collapse in investment in reaction to unwise and erratic governmental policies was reinforced by deflationary action by the monetary authorities.

Our monetary performance has been far better in the postwar period. But even in that period it has probably on balance contributed to instability. And this is almost surely true of the Government's fiscal performance.

The most unstable major sector of the national income has in the postwar period been Government expenditures. Fluctuations in expenditures have arisen partly from the changing needs of defense. But they have also arisen from the response to recurrent recessions. Increases in governmental expenditures designed to offset the recessions have taken so much time that they have come into play in important measure only after the economic tide has turned and recovery has been resumed, thus reinforcing rather than offsetting cyclical fluctuations.

What is true about economic fluctuations is true also, I believe, about growth. While a stable legal framework and preservation of free markets are essential prerequisites for healthy economic growth, and while government has done much in these respects to promote and facilitate growth, it has taken other measures that have tended to inhibit growth. These include not only the promotion of instability just considered, but also such interferences with the effective operation of the free market as price fixing, subsidies to particular activities, tariffs and quotas affecting foreign trade, and taxes seriously distorting economic incentives.

I cannot hope to demonstrate these propositions in the time available. I have stated them in order to make clear the point of view that underlies the constructive suggestions I shall offer.

If my reading of history is right, it means that the central task for government at the present time is not to construct a highly sensitive set of instruments that can continuously offset instability introduced by other factors or that can facilitate economic growth, but rather to mend its own ways, to cease from being itself a primary source of instability and a primary obstacle to the effective utilization of resources by individuals.

What we urgently "need is not a skilled [governmental] driver of the economic vehicle continuously turning the steering wheel to adjust to the unexpected irregularities of the route but some means of keeping the [governmental] passenger who is in the back seat as ballast from occasionally leaning over and giving the steering wheel a jerk that threatens to send the car off the road" (quoted from my forthcoming "Agenda for Monetary Reform," the Moorehouse F. X. Millar lectures given at Fordham University to be published by Fordham University Press). The words "governmental" in brackets replace the word "monetary" in the original.

I have tried to make my suggestions specific and to keep my comments on them brief in order to reserve as much time as possible for points that may be of special interest to the committee. My suggestions range over a wide area including monetary policy, debt management, fiscal policy, and certain aspects of international trade policy.

I have omitted other areas, in particular labor policy and antitrust policy, not because I regard them as unimportant but because I am not competent to discuss them in detail.

With respect to monetary policy and debt management, a fuller exposition of my suggestions is contained in a series of lectures I have just completed at Fordham University and that will be available in printed form in the near future.

I turn to my concrete suggestions.

#### A. MONETARY POLICY

1. Replace the present vague guides to the monetary authorities by the instruction that they increase the stock of money in the hands of the public at a fixed rate specified in advance and that they not alter the rate in response to changes in business conditions. The rate of growth chosen should be designed to produce an approximately constant level of prices over the long run.

Evidence to date suggests that this would require a rate of increase somewhere between 3 and 5 percent per year, if the money stock is defined as including currency in the hands of the public and demand and time deposits in commercial banks. This rule would avoid the monetary uncertainties that have plagued us in the past, provide a stable monetary background for short-run adjustments, and assure long-run stability in the purchasing power of the dollar.

2. Streamline present Federal Reserve powers by eliminating obsolete and unnecessary powers that interfere with the ability of the System to control the stock of money and that introduce unnecessary instability. The major changes required are the elimination of re-discounting and of the power to vary reserve requirements. These are highly defective tools of monetary management. Their elimination would leave open-market operations as the major tool of monetary management.

3. Alter our gold policy by abandoning the fiction that gold has an essential monetary role. A thorough-going 100 percent gold standard would have much to recommend it. Our present gold standard, or any gold standard currently within the realm of possibility, offers few of the advantages while exaggerating the disadvantages of a full gold standard.

Elimination of disturbances arising from gold requires repeal of the present 25 percent gold reserve requirement for Federal Reserve notes and deposits, and elimination of the present commitment on the part of the Treasury to buy and sell gold at \$35 an ounce. The subsequent treatment of the existing gold stock is a matter of subsidiary importance.

At present, the fixed price of gold also fixes the rate of exchange between the dollar and other currencies. No substitute means of fixing rates of exchange should be adopted. Rather, the rates of exchange should be permitted to be determined on free markets by private transactions, as rates of exchange for the Canadian dollar are now determined.

I have examined "The Case for Flexible Exchange Rates," in some detail in an article by that title which appears in my "Essays in Positive Economics" (Chicago: University of Chicago Press, 1953), pp. 157-203).

4. Reform our present banking arrangements. The most satisfactory reform would be to separate the depositary from the lending and investing activities of banks by requiring depositary institutions to have reserves of 100 percent in the form of Federal Reserve notes and deposits. If this were done, it would be desirable to pay interest on the reserves, to remove any limitations on the interest rates commercial banks may pay to depositors, to permit free entry into the depositary banking business, and to eliminate present government controls over lending and investing activities.

This reform would eliminate instability arising out of shifts in the fraction of its money the public wishes to hold in the form of currency and in the fraction of their assets banks want to hold in the form of cash or Federal Reserve deposits. It would establish a closer link between Federal Reserve action and the money supply.

A less far-reaching yet desirable reform would be to make member bank reserve requirements uniform for all classes of banks and all deposits, whether demand or time; to put into effect the recently enacted power to treat vault cash as satisfying reserve requirements; to pay interest on reserves held in the form of Federal Reserve deposits; to remove the present prohibition of the payment of interest on demand deposits, and to repeal the present power of monetary authorities to limit the interest payable on time deposits. The change in reserve requirements should be made in such a way that the net effect is neither expansionary nor contractionary.

#### B. DEBT MANAGEMENT

1. Debt management and open market operations are essentially the same monetary tool, differentiated now only by the agency that wields it. The technically most efficient arrangement to coordinate debt management and open market operations would be to assign re-

sponsibility for debt management to the Federal Reserve. Whether this is done or not, there remains the question of substance.

For simplicity, the following substantive recommendations assume present administrative arrangements:

2. Restrict marketable issues to, at most, two kinds, say a 90-day bill or its equivalent for seasonal needs, and an intermediate- or long-term security, say an 8- or 10-year maturity when issued.

Float such securities at regular and close intervals, preferably weekly, if not biweekly or monthly, in amounts announced long in advance and varying from date to date as smoothly as possible.

These two steps would eliminate the present bewildering array of securities differing in maturity and terms and the present bunching or refinancing and issuance of securities at a few dates which render debt management operations a potent source of instability.

3. Sell all securities exclusively by auction so the market can set the price. The method of auction should, however, differ from the method now used for bills under which purchasers submit a single bid for a specified quantity and pay the amount bid if their offer is accepted. The present method involves payment of different prices by different purchasers, which tends to limit the market to specialists and to establish a strong incentive for collusion among bidders.

A preferable alternative is to ask purchasers to specify the amounts they are willing to buy at a schedule of prices, determine a single price so as to clear the market, and charge all purchasers that single price. An equivalent alternative, of course, would be to fix the price and conduct the auction in terms of the coupon rate, again settling on a single coupon for all purchasers.

The CHAIRMAN. Mr. Friedman, I wonder if you would be willing to expand upon this? In other words, you ask each purchaser to submit a demand schedule?

Mr. FRIEDMAN. That is right.

The CHAIRMAN. Instead of a single bid?

Mr. FRIEDMAN. That is right. The same result can also be achieved through single bids if multiple bids are permitted.

A purchaser is asked to submit a bid in the following form: "I am willing to buy \$100,000 worth of bonds at any price below a certain level, say, below 99." Then he submits another bid, saying, "I am willing to buy \$50,000 at any price below 98"; if he wants to, he can submit still other bids at different prices.

This is the equivalent of submitting a demand schedule, but it might be regarded as somewhat simpler because it is much closer to what is now done in security markets.

When you give an order to your broker, you say buy at any price of such and such or below, or sell at any price of such and such or above, and you can do exactly the same thing here. This device would eliminate the present situation under which nobody dares go into the market unless he is clever enough and smart enough and has enough connections to figure out where the auction is going to end, because if he bids 98 and the auction ends up at 96, he is stuck.

On the other hand, under an arrangement of the kind suggested, if he was willing to buy a certain amount at any price up to 98 and, if the price turned out to be 97, that would be fine; he would get the bonds at 97 and not experience any loss. He doesn't have to go around

and try to figure out what other people are going to bid or try to guess where the market is going to come out.

The CHAIRMAN. I notice that you say the present system not only tends to limit the market to specialists, but to establish a strong incentive for collusion among bidders.

Mr. FRIEDMAN. Yes, sir.

The CHAIRMAN. I wonder if you would be willing to develop that a bit?

Mr. FRIEDMAN. Yes; for the same reason. If you pay the price that you bid, then it really makes a great deal of difference that you should bid very close to the final price at which the auction is going to be settled.

The only way to assure that you do so is to get together with other people and arrange your bids. As you may know, a similar method to the one we now use has been used in the British bill market and there you have explicit collusion. My understanding is that a single syndicate is formed which gets together and puts in a single bid.

I have no direct evidence on collusion in the United States, but I have examined the figures reported in the newspapers week by week on the minimum and maximum accepted bids under the auctions and I find it literally incredible that those bids are the result of wholly independent bidding by independent purchasers.

The CHAIRMAN. I wonder if you would be willing to submit a memorandum on that? Would that be too much trouble?

Mr. FRIEDMAN. On this technique of bidding?

The CHAIRMAN. On the degree of spread between minimum and maximum bids.

