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THE DOLLAR AND THE POLICY MIX: 1971

ROBERT A. MUNDELL



INTERNATIONAL FINANCE SECTION

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The author, Robert A. Mundell, is Professor of Economics at the University of Chicago. He has written many articles in the field of international finance and several books, including most recently, Man and Economics (1968), International Economics (1968), Monetary Problems of the International Economy (with A. Swoboda, 1969), and Monetary Theory: Inflation, Interest and Growth in the World Economy (1971).

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FRITZ MACHLUP, Director
International Finance Section

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THE DEFICIT AND THE DOLLAR

A decade ago Professor Rueff characterized the American balance-of-payments deficit as a "deficit without tears." He meant that the United States could buy expensive-to-make (European) resources with cheap-to-print dollars. The international use of the dollar granted what General de Gaulle called an "exorbitant privilege," an automatic access to credit analogous to free emergency overdraft facilities, adding an extra dimension to American power. Other countries had adopted the dollar because it had become the unit of account, the currency of settlement, the intervention currency, the dominant vehicle currency, and a major reserve asset of the international monetary system. Unlike the United States, other countries had to earn reserves by running balance-of-payments surpluses. In the 1960s the United States did shed some tears over the deficit, but they were largely of the crocodile variety.

In 1970 and early 1971 the deficit has been much larger than usual and a source of great embarrassment to the United States. Its tears have showered the Bundesbank with liquidity, although some of the problem has been eased, apparently, by forward operations and mopping-up special sales of short-term securities by the Treasury. The short-run weakness of the dollar hides its long-run strength, which is based on the dominating power of the American economy. But the temporary difficulties of the short run represent hurdles that have to be jumped, and the weakness of the dollar today could cause very important long-run changes in the international monetary system.

Is the deficit a menace to the dollar? Fritz Machlup could anatomize the word "menace" and find twenty-five meanings for it. It could be a menace to the gold stock in the short run. If the gold window is shut, the deficit might threaten the role of the United States as the world's financial leader. The rest of the world could conceivably set up its own system and exclude the United States, or the system could break up into "optimum-currency areas." If, on the other hand, the deficit increases and foreign countries swallow or spend the dollars, the resulting increased world money supply would aggravate world inflation and threaten confidence in currencies, including the dollar. If the European countries one by one changed their exchange rates, they would sacrifice some of the financial integration that has been a major contribution of the dollar, upsetting the stability of expectations, and further promote the "dollarization" of the world economy. Similarly, if other countries

adopted flexible rates, the dollar's strength would increase, because of its unchallengeable liquidity properties, in comparison with the currencies of the smaller countries. Finally, if the Europeans formed a currency coalition against the dollar or created a new sovereign currency, a two-bloc system would reveal the need for explicit coordination of policies to accommodate the financial interests of the two blocs. But the dollar bloc would still be larger than the Eurobloc even if the latter included the United Kingdom. Its transactions domain would encompass well over 60 per cent of the world's transactions, so huge is the domestic dollar domain. A European currency represents no direct threat to the United States, except that it would curtail the dollarization of Europe. It would promote European integration and the competition from a friendly rival might inspire the United States to a better economic performance.

Should the United States ignore its balance of payments and govern its policy solely by the needs of internal balance? A change from the present system is not cheap. America would give up substantial international power (which would be good or bad depending on one's appraisal of her current and expected future use of it). A "passive" policy or

"benign neglect" is a trap.

The menace to the dollar, however, does not lie in the international sphere as much as in the inflation and unemployment policies of the United States. Inflation is neither necessary for, nor conducive to, full employment. We shall argue later that inflation causes unemployment.

In the meantime the American depression of 1969-71 will have created a loss in output foregone approaching \$100 billion, an incredible waste for the entire world and perhaps the most serious factor undermining world confidence in the economic leadership of the United States.

The best defense of the dollar involves policies to restore the American economy to full capacity, and stop, or at least reduce, inflation. The purpose of this essay is to show that restoration of equilibrium requires a change in the American policy mix. The current policy mix leads to more inflation and unemployment. The correct policy mix will save billions of dollars in output. In introducing the correct policy mix and getting back to full employment the United States will prevent the tears of the deficit from flooding the rest of the world with too much liquidity.

In this first section, I consider the cause of the deficit and the reasons why it should not be neglected by a "passive" balance-of-payments policy. In the second section, I put the case against the present policy mix and show that it will cost the United States \$100 billion in foregone output before the recession is over; loose money and sagging interest rates will not solve American problems. In the third section, I show why a tax reduc-

tion will lead to increased employment, output, and growth and, if combined with sufficient monetary restraint, will stop the inflation and bring the deficit down to levels the rest of the world can tolerate.

Two Explanations of the Deficit

"The" deficit is the increase in dollar liabilities of the United States plus gold and SDR losses. It has been the major source of reserve growth of the