Mr. FRIEDMAN. Yes.

(The information referred to follows:)

*Minimum and maximum accepted bids on offerings of 91-day Treasury bills, April to June 1959*

Issue date 1959	Accepted prices			Equivalent accepted yields		
	Maximum	Minimum	Range (maximum-minimum)	Maximum	Minimum	Range (maximum-minimum),
Apr. 2.....	99.292	99.265	0.027	2.801	2.908	0.107
Apr. 9.....	99.260	99.251	.009	2.927	2.963	.036
Apr. 16.....	99.255	99.219	.034	2.947	3.090	.143
Apr. 23.....	99.229	99.214	.015	3.050	3.109	.059
Apr. 30.....	99.292	99.283	.009	2.801	2.836	.035
May 7.....	99.267	99.256	.011	2.900	2.943	.043
May 14.....	99.317	99.310	.007	2.702	2.730	.028
May 21.....	99.282	99.270	.012	2.840	2.888	.048
May 28.....	99.282	99.270	.012	2.840	2.888	.048
June 4.....	99.210	99.200	.010	3.125	3.165	.040
June 11.....	99.200	99.162	.038	3.165	3.315	.050
June 18.....	99.180	99.170	.010	3.244	3.284	.040
June 25.....	99.180	99.166	.014	3.244	3.299	.055

Source: Treasury Bulletin, August 1959, table 2, p. 33.

NOTE.—By comparison, bid and ask quotations on already issued securities of comparable maturity, as reported in daily papers in terms of yields, typically differ from one another by something like 0.04 to 0.10. Day-to-day variations in bid and ask quotations, even when the market is highly stable and untroubled often exceed 0.04.

Mr. FRIEDMAN. What one observes is that the minimum and maximum bids each week are very close together and much closer together

than the difference from week to week, so that in many cases there is no overlap at all from one week to the next in bids.

If people were bidding individually and independently, it is very hard for me to believe that they would each week be able to guess the outcome so closely that the highest bid accepted would in some cases be below the lowest bid accepted the week before, and in other cases the lowest bid accepted would be above the highest of the week before, and this is why it seems to me there is indirect evidence of something other than independent bidding.

I don't mean to be criticizing anybody for getting together under the present arrangements. If the Government sets up an auction technique in such a way as to make it extremely costly for anybody who is out of line, then it is to be expected that individuals participating in the market will take measures to protect themselves, and I don't mean to be criticizing anybody for doing so.

The CHAIRMAN. In other words, you are saying that the securities sold should be sold to all at the same price?

Mr. FRIEDMAN. Absolutely.

The CHAIRMAN. But this should be done under the auction system?

Mr. FRIEDMAN. That is right, yes.

So far as I can see, the adoption of this alternative technique would meet every objection to the sale of long-term securities at auction that was offered by the Treasury Department to this committee at the hearings on July 24, 1959. Every one of the objections derived from the assumption that the particular method of auctioning now used for bills would also be used for long-term securities.

Adoption of this recommendation would require elimination of the present legal ceiling on the rate of interest that the Treasury may pay on longer term securities. This limitation should be removed in any event.

#### C. FISCAL ARRANGEMENTS

1. To promote economic stability, it is desirable to avoid erratic and sudden changes in governmental expenditure programs so far as possible, and in particular, in response to changes in economic conditions.

With a stable program of expenditures and a stable tax structure, changes in economic conditions automatically produce shifts in the governmental budget toward a surplus in time of expansion and a deficit in time of contraction. This built-in flexibility is all to the good. Attempts to go still further have in practice had the effect of fostering rather than curing instability.

2. To promote economic productivity and growth, a thorough reform of our tax structure is required. The present structure distorts incentives and discourages effort, and thereby leads to much waste, and it does so in ways that produce glaring inequities. The major reforms that seem to me desirable are:

The ultimate elimination of the corporation income tax. Instead, corporations should be required to attribute their undistributed income to stockholders and stockholders should be required to include their pro rata share of undistributed income in income subject to the individual income tax.

The CHAIRMAN. You mean that information would be furnished to them by the corporation?

Mr. FRIEDMAN. Yes.

When the corporation sends a stockholder a slip saying, "Your dividend payments this year have been \$3," it would say, in addition, "your share of undistributed earnings is \$2.26." This could be on the same information slip which the corporations now send to the stockholders.

The CHAIRMAN. That is very appealing.

Of course, it would be open to the objection that you are taxing people on income which they have not yet received.

Mr. FRIEDMAN. If people prefer to get it distributed, they can buy stocks in corporations that pay out their earnings, so this is a question of whether the stockholders run the corporation. I assume they do, and we ought to have arrangements under which they do.

The CHAIRMAN. A very odd assumption.

Mr. FRIEDMAN. The stockholders have one ultimate recourse. They can always sell their stock. This is an effective device to eliminate any discrepancy between the interests of stockholders and the management since it gives an incentive for people who specialize in such matters to buy up the stock and change management, as in this city with the Capital Transit Co.

The CHAIRMAN. As one, though, who followed Mr. Wolfson very closely for a number of years, I think, while we have effected some reforms, that the stockholders are still a voice crying in the wilderness, so that the diffusion of stockholders is such that in practice most of the large corporations are run by management. If you want to take one example take Bethlehem Steel, where I think all the members of the board of directors are salaried managers of the company.

Mr. FRIEDMAN. The immediate running of the corporation is, of course, by the management.

My only point is that I think there is a market mechanism which sees to it that managers have an appropriate incentive to act in a way which is in the interest of the stockholders. It does not operate effectively or precisely, as no other arrangement does, but the fact that people always have the right to sell their stock is a very potent and effective instrument for preventing any wide deviations between the interests of ownership and management.

(b) Reform of the individual income tax to reduce drastically the nominal rates imposed in the high brackets and to widen greatly the tax base. These high nominal rates have been responsible for the proliferation of provisions reducing the amount of income subjected to them. This has mitigated the adverse effect of the rates on incentive but only at the cost of producing a misdirection of resources to take advantage of the provisions, and a largely arbitrary distribution of the tax burden, with persons in essentially the same economic position paying vastly different taxes, depending on their accidental capacity to take advantage of special provisions.

Taxes finally paid would be both more equitably levied and less disturbing to efficiency if rates were drastically lowered and the base expanded and changed. The most important changes required in the base are the elimination of percentage depletion on oil and other raw materials; the elimination of tax exemption of interest on State and local securities; the coordination of income, estate, and gift taxes; and provision for averaging income over a period, which would also permit a more satisfactory treatment of capital gains.

## D. INTERNATIONAL TRADE POLICY

1. To permit a more efficient utilization of our resources, and thereby to promote economic growth in accordance with the preferences of our citizens, we should move toward the complete elimination of restrictions on international trade. Recent years have seen a growing use of direct physical limitations on trade, such as import quotas. Such physical limitations are even worse than tariff barriers, since they are equivalent to prohibitive tariffs on any additional amounts, involve arbitrary subsidies to persons or enterprises assigned quotas, and have generally been imposed or removed by administrative discretion rather than legislative action. A recent important example is the imposition of restrictions on oil imports. The most urgently needed step currently is to erect effective legislative barriers against the use of such direct physical impediments to trade.

2. One major factor that accounts for the use of direct limitations is our agricultural policy, which has been perhaps the single most important source of increased impediments to international trade. The attempt to maintain domestic prices at a level above world prices has enforced segregation of markets, and has led to quotas on imports and the sale of exports at prices below internal prices—a process widely called dumping when done by private parties. In my view, no governmental policy has done so much to undermine our attempt to promote a wider use of the market mechanism in conducting the economic activities of the world as our agricultural policy. In the long run, this external effect may turn out to be even more harmful than the waste of our domestic resources produced by our agricultural policies. The best way to resolve this problem would be to eliminate agricultural price supports entirely and to sell off Government stocks at a steady rate over, say the next 5 years.

3. With respect to tariffs, we should unilaterally move toward their reduction and eventual elimination by providing in advance for a series of regular annual reductions spread over, say, the next 10 years. There are few measures we could take that would do so much at one and the same time to expand the effective freedom of our own citizens and to stimulate foreign countries, particularly the less developed, to rely more heavily on free-market techniques in organizing their own economies.

I recognize that these suggestions will appear at once drastic and negative. They would require far-reaching changes in present arrangements and seriously disturb important vested interests. Yet they offer no easy answers to hard problems, no devices for Government to adopt that can guarantee either perfect stability or rapid growth.

Drastic measures are certainly not politically feasible. But a clear sense of the direction in which we want to move is necessary to guide the small steps that are feasible.

If the suggestions appear negative, it is because I have been concentrating on the role of Government. In a free society, the positive source of economic prosperity is to be found not in the plans of the few but in the voluntary strivings of the many. Government serves best when it fosters those strivings.

Thank you.

The CHAIRMAN. Thank you very much.

If I may turn to some points which you make. As you doubtless know, during July and August there was quite a heated discussion between Congressman Reuss and I on the one side and Chairman of the Federal Reserve Board, William McChesney Martin, on the other.

We urged that any expansion of the total money supply should be effected primarily through open-market operations, and he was very insistent that the increase should primarily come, and we thought that he was really taking the position should exclusively come, through lowering of reserve requirements which he would initiate in the periods of recession. He would allow the rate to move to a lower level.

Now, I think I know what your answer is going to be from the points which you make, but I would like a direct reply on this point.

Mr. FRIEDMAN. If we have a fractional reserve system, as we do, I think reserves should be fixed and kept unchanged and that the Reserve System should have no power to move them up or down.

In consequence, I quite agree that under present arrangements an increase in the supply of money should be obtained not by lowering reserve requirements but by open-market operations.

The CHAIRMAN. And this would have the incidental effect of adding to the earnings of the Federal Reserve System and hence indirectly to the earnings of the Government?

Mr. FRIEDMAN. It would under present arrangements, but I think this is not a desirable feature of it. I want to do the same thing, but for a rather different reason.

One point I mentioned in my comments was the desirability of having a system under which interest would be paid on reserves.

Under present arrangements, the Government essentially borrows from the public in two different ways. It borrows by securities called bonds, or notes, or bills, or something which bears an interest coupon and which pays interest. It also borrows in the non-interest-bearing form of Treasury currency and Federal Reserve notes and of Federal Reserve deposits. In these remarks I am treating the Federal Reserve System as part of the Government. It should be treated as a part of the Government and not as a private institution.

It seems to me that borrowing in noninterest form is undesirable and inappropriate. Why should some citizens who lend their resources to the Government be paid for doing so and other citizens do it for nothing?

The way to resolve this problem would be to treat all Government debt alike so far as you can. You cannot with respect to Treasury currency, Federal Reserve notes, and coins. It is not feasible to pay interest on these, although at various times in the history of this country we have paid interest on hand-to-hand currency.

However, with respect to Federal Reserve deposits, it seems to me that it would be desirable to pay interest on those deposits at the same rate as we have to pay on other short-term borrowing.

In order for this reform to be desirable, it would be necessary to accompany it by another step. At present, member banks are prohibited from paying interest on demand deposits. If you paid interest on reserve balances without eliminating this prohibition, you would simply be giving a subsidy to banks, and that is not my aim.

I think the payment of interest on reserve deposits ought to be accompanied by an elimination of the present prohibition of the payment of interest on demand deposits and of the present power of monetary authorities to limit the interest that may be paid on time deposits.

The CHAIRMAN. That is, you do not think that the present 3-percent limit on the interest rate which the banks can pay on time deposits to individuals should be maintained?

Mr. FRIEDMAN. No; I do not.

The CHAIRMAN. I have been somewhat struck with the fact that while the banks are very anxious to have the 4¼-percent limitation on long-term Government securities removed, I have not noticed any great popular demand from the banking community that there be a similar removal of the ceiling on the interest rate on time deposits.

Mr. FRIEDMAN. Yes; I agree, and I would remove both. I think the 4¼-percent limitation should be removed. I think that the 3-percent limitation should be removed. This is a form of governmental price fixing. It has no place and no function to perform in our society.

The CHAIRMAN. Have you taken this up with the members of the American Bankers Association?

Mr. FRIEDMAN. I speak for myself, Senator Douglas.

The CHAIRMAN. You mentioned another point on which I have had a running argument with the Federal Reserve for a number of years. That is the elimination of rediscounting. It has been so frequently objected that the open market operations of the Federal Reserve can be negatived through the rediscount process. I have urged the closing down of the rediscount window. This has met with violent opposition from the Federal Reserve System. I notice you favor this.

Mr. FRIEDMAN. Yes.

The CHAIRMAN. I wonder if you could develop this. It is so reassuring to have my economic and fiscal views upheld by so eminent an economic authority that I am basking in the light of your approval.

Mr. FRIEDMAN. I think it is important in discussing rediscounting to recognize its original source and why it has lost the function it originally had.

Rediscounting was originally adopted under the view that the Federal Reserve System's major function was to be a lender of last resort and to avoid banking panics. This was the intention of rediscounting when it was enacted in 1914. At that time it was thought that the quantity of money was going to be dominated by the gold standard, that rediscounting was going to be an instrument that would be used only occasionally when you had a banking panic and only to meet an immediate liquidity crisis. It was not at all intended that it should serve as a standard, regular means of affecting the quantity of money.

The need for rediscounting in this sense arose in the 1929-33 episode, and unfortunately and, I think, unnecessarily, the powers of the Reserve System were not properly used, and we experienced a banking panic of the kind which the System was set up mainly to prevent. When it came it was much worse than anything that we had before.

As a consequence of that banking panic, we established the Federal Deposit Insurance Corporation. The Federal Deposit Insurance Corporation has accomplished the objective for which rediscounting was originally intended by a very different route.

Rediscounting was intended to provide liquidity after a run on banks had started. It was intended to enable banks that were being subjected to demands from their depositors for currency to be able to liquefy their assets, as it were, to convert them into currency.

The Federal Deposit Insurance Corporation does not act as a lender of last resort in any important sense. It eliminated the problem in a different way, by establishing confidence that banks would be able to meet their deposit liabilities, or that, at any rate, depositors would not suffer losses even if the bank failed.

Federal deposit insurance in this way eliminated the source of bank runs. If you look at the figures on failures since 1934, there is a drastic difference. Banks do not fail any more. There are still bad banks. They still have assets that go sour, but they do not fail any more. They are now merged with good banks when this happens or their assets are taken over by the Federal Deposit Insurance Corporation, so that the number of bank failures has become negligible.

The amount of losses imposed on depositors has also become negligible and there is no longer any need for rediscounting to serve this particular purpose. Instead, rediscounting serves other purposes which seem to me very much less essential and, indeed, to be a source of trouble.

Now, why is rediscounting a source of trouble? It is a source of trouble in the first place because the initiative to rediscount or not comes from member banks and this means that the Reserve System does not know how much money it is going to be creating through the discount window. It does not know it will be able to do what it wants to do. It can set a price, but it cannot set an amount. You have a choice in any market. If you set the price, then you take whatever amount follows.

The Federal Reserve sets a rediscount rate. Given this rediscount rate, member banks borrow or not as they want. This determines what happens to the stock of money, and the Reserve System is effectively impotent to determine the stock of money. It could determine the stock of money much more closely if it relied only on open market operations.

Secondly, I think a much more important defect of the rediscount rate is that it leads the Reserve System to do things it does not intend to do. There is a general tendency to think of tightness or ease in terms of the level of the rediscount rate, to think that if the discount rate is raised, that means a "tighter" policy, and if it is lowered, that means a "easier" policy. This is a mistake. What is important is not the absolute level of the rediscount rate but its relationship to market rates.

This is exactly the same point that underlay the fallacy about the bond support program after World War II. The bond support program fallacy took for granted that a fixed rate of interest meant a neutral policy, and it does not.

If you keep the Federal Reserve's rate of interest—the discount rate—fixed when you are having a boom in the market, this is equiva-

lent to an easing of policy, because it means when the market is booming, you will have a much greater amount of discounting at that rate than you otherwise would have or than you did before.

The CHAIRMAN. I wonder if for the sake of the record you would cence which is in a sense an aside.

I am very much older than you are and I think you were not born before the presidential campaign of 1908, but I remember that campaign in great detail.

The new State of Oklahoma had introduced a program known as "the guarantee of bank deposits," which was bitterly attacked by the banking fraternity of the country. The Democratic candidate for the presidency, Mr. William Jennings Bryan, advocated the guaranteed bank deposits upon a national scale and met with a very adverse reception from the banking fraternity and from the financial journals which denounced this as a wild idea.

Now, your endorsement of the beneficent effect of the guarantee of bank deposits would seem to indicate that in this case the programs of Oklahoma and Nebraska were much wiser than those of Wall Street.

Mr. FRIEDMAN. Senator Douglas, I would like to comment on that before I go back to rediscounting, because I do not really mean to be endorsing Federal deposit insurance.

I think that the Federal insurance of bank deposits in the circumstances of the time and the period performed a signal service. I have no doubt that it has been a major factor in promoting stability of our economy. At the same time, I think it was the wrong way to achieve this result.

I have recommended in my statement 100 percent reserves precisely because that seems to me the right way to do it. If we were to adopt 100 percent reserve arrangements it would be possible to dispense with Federal deposit insurance.

Representative CURTIS. And rediscounting, too?

Mr. FRIEDMAN. These are independent things.

You could eliminate rediscounting without changing reserve requirements or Federal deposit insurance. You could adopt 100 percent reserves without eliminating rediscounting. They are independent in that sense. I think they are all desirable, but they are separable items in the sense that you could do each one separately.

The CHAIRMAN. I wonder if you would permit historical reminiscence to develop the content of the 100 percent reserves system, because this emerged in the early thirties and has somewhat emerged in the forties and fifties.

Mr. FRIEDMAN. The essence of the 100 percent reserves system is to do for deposits what the National Banking Act of the Civil War did for currency. That is essentially, in a single sentence, the basic idea.

It used to be that banks were free to issue bank notes, circulating currency.

Through the National Banking Act, and through a tax imposed on State bank notes, our currency was made essentially a governmental liability and not a private liability.

Although national banks could print the notes and have their name on them, they had to deposit with the Federal Government reserves be endorsing Federal deposit insurance. of essentially more than a hundred percent.

The CHAIRMAN. And that enabled Salmon P. Chase, the Civil War Secretary of the Treasury, to float large quantities of Government bonds which otherwise would not have been taken up by the private banking groups, is that not true?

Mr. FRIEDMAN. No, I do not believe it is, Senator Douglas, because the dates are a little bit wrong. That is one of the reasons he wanted to do it, but the act actually had most of its effect after the Civil War peak spending had passed.

The CHAIRMAN. I know. It assisted in the financing of the Civil War, did it not?

Mr. FRIEDMAN. My recollection is that it did only to a limited extent because most of the effects came after the Civil War was over, although it was intended to affect the Civil War.

However, I am not absolutely certain on the details.

My recollection is that the original act was passed during the Civil War, but that there was a defect in the way it was set up so that banks did not have much of an incentive to take advantage of it and that it was then revised and that the actual issue of any substantial amount of national bank notes came at the very end of or after the Civil War, but I may be wrong on the details of that.

The CHAIRMAN. This is a very interesting point in the financial history of the United States. It has great bearing on policy. I have taken, however, more time than I should.

Mr. Curtis?

Representative CURTIS. There are so many areas in which we might interrogate.

I certainly appreciate the paper and recommendations very much.

Just on this historical aspect, first, if I may, you mentioned the point of the financing of the previous wars. I would just like to find out if we had any improvement. I have heard the theory advanced that although we did finance the Civil War in the manner described, we did a better job in World War I, and we did a better job in World War I than World War II.

Do you believe that we have had some improvements in the methods of financing our wars?

Mr. FRIEDMAN. We have had a change. As a matter of fact, despite the general feeling, my own view is that we did a better job in the Civil War than in either World War I or World War II.

What happens is that people's attitudes toward things depend on their experience.

At the time of the Civil War everybody was upset about the amount of inflation involved, and about the greenback issue, and so on.

Now when we look back at it in terms of later experience, I think that the Civil War performance was a remarkable performance. That was a war which involved a drain upon the resources of the North that undoubtedly was much greater than the drain imposed by World War I, and yet the price rise was no larger.

One interesting thing about the three wars, Mr. Curtis, is that the price rise has been almost the same in all three. You have just about a doubling of prices.

Representative CURTIS. Yes.

Mr. FRIEDMAN. I once made a rather detailed comparison of the three wars from this point of view and it is on this study that my present comments are based.

In order to examine how well we financed a war, one has to look at what the problem was.

The First World War raised a much smaller problem than either the Civil War or the Second World War. Yet, we had as large a price increase, so I really think that the First World War's performance was the worst of the three.

When you compare the Civil War and World War II, it is a little closer thing.

On the whole, I am inclined to believe that the Civil War comes out ahead, but it is not much of a difference.

Representative CURTIS. I certainly appreciate this. That is going to revise my thinking. I am going to have to do some checking there.

You have spoken of monetary policy, and I do not know anything about monetary policy, to be very honest, and I am trying to get the fundamentals fixed in my own mind, but I certainly have a predilection to believe that what you have said about the irrationality of our monetary policy, and certainly debt management, which I am a little more familiar with, leaves a lot to be done.

In spite of the fluctuations, say, and the method in which we have handled increased money supply, in your judgment how have we been doing actually as far as increasing the stock of money in relation to our economic growth? Has the net result been all right, do you think, or not?

Mr. FRIEDMAN. Over which period?

Representative CURTIS. Since 1946, I was taking.

Mr. FRIEDMAN. From 1946 to date, we have come closer to following the rule I suggest on page 6 than at any other time in our history and the results have been rather good, on the whole. If you take the period from about 1947 rather than 1946, the rate of change in the stock of money has been relatively steady. There have been only mild movements in either direction and the average rate of increase has been about the right rate of increase.

Representative CURTIS. Do you think we have come about that accidentally, or do you think that it has been a rational result?

Mr. FRIEDMAN. It is not accidental. I think it has been a result of a combination of factors. It has been a result of a greatly heightened awareness of the problems and the difficulties of stabilization and thus a tendency on the part of everybody, and particularly of the monetary authorities, to do relatively little. That has been a good thing. They have avoided sharp movements in either direction in their actions, not in their talk, which are two different things.

I think we have to distinguish sharply between the descriptions that are published of monetary policy and what monetary policy actually is. Actual policy has tended to refrain from sharp and radical movements in either direction and that has been a good thing.

I think one of the factors, interestingly enough, that has improved monetary policy in the postwar period has been the availability of some numbers. Until the 1940's we never had any figures on the stock of money on a monthly basis and, indeed, not until the 1950's did the Federal Reserve Board ever publish any seasonally adjusted figures of the money supply.

Prior to that date, although they published seasonally adjusted figures of everything you can think of, they had not done so for the money supply.

I think the fact that they had these numbers, and could therefore see more closely what they were doing, was one factor that promoted performance, and I think the other factor has been this unwillingness to go sharply in either direction.

Representative CURTIS. I certainly am interested deeply in your recommendations and how you think we might set this up more rationally.

I am going to try to do some real thinking on this.

Let me ask this. Do you feel that the present balance of the monetary-fiscal mix is desirable and in that context what would be the effects of a shift by the Government to tighter fiscal policy?

I presume a tighter fiscal policy would bring about an easier monetary policy.

Mr. FRIEDMAN. I am not sure I understand exactly what you mean by the mix. I take it what you are referring to is whether we ought to impose higher taxes relative to our expenditures or lower the expenditures in relation to our taxes in order to permit a lower interest rate to develop.

Representative CURTIS. Or taking the result, whether we should be financing more deficits which would be the question of a balance between expenditures, although I am interested too as to whether or not we actually could increase or should increase the amount of Federal expenditures, which, of course, would mean, if you were to have a tighter fiscal policy, you would have to increase taxes rather than lower them.

Mr. FRIEDMAN. That is right. So I take it your question is ought we to aim at a higher level of taxes in relation to expenditures than we now have.

Representative CURTIS. That is correct; yes.

Mr. FRIEDMAN. I think that is a very difficult question to answer. I do not really think there is any easy way to say what is the right combination. Personally, I have been inclined to the belief that our present combination is not far from reasonably satisfactory, that a reasonable combination is to aim at a rough budget balance on the average over a period of time—by that I mean allowing for the automatic movements during a cycle—and that there is not any strong case to be made at present for a higher level of taxes in relation to expenditures.

I would like to see both taxes and expenditures reduced, of course, as we all would, but the question you are raising is one of their relationship to one another.

I do not myself see any great problems arising from an allegedly tight monetary policy. We have not had a tight monetary policy. If one looks at what actually has been happening to the stock of money, in the last year or so it has been growing at about the right rate, about 4 percent a year.

Assertions that monetary policy is tight arise out of the belief that the rate of interest is now higher than it has been for 30 years.

However, whether this is so or not depends on which rate of interest you look at. If one looks at the nominal rate of interest on bonds, it is the highest it has been in 30 years. If one looks at the yield on equities, which is also a rate of interest, it is probably the lowest it has been in 30 years.

The reason for this difference, it seems to me, is not to be found in the general relation between fiscal policy and monetary policy. It is not in the mix. The reason for this discrepancy is in the changing attitudes of the public involving a shift toward a widespread belief that prices are going to rise.

Representative CURTIS. Yes. One final question because I think I am a little over my time.

In this discussion of monetary supply where do you place this growing consumer credit? I am primarily concerned with the consumer credit. I have tried to pose in my own thinking that this is a phenomenon that has come in, and a desirable one, I think, socially, to spread the purchasing power of an individual over the lifetime instead of when he happens to get it and that as consumer credit matures, it is going to reach a certain percentage, but we are still in the process of continued rapid expansion.

However, do you regard this growing consumer credit as a serious difficulty in this area of monetary policy?

Mr. FRIEDMAN. No, I do not. I think that one difficulty in this area is the tendency to shift back and forth between what you might call the monetary effects of monetary policy and the credit effects.

I do not think we ought to be concerned with the allocation of credit. That is a problem that the market ought to handle. If people want to borrow in the form of consumer credit that is their business. If people do not want to borrow, that is their business.

The capital market is a pretty efficient and well functioning market. Rates of interest are fairly fluid and free, and on the whole it seems to me the market does a good job. Instead of expanding them, I would like to see us abolish any existing direct controls over credit, of which the most important now is the margin requirement on stocks.

So that, in answer to your question, I would say let us not worry about credit policy. The job of the Federal Reserve and of the Government is to determine what the amount of money is. If we do that job well, if we keep our eye fixed on what is happening to the amount of money, that will establish a framework within which credit changes can take place in accordance with the needs and preferences of the public.

Representative CURTIS. Thank you very much. I certainly appreciate your paper.

Mr. FRIEDMAN. Thank you.

The CHAIRMAN. Mr. Bolling.

Representative BOLLING. Mr. Chairman, I have a minor line I would like to get down.

The witness refers to a series of lectures. I do not know whether it is appropriate to suggest that they be included in the record, but I would like to at least have that considered.

The CHAIRMAN. How many pages do they make?

Mr. FRIEDMAN. I do not know whether it would be feasible because the Fordham University Press is going to be publishing it and I think it is not feasible.

Representative BOLLING. Perhaps we could then figure out a way to have it available to members.

Mr. FRIEDMAN. I am sure that could be done.

Representative BOLLING. You are talking about the interference with the effective operation of the free market as price fixing, subsidies to particular activities, and so on, and I think there is considerable discussion later on of the tariffs and quotas affecting foreign trade and taxes, but I would like you to expand a little bit with illustrations of the price fixing, and the subsidies to particular activities, and what I am after is obviously something a good deal broader than just the foreign program. I mean what are some of the examples of price fixing, and what are some of the other examples of subsidies to particular activities?

Mr. FRIEDMAN. In the particular area we have been dealing with, the limit on the rates of interest that member banks may pay on demand and time deposits is an example of price fixing. The Interstate Commerce Commission control over railroads is another example of governmental price fixing. It is another example of the kind of thing that at one time had a function and justification. The function and justification have largely disappeared and yet we continue to do it.

Representative BOLLING. This would, of course, affect all methods of transportation.

Mr. FRIEDMAN. That is right.

Representative BOLLING. They are at the same time, at least if you put it in the long range of history, met by subsidies.

Mr. FRIEDMAN. Quite right.

Representative BOLLING. And your position in this particular set of cases would be that both the price fixing and the subsidies should be eliminated?

Mr. FRIEDMAN. Yes, sir; it is.

Representative BOLLING. That would include rails, trucks, and it gets very complicated when you get into the field.

Mr. FRIEDMAN. When you get to trucks, you have the problem of the gasoline tax. It is to be interpreted as a payment for the services of the roads, as a use charge, rather than as either a tax or a subsidy. The aim in relation to trucks ought to be to impose taxes which pay for the cost of the highway and other services that the trucks use, and involve neither a subsidy nor the reverse.

Now, you cannot do that perfectly. Obviously there is going to be a lot of leeway, but that ought to be the aim.

Representative BOLLING. What about barge line operators, waterways, and so on?

Mr. FRIEDMAN. I do not know any of the detailed facts of the area and so all I can do would be to repeat the general principle, because I do not know the facts in that case.

Representative BOLLING. The same thing would apply. Would you carry this through in relation to merchant marine?

Mr. FRIEDMAN. You have a special problem when you come to the problems of national defense and, of course, one has to be very careful here.

On the one hand, there certainly are valid national defense arguments in some cases.

On the other hand, national defense tends to be used as an excuse for lots of things that are not justifiable.

In the case of the merchant marine, there may be a valid national defense case. I do not know enough about the details of the subsidy to know whether it is in fact justified on this ground, but I just want

to enter the qualification that there may be some valid cases where national defense is an appropriate justification.

Representative BOLLING. Of course, this comes into the tariffs and quotas field, too.

One of the problems that we always face in terms of defense essentially is as we find that one group gets away with being declared defense essential, then everything down to and including lace is in to claim that that is defense essential. It may well be, but so far I have not been convinced.

Mr. FRIEDMAN. In the case of tariffs and quotas, I think that the national defense argument is not a valid argument for this reason: Tariffs and quotas seem to me to be very undesirable techniques for achieving defense objectives. If there is a real defense objective in a particular industry, it seems to me that it can be attained much better by a direct charge on the budget than by a subsidy concealed under a tariff or a quota.

Representative BOLLING. I heartily agree. Let us go on and find some more subsidies.

Mr. FRIEDMAN. The post office, of course, in its operation involves subsidies as among users. There you have a very simple solution. The first thing that ought to be done with respect to the post office is to make it legal for people to go into competition with the post office.

If the argument for having a Government post office is that the Government can handle the mail more efficiently, then there need be no concern about private competition. If the Government cannot do it more efficiently, why should we not permit private competition with the post office?

Representative BOLLING. Let us follow this through a little bit. Who would attempt to compete with the Government on second-, third-, and fourth-class mail, but second primarily?

Mr. FRIEDMAN. That is why this is related to subsidies.

The reason why nobody will compete with the Government on those classes of mail is because the Government essentially uses its monopoly of first-class and other mail to finance subsidies to other groups. If you have competition in the provision of mail services, then private enterprises would go into those areas where no subsidies are involved and it would become perfectly clear for which classes of mail you have subsidies.

Representative BOLLING. Would you accept as a half step the idea that it might be a good idea if all classes of mail paid their way?

Mr. FRIEDMAN. The difficulty is that there is no way of knowing what paying their way means. As you know better than I do, this is a problem of accounting. The only effective test of whether something pays its way is whether somebody can produce the product more cheaply. The way to have that test effective in the mail case is to eliminate the present restrictions on private enterprise in the field of carrying the mail.

The CHAIRMAN. There is no monopoly in the transportation of second-class mails. I mean periodicals can transport their issues by private truck; is that not correct?

Mr. FRIEDMAN. I am not sure what the details are.

The question is the limitation on somebody going into the business and offering to carry any class of mail for a return. An individual concern may deliver its own first-class mail if it restricts itself to delivering its own mail, but no one is free to go into the business of offering the service of delivering mail at a fee, and whether that applies to second-class mail or not, I do not know. I am not sure.

The CHAIRMAN. I do not want to intrude on Congressman Bolling's province, but pending the opening up of the postal system to a purely competitive basis would you say that second- and third-class mail should bear their share of the overhead costs connected with the post office, or should all of this be thrown on first-class mail?

Mr. FRIEDMAN. I do not know enough of the accounting procedures or the accounting figures.

I would obviously agree with the general principle that the charge for any class of mail should be as close as you can get to the marginal cost of carrying that class of mail, to the additional cost imposed by carrying an additional piece of mail.

I see no justification for imposing unduly high rates on one class of mail in order to subsidize others, but I would not want to express a substantive judgment.

The CHAIRMAN. There is not only the pure historical question. Granted that the post office came into being for first-class mail, and that second- and third-class mail since 1872 have become of increasing importance. It is now a very real question as to which is marginal. Excuse me.

Representative BOLLING. That is all right.

Mr. FRIEDMAN. May I, Mr. Bolling, mention one other important class of subsidies while I am at it and these are the granting of radio and television licenses free of charge.

It seems to me there is no justification for that.

These are scarce and valuable products and if the Government is going to distribute them, it ought to sell them at auction and get as high a price as it possibly can for them.

Representative BOLLING. I think I would agree with that.

How do you categorize the various guaranteed insurance programs of the Federal Government? I cannot begin to list them, but some of the more obvious ones we do not need to. What are they?

Mr. FRIEDMAN. They are subsidies. They are very interesting subsidies because the question arises how does the Government pay any cost, and the answer to that is clear but not obvious.

Consider the guarantee program on mortgages under the various kinds of programs. It looks as if this costs the Government nothing because these mortgages have rarely gone sour. There have been no substantial losses on them. Yet it does cost the Government money. The way it costs the Government money is by making the rate of interest which the Government must pay on its own debt higher than it otherwise would be. As a result, the subsidy for these programs is hidden in the interest charge on the debt.

Now, the reason it works that way is fairly clear. The people who hold assets, financial institutions, the public at large, and so on, have some preferences about the kind of assets they hold. Some people place a great deal of importance on holding Government-secured obligations that are absolutely certain.

If there are only a small amount of governmentally secured obligations, these people will be willing to bid a relatively high price for them in order to acquire them. The rate of interest on Government securities will then be low compared to the rates of interest on other obligations.

On the other hand, suppose the amount of Government securities available is increased. Then it is necessary to induce people to acquire them who have no special preference for Government securities. The rate of interest on Government securities will then rise, compared to the rate of interest on other securities, until you attract enough people who have no special requirement for Government securities to buy them.

The effect of an extensive program of Government guarantee of debt obligations has been to dilute, as it were, the Government obligations market, and as a result the rate of interest on the regular Government debt, on what we call the Government debt, is higher than it would otherwise be. That, it seems to me, is the way in which the subsidy element in these guarantee programs show up.

Representative BOLLING. Do I gather from what you have said that you would prefer that if we are going to have a subsidy, say, to serve a social purpose, like increasing the homeownership of the public, it should be clearly framed rather than hidden?

Mr. FRIEDMAN. Yes.

I do not take the position that there are no subsidies whatsoever that are justified, as perhaps is the case of defense subsidies for maintaining a merchant marine. I do however think that almost all our present subsidies are unjustified, including, I would say, in particular the subsidy to homeownership. However, if we are going to have them, then let us have them openly on the books so that we can see we have the subsidy and we can raise the question expressly, do we want to subsidize this particular activity? Let us not, as we do with the tariff and as we do with these guarantee programs, conceal the subsidy.

Representative BOLLING. In another area, do you consider the way in which the Government buys goods, and I would suspect services, but I am pretty sure about goods, in which the Government is the defense in building roads and dams, and has been described, I think accurately, as a weak monopsonist is tantamount to a subsidy?

Mr. FRIEDMAN. I am afraid, Mr. Bolling, I do not know enough about details of the techniques of purchasing goods to be able to answer your question. I am sorry.

Representative BOLLING. I think that is all, Mr. Chairman.

The CHAIRMAN. Congressman Reuss.

Representative REUSS. Mr. Chairman, the witness has thrown out so many important suggestions on monetary policy that I am going to ask him to lead me through, and this may take a little more than the usual time. If it does, the Chair will stop me.

The CHAIRMAN. I took more than the usual time.

Representative REUSS. Let us start right in with the beginning and go through to the end.

Point 1, you say increase the money supply 3 to 5 percent per year. Why 3 to 5 percent? Because that is in accord with what you foresee as a reasonably foreseeable increase in the gross national product and it will take that much money to lubricate the machine?

Mr. FRIEDMAN. Yes; these numbers are based on historical experience. We have examined in great detail the period for the past 90 years, from about 1870 to date, and this figure is based on that experience. Over that period we have had a growth in output at the average rate of a little over 3 percent a year.

In addition, over that period people have chosen to increase the amount of money they want to hold relative to their income. Whereas in 1870 cash balances amounted to something like 2 or 3 months' income, they now amount to 6, or 7, or 8 months' income. To provide people with the cash balances they wanted over that 90-year period would have required another 1 percent per year, so over the past 90 years it would have taken a little over 4 percent a year to have maintained stable prices on the average.

It seems to me that is roughly also what we can look forward to in the future.

Representative REUSS. So that while in this year the increase in the money supply of around 4 percent happens to have been about right, your feeling is that that was pure coincidence and that the increase in the money supply for the last 5 years preceding the current year, an increase which I believe was only at the rate of a little more than 1.5 percent a year, was less than it should have been for those years?

Mr. FRIEDMAN. No, Mr. Reuss. I believe that part of the problem is getting the figures for the right concept of the money supply.

The figure you are citing is for currency plus demand deposits alone. I am including time deposits in commercial banks in the concept here.

Representative REUSS. Does that throw it off very much?

Mr. FRIEDMAN. It does for this period because as it happened commercial banks' time deposits were realizing gains relative to demand deposits over that period, so it makes a slight difference.

Representative REUSS. A slight difference, so weight the 1.5 percent with a few fractional percentage points that occur. But, is it not a fact that the increase in the money supply as defined by you, including time deposits, in the last 4 years immediately preceding the current year has been less than you would have liked to have seen?

Mr. FRIEDMAN. It depends very much on your starting point. As I remember the figures, the increase from about 1950 to 1953 was about the same as the rule would have called for.

From 1953 to 1954, thereabouts, or throughout the 1953-54 recession, the actual increase was less than the 4 percent per year would have called for. From 1954 to 1955 or early 1956 it was about the same. In 1956 and 1957 the actual increase was less than the rule would have called for. In 1958 it was very much higher than the rule would have called for and in 1959 it has been about right.

I do not believe it is true that there is any long stretch in this period, as I remember the figures, in which you have had a drastic deviation from what this rule would have called for.

I do not believe that is entirely happenstance. I believe that the Reserve System has been more or less adopting the policy of trying to achieve a long-run rate of growth in the money supply consistent with economic growth.

The real changes from present procedure that would be embodied in this rule are two:

One would be that it would make this policy explicit rather than implicit. The second is that it would instruct the System to do this week in and week out, month in and month out, regardless of their own personal judgment at the moment of what the immediate situation was calling for.

Representative REUSS. You say then, in effect, "We are not paying you to think. You just make with the 4 percent increase in the money supply."

Mr. FRIEDMAN. Exactly. May I put it differently: "We are paying you to think about how to achieve the 4 percent increase in the money supply." That is itself a technical job.

Representative REUSS. Oh, yes.

Mr. FRIEDMAN. We are not paying you to seek to lean against a wind when the real problem is to lean against a wind that has not started blowing yet. Neither you nor I nor somebody else really knows how to lean today against next year's wind.

Representative REUSS. You think such is the complexity of the modern economic machine that mortal man does better to rely upon arithmetical formula than upon his economic intelligence?

Mr. FRIEDMAN. We can only judge that, Mr. Reuss, from experience, and we have a situation in which since the early 1920's people have been trying to do better than this rule.

As I look over the people who have been in charge of the Federal Reserve Board, they seem to me as able and farsighted a group as you could hope to have in such positions, although there have been some exceptions both ways. They have been served by a research staff that has contained some of our leading monetary scholars, and has had a high standard of technical excellence. Yet I think you would get almost unanimous agreement among informed students of monetary affairs that the actual performance over the period from the 1920's to now has been decidedly worse than the rule would provide. and that is the sort of basis for this judgment.

Representative REUSS. Let us go on to point 2, in which you say, let us leave creation of the money supply to the open market operations tool and let us junk rediscounting and the reserve requirement varying tools.

Let me say by way of exposing my own colors that I agree with you that there has been a great overemphasis of the rediscounting of reserve requirement tools, and the open-market operation should be availed of much more.

However, because you say eliminate those two tools, I must examine you a bit on that.

I would agree with you that rediscounting in effect tends to eliminate most of the control effects you get from the other methods of controlling the money supply because rediscounting in effect says, "Look, if you are willing to pay the interest rate you can evade whatever reserve position we think the economy needs."

Therefore, the unrestricted use of the rediscount window as at present, I agree with you, is a vitiating force on the effect of monetary policy.

However, when you talk about doing away with it entirely, I am moved to ask you this: Does it not have some value, if properly exercised, as a method of ironing out the bumps and the inequities that

pertain to an individual bank or to banks in a particular geographical area? Is there not something to be said for controlled rediscounting, not open-end rediscounting, there?

Mr. FRIEDMAN. I think not. So far as rediscounting is a means of helping out particular banks, it is another example of the kind of subsidy we spoke about before.

I see no particular justification for a governmental program making available special credit facilities to particular institutions—namely, commercial banks.

If one looks at experience—for example, in the period from 1934 to 1939—rediscounting was inoperative. The amount of rediscounting was negligible because of the fact that rediscount rates, although low by historical standards, were high compared to market rates. Over this period banks found no difficulty in adjusting to temporary bumps by borrowing from one another or in other ways.

I see no reason why banks cannot meet their problems on the open market by disposing of paper that they may have, or acquiring more, or by making loans to one another, by using the Federal Funds market, by the various and numerous devices that are available to them for adjusting their positions, and rediscounting is not necessary for this purpose.

Representative REUSS. A fortiori, if the system also adopts your first suggestion of automatically increasing the money supply 4 percent a year, then no banker has any excuse for saying that he could not foresee that he was going to be squeezed and he was going to have to refuse to renew a splendid line of credit.

Mr. FRIEDMAN. That is right. One of the effects of rediscounting is to cause monetary policy to have certain automatic cyclical reinforcing effects.

Suppose I have a discount rate of 3 percent, and I am just picking a number, whatever it may be. Consider what happens at a cyclical peak. Let us take a specific example, the summer of 1957, because it is a particularly good illustration of this point. When the demand is very strong a particular rate, say, 3 percent, or whatever it was at the time, may be relatively low and member banks will engage in much discounting.

Let us hold it there and now let us suppose there is a change in the market. There is a decline in demand for credit, as occurred in late 1957. The same rate of 3 percent now becomes a very tight rate.

As market rates fall it is in the interest of banks to reduce their rediscounting and you have an automatic shift toward tight money at the time when you would like to have the opposite, and the same thing happens at a trough, so the effect of using a rediscount mechanism is not only that it is erratic, but it produces a bias in the wrong direction from the point of view of cyclical control.

Representative REUSS. So you today say let the rediscount power die among its worshipers and let us rely on open market operation. Let us look at the other thing you would eliminate, the power to vary reserve requirements. If you do that and if you also adopt your 4 percent per annum increase in the money supply, this will require in the years to come, indeed throughout all eternity, a purchase over the years by the Federal Reserve of a considerable amount of U.S. securities.

Mr. FRIEDMAN. Yes.

Representative REUSS. In other words, the present \$30 billion, they hold—I think that is what it is—will go up every year by, just guessing, a billion or two?

Mr. FRIEDMAN. Yes, something like that.

Representative REUSS. I might add I have never seen a thing wrong with that.

Mr. FRIEDMAN. No, I do not, either.

Representative REUSS. I have seen certain salubrious benefits for the taxpayers therein which you do not particularly agree with, but I will not go into that.

However, are you sure you really want to entirely abandon the reserve requirement changing power? May it not, for example, be a worthwhile residuary weapon in our anti-inflationary armory? How about having it around in case suddenly there should be a large demand inflation and we need to restrain credit? Also how about keeping it as a reserve weapon in case there should be a bad deflation and for one reason or another it is inadvisable for the Fed to buy up the huge amount of Federal securities which it might have to do and for reasons of equity or otherwise a change downward in reserve requirement was in order?

Mind you, I have already said that I think that we have used the downward change too much in recent years, but you want to abolish it altogether.

Would you be willing to relent a little bit on that point and let us keep it in the armory of weapons which the Federal Reserve is empowered to use, although they are discouraged from using them?

Mr. FRIEDMAN. No, I am sorry, but in your comment you say perhaps for some other reasons it might be desirable. I do not know what those other reasons are. If at any time we wish to expand the money supply more rapidly, we can do so by open market purchases.

The question is, does a decline in reserve requirements enable us to do something which we could not do by open market operations, or does it have some effects which are favorable compared to the effects of open market operations?

I do not know what they are. I have not been able to find any.

Representative REUSS. I do not know, either, frankly.

Secretary Anderson and Chairman Martin spent hours of time last summer trying to tell us that they could not do the job of creating additions to the monetary supply without use of the power to lower bank reserve requirements.

What you are saying is that you do not follow them either.

Mr. FRIEDMAN. No, I do not. Though I have tried to examine the arguments on this, I have found none that has convinced me that reserve requirement changes have any special advantages.

Let me call to your attention the unfortunate character of reserve requirement changes.

The smallest change that has ever been made is one-half of 1 percentage point. If this were applied to the whole banking system, it would amount to a change of 5 percent, roughly, in required reserves. That is a bigger change than ordinarily occurs from one year to the next, so at one fell swoop when you use this instrument you are taking a whack equivalent to more than the ordinary year-to-year changes in reserve.

The Reserve System has been aware of this and so they have tried to offset the effects of reserve requirement changes, when they have used them, by open market operations.

They have not really themselves been willing to accept a reserve requirement change by itself as an effective tool. They have gone one step forward and two steps back.

I find it hard to see any special advantage which reserve requirement changes have over open market operations and many defects. This is one of them, but there are others.

Representative REUSS. A final question on paragraph 2. I take it if you are going to junk the discount window and the reserve requirement changing power and go on a single open market operation basis, you would also junk, would you not, the bills-only policy which now prevails in the Federal Reserve system?

Mr. FRIEDMAN. Let us talk about the bills-only policy because I think most of the discussion about the bills-only policy, if I may say so, has been directed at false issues.

The bills-only policy has an importance only as a means of dividing responsibility between the Treasury and the Federal Reserve.

Suppose there were no limitation on the legal interest rate, that the  $4\frac{1}{4}$  percent limitation were removed, just for the sake of argument. Then the bills-only policy would have no effect whatsoever on what the Federal Reserve and the Treasury together could do. It would be a purely internal administrative arrangement to divide responsibilities between the Federal Reserve on the one hand and the Treasury on the other. If you name any operation you would like to have performed, so long as the Federal Reserve and the Treasury get together, they can do it, bills only or no bills only.

If what you want to do is to increase the amount of high-powered money, that is, the amount of reserve money, and do it by buying long-term bonds, the way you do it with the bills-only policy is very simple. The Federal Reserve buys bills. The Treasury sells bills and uses the proceeds to redeem long-term securities. If you want to do the opposite, if you want to sell long-term securities, the Federal Reserve sells bills, the Treasury buys bills, getting the funds to do so by issuing long-term securities, so there is nothing the two of them together cannot do.

Representative REUSS. Except, if I may briefly interrupt at this point, you are not describing life as it is. This is not what has happened.

The Treasury does not have the compensatory policy for remedying the foolishness of the Federal Reserve adopting the bills-only policy, does it? They do not counteract this. There is not a total governmental policy of buying and selling across the board. In fact, the Treasury has no policy at all, so if you engraft a nonpolicy on to the Fed's bills-only policy, you do not have what you are describing, do you?

Mr. FRIEDMAN. I am not saying that the bills-only policy does not have an effect.

What I am saying is that its effect derives not from imposing any technical limits on what the Government can do, but from the particular division of responsibility it erects among different agencies.

That problem, it seems to me, is not to be resolved by saying the

Treasury is bad and the Federal Reserve is smart or the Federal Reserve is bad and the Treasury is smart. It ought to be resolved by examining the question, how do you get an effective coordination of Federal Reserve and Treasury policy? That is the real issue. If one were to think about an effective coordination, I do not think the bills-only policy is a bad way of doing it, because what that means is the Fed says, "You over there at the Treasury worry about the maturity composition of the debt. That is your problem. We will worry about the total amount of money outstanding."

That is not a foolish division of responsibility between them.

Representative REUSS. But you have not described what the bills-only policy is.

What the bills-only policy says is the Fed will buy bills only, period.

Mr. FRIEDMAN. That is right.

Representative REUSS. If it went on to say that the Treasury, that other arm of the Government, is hereby adjured to do its share of the total picture and to take care of the long side of the market, that would be fine, but it does not say that and the Treasury does not recognize that part of its obligation, so you have a lot of straining at the gnat of the short side, but swallowing the camel of the long side, upon which nothing is done, is that not true?

Mr. FRIEDMAN. I do not believe so. I believe that you have to get to this final picture of what actually goes on, and you have to bring in the legal limitation on interest rates, the  $4\frac{1}{4}$  percent limit.

If you did not have the bills-only doctrine, the  $4\frac{1}{4}$  percent limitation could be rendered completely nugatory by cooperation between the Federal Reserve and the Treasury.

The Treasury could sell long-term bonds at  $4\frac{1}{4}$  percent to the Fed. The Fed could sell these bonds then at any price it wanted to the public.

What really causes the current problem is the combination of these two.

I must say that personally I am opposed to the legal limitation on interest rates, but if it is in effect in the law, I do not think it is appropriate to use a loophole to get around it, and it seems to me that this device of using the Federal Reserve, in effect, to issue long-term securities at interest rates of more than  $4\frac{1}{4}$  percent would be an undesirable thing to do.

If this legislative limit is a bad limit, we ought to eliminate it. If it is a good limit, it ought to be effective. I find it hard to see that any of these difficulties derive from the bills-only doctrine.

Representative REUSS. Long before the  $4\frac{1}{4}$  interest rate ceiling on Federal securities of 5 years or more became operative by reason of the general rise in interest rates into this area, long before that, for 5 or 6 years before that, the Federal Reserve did have its so-called bills-only policy and the Treasury did not have any articulated or conscious compensatory policy of saying, "OK, Feds, you take care of the short end and we take care of the long end." Nobody took care of the long end.

Mr. FRIEDMAN. The criticism for that, if there be criticism, should be directed at our debt management agency, the Treasury, and it seems to me this is not criticism of the Fed.

Representative REUSS. I was not interested in blaming the Fed. I was interested in looking at our total governmental picture and seeing who was doing wrong.

After all, as Mr. Curtis never tires of pointing out, the head of the Fed is supposed to be a card-carrying Democrat and the Treasury is all Republican, so I would have no political interest in shifting the blame.

Mr. FRIEDMAN. But Mr. Reuss, as I suggested in point 1, on page 8 in respect to debt management, debt management and open market operations are really the same thing and the real problem, and that is the problem which bills-only raises, is how do you coordinate the Fed and the Treasury.

Representative REUSS. Do you believe that the 25 percent gold reserve requirement should be eliminated independently of the question as to whether we go back on the gold standard?

Mr. FRIEDMAN. I am sorry. I am not sure I know what you mean by going back on the gold standard.

Representative REUSS. You have said at the beginning of point 3 that we ought to alter our gold policy and a thoroughgoing 100 percent gold standard would have much to recommend it. If we do not adopt a thoroughgoing 100 percent gold standard, do you not believe that it would be sound policy to eliminate the present legislative requirement of a 25 percent gold coverage?

Mr. FRIEDMAN. Yes. I may have not made myself clear. I do not believe it is feasible or practical to adopt a thoroughgoing 100 percent reserve standard. I think the people who are now talking about adopting a gold standard are not in favor of a thoroughgoing gold standard. What they want, it seems to me, would be undesirable, and given present circumstances and political feasibilities, I am in favor, as I say in the first sentence, of abandoning any pretense that we have something called a gold standard, so I am certainly in favor of eliminating this 25 percent requirement almost regardless.

Representative REUSS. I am glad I asked that, because I did misunderstand you as advocating a return to the gold standard and you, quite the contrary, advocate the removal of any vestiges thereof.

Mr. FRIEDMAN. Yes, sir.

Representative REUSS. Point 4. You talk about something that sounds like a one hundred percent reserve system which would make our commercial banks just like insurance companies, savings and loan associations, and other lending institutions which do not have any magical credit creating powers.

Where under this does the economy get its money in credit supply, the 4 percent annual increase?

Mr. FRIEDMAN. By the Federal Reserve or whatever is the monetary agency purchasing Government obligations. As things now stand, we get our increase in the money supply in two ways. A fraction of it is created by the Government and a larger fraction is created by the commercial banks.

Under the altered arrangements, the whole of the increase would be created by the Government. This could be done either by the purchase of existing obligations, by the creation of new obligations, by financing part of the budget in this way, through the creation of money, any one of these ways.

Representative REUSS. And if in a given year the Fed buys, let us say, a billion dollars' worth of securities, probably almost all U.S. securities, from the public or the banking system—I do not think it matters—you have 100 percent reserves because a billion dollars of reserves is created and that exactly equals the amount of the credit creating capacity of the banking system. There would be no more high-powered dollars.

Mr. FRIEDMAN. No, they are all high-powered.

Representative REUSS. All high-powered, so that under your regimen, if you are going to increase the money supply at the rate of 4 percent a year, roughly speaking you would need to buy about \$6 billion worth of U.S. securities a year because the money supply now is around \$150 billion, roughly speaking.

Mr. FRIEDMAN. Closer to \$200 billion by the definition I suggest.

Representative REUSS. All right. You would have to buy \$8 billion.

Mr. FRIEDMAN. That is right.

Representative REUSS. The banking system now holds about \$60 billion of U.S. securities. In 7 years you would be fresh out of things to buy. What are you going to do?

Mr. FRIEDMAN. You have a variety of possibilities. First of all, you can buy up what is outside banks.

In the second place, you can issue securities to finance some parts of the Government's operations.

If you went on a 100 percent reserve scheme there might be much to be said for planning your fiscal policy in such a way that you would regularly finance part of your expenditures through money creation.

It would not be inflationary, because you would then be creating only that amount of money which is necessary to provide your regular secular rate of growth.

Alternatively, there are a variety of other things you could do.

Under present law—whether this is desirable or not I am not saying; I am speaking only of the possibilities—the Reserve System is empowered to buy lots of things which are not Governments. They can buy municipal and State warrants, they can buy acceptances, and they can buy quite a number of other assets or securities.

Representative REUSS. Why is it that you would change the traditional power of the banking system to create money?

Mr. FRIEDMAN. For two main reasons. One is that given that power you have an unnecessary element of instability in the economic system arising out of changes on the part of the public, in respect of the fraction of their money they want to hold as currency or deposits and out of changes in banks' attitudes about how much they want to hold in cash.

Every time people decide to shift between currency and deposits, this tends to affect the total amount of money.

Similarly, when banks decide to change the fraction of their assets they hold in cash or deposits with the Reserve System, this tends to have an effect on the money supply.

By having a 100 percent reserves system, you would eliminate these sources of instability in the money supply. That is the first reason.

The second reason is that fractional reserve banking leads to extensive governmental intervention into lending and investing.

A commercial bank is not free to do anything it wants in borrowing or lending money. It has to meet very stringent requirements imposed by State banking commissioners if it is a State bank, the Comptroller of the Currency, if it is a national bank, and the Federal Reserve System, if it is a member bank. It seems to me this is undesirable governmental interference into economic activity, so the second reason for 100 percent reserves is so that you can separate out these lending and investing powers and let them be subject to no more regulation than are similar activities carried on by other agencies.

Representative REUSS. How would banks maintain their earning power?

Mr. FRIEDMAN. There are two ways. Under the form of 100 percent reserves that has been traditionally proposed, banks would get their earnings from service charges to depositors. Under the arrangement I have suggested here, banks would also receive interest on their reserves, which they would pass onto their depositors, if you had competition, in the form either of services rendered below cost, or in the form of interest paid on deposits.

Representative REUSS. From service charges?

Mr. FRIEDMAN. And interest received on their reserves, if you decided to adopt that variant of it.

Representative REUSS. Have you made any calculations of the effect on bank earnings of having to switch the major source of their earnings from what they get over money created by the wave of the magic wand and what they get from charging checking account depositors and other users of bank services?

Mr. FRIEDMAN. No, I have not.

Representative REUSS. You talk about making all member bank reserve requirements uniform.

I take it you do that for the reason already expressed by you that the inauguration of the Federal Deposit Insurance Corporation has very substantially shifted to that device the protection of depositors against runs on banks and therefore the bank in a small town is about as runproof as the bank on Wall Street and vice versa, and you do not see any reason for the change? Is that a fair attribution of your reason?

Mr. FRIEDMAN. In part it is. The function of reserve requirements is for monetary control purposes. Required reserves are not reserves in any meaningful sense because if a bank uses them it goes out of business, so the function of required reserves under current circumstances is to provide monetary authorities with power to control the stock of money.

From this point of view, there is no justification for differences in reserve requirements. Differences in reserve requirements only have the effect of making the monetary authority's job more difficult, because if people shift from banks in large cities to banks in small cities, this has effects on the stock of money. It is worth noting that two defects in our present reserve requirements tend to somewhat offset one another and ought to be eliminated simultaneously.

One is the different reserve requirements by class of city. The other is the failure to include vault cash, because it so happens that country banks hold larger vault cash relative to their deposits than reserve city and central reserve city banks. It so happens as things

now are—it just happens to be numerically so—if you impose a single rate of reserve requirements on all banks roughly equivalent to the present average rate plus the average amount of vault cash as a fraction of deposits so it would be neither expansionary nor contractionary, this would on net have little effect on any class of banks. The nominally greater rise in reserve requirements for country banks would be offset by their greater holdings of vault cash.

Representative REUSS. On this important point, which I was coming to anyway, I have been one of those who felt in connection with recent banking legislation two things: one, that in the interest of fairness vault cash should be counted.

Mr. FRIEDMAN. That is right.

Representative REUSS. Secondly, that it should be counted in such a way that in the process of counting it there was no net change in reserve overall systemwide requirements.

Mr. FRIEDMAN. Quite right.

Representative REUSS. And I tried my best to make a good deal of legislative history so that I hope it will be clear to the monetary machines that that is what Congress wanted.

What you are saying is that there is now through happy coincidence a very easy road for that result to be accomplished?

Mr. FRIEDMAN. Yes, if you were to provide for an elimination of the difference between country banks and central Reserve and Reserve city banks.

Representative REUSS. And to the extent that you do not fully provide for their elimination, but move in that direction, you could still accomplish the purpose of no systemwide changes by minor juggling of the percentages?

Mr. FRIEDMAN. Yes, you certainly could.

Representative REUSS. And while, of course, you have said that in general the changes in the money supply should be brought about by open market transaction, I take it you are prepared to stomach a once and for all one-shot revisiting of the whole reserve requirement problem as an incident to the carrying out of the congressional directive for the recognition over a period of years of vault cash?

Mr. FRIEDMAN. I quite agree.

The inclusion of vault cash should be accompanied under present law by a revision in reserve requirement percentages. This was the intent of my last sentence of the paragraph.

Representative REUSS. May I say, Mr. Chairman, I want to thank you for your forbearance.

The CHAIRMAN. Not at all. I think your questioning has been magnificent.

I would merely like to say that I appreciate the intelligence which the Congressman from Wisconsin showed in the discussion of this, which is seemingly egotistical because I produced a supplement opinion on the vault cash and reserve proposal when it came up before the Banking and Currency Committee.

Representative REUSS. I do not think it will make the chairman egotistical when I say I relied on that when the legislation came over to the House and I think, as a result of what the Senator was able to start over in the Senate, we produced a vault cash bill and some legislative history in connection therewith which will, I hope, bring about this result.

The CHAIRMAN. You did a much better job in the House than we were able to do in the Senate.

Congressman Curtis?

Representative CURTIS. There is one question I would like to ask on your suggestion that the control over the stock of money be vested in this open market process. Who is going to determine how we are measuring this economic growth, as to whether we actually are? What are we going to rely on for that? It is not an automatic measurement, is it?

Mr. FRIEDMAN. I am not sure I understand your question. Under the proposal, I would say set a number, 4 percent, and that is your measure. Stick to it.

With respect to the stock of money, of course, we are not going to avoid looking at what happens. In the course of 5 or 10 years, I would hope, that we would learn more and might be able to do better.

I do not mean to suggest that this is a be-all and end-all for all time, but at the moment, this seems to be about the best thing we know how to do with our present knowledge.

Representative CURTIS. I had temporarily forgotten at that point that you were setting it on this basis.

Just one other area brought up by Congressman Reuss' questioning and this is in the debt management field.

Mr. Reuss in his questioning was assuming that the Treasury had no policy at all, which I think is very unfair. He is entitled to disagree with it, but I think it is worth examining to see whether in your judgment the Treasury, which did at least give lip service, was able to accomplish the policy of trying to get our debt on a longer term basis.

I wonder if you would comment on the Treasury policy and how well you think they did do and where, in your judgment, their policy proved to be in error?

Mr. FRIEDMAN. I think the shift by the Treasury toward a wider use of the auction technique on bills and their tendency to issue the bills on a more regular basis and to avoid bunching has all been to the good.

The CHAIRMAN. May I say that was after some prompting by certain members of this committee.

Mr. FRIEDMAN. I think on the whole the attempt by the Treasury to lengthen the term of securities was a good thing. I do not regard the lengthening of maturity as of major importance, but I think as between the two it is a little better to have them longer than it is shorter, and I think on the whole they have tried to do this.

I do not want to engage in a criticism of particular debt managers. I think the problem is whether we can devise better general rules for guiding them that will enable them to do better. It seems to me if we were able to establish the policy that debt management should be a steady, regular, predictable kind of thing instead of an erratic kind of thing, that this would be all to the good.

Representative CURTIS. I appreciate that answer.

One other area is this problem of the proportion that we try to get in the hands of E. & H. holders. Of course, one of the problems, and which you have touched on in another way, is the competition that we have given to these kind of securities through guaranteeing savings

and loan deposits at FDIC has created a difficult situation; but I think you do agree, do you not, that it is wise to have a substantial portion of the debt in the hands of the smaller investors, E. & H., or do you not?

Mr. FRIEDMAN. I must confess I do not believe it is a matter of major moment. The important thing is that we let the interest rates on debt be whatever the market determines.

The only reason why it has currently been important to have much of the debt in the form of E. & H. bonds is because we have not been willing to let the market set the interest rate. If we are, then it does not seem to me it is of great moment.

Representative CURTIS. Thank you.

The CHAIRMAN. I want to make two comments.

First, I want to thank the witness for his brilliant, honest, and rigorous analysis and to express the personal pleasure that he comes from the university which was formerly my own from the city which is still mine, and then to make a comment upon the hearings as a whole and the work of the committee as a whole.

As we know, this is the final session of the committee's year-long set of hearings in connection with the study of employment, growth, and price levels.

Hearings began on the 13th of March, continued through nine separate sets of hearings running over 40 days and involving some 95 witnesses, and I may say we have made conscious effort fairly to have various and conflicting doctrines represented at those hearings.

These hearings are being supplemented by questionnaires submitted to the Treasury, Federal Reserve, and dealers in Government securities.

In addition, we have invited numerous groups to file statements or briefs containing their analyses of the issues before us and recommendations for policies. These will be published as soon as possible.

The committee will now recess its public hearings on this study. We will publish additional study papers in the coming weeks, and we mentioned some 25 study papers which will be published, but some are coming out next week. We hope these will appear at regular intervals between now and the 31st of December.

We expect to file our own final report with Congress some time during next January.

I want to express the thanks of the committee to all the witnesses who have taken time from their work to come here and testify and the care which they have taken with their papers, and to all who participated not only in the hearings but in the preparation of the material.

I want to thank, and I am sure that I speak for the committee as a whole, the members of the staff who have worked with such fidelity and intensity on this issue.

I hesitate to single out individuals but I would especially like to thank the director of the study, Dr. Otto Ecstein, who has not taken so much a part in the hearings, but has conducted his share of the research work with great brilliance and integrity, and also Mr. James Knowles, who has been in general charge of the agenda for the hearings, and Mr. Lehman, who has kept us reasonably within our budget.

In closing the hearings, I ask unanimous consent that there be inserted at an appropriate place in the record several statements received by the committee which seem appropriate to other studies.

I would also like to express my thanks to all the members of the committee on both sides of the aisle, members on my side of the aisle, and members on the other side of the aisle, and particularly to the ranking Republican member, Congressman Curtis of Missouri, who has been an ideal colleague.

Representative CURTIS. Thank you.

Mr. Chairman, I was about to join in your expression of appreciation and to say that it certainly is in the full committee's view that we commend our staff, and I take this opportunity of reiterating what I have said before, that with the activity with which you have set these hearings up and the way they have been conducted, I think only good can come out of it.

The CHAIRMAN. Thank you very much.

Mr. FRIEDMAN. Thank you.

The CHAIRMAN. Thank you.

(Whereupon, at 12:15 p.m., the committee adjourned.)

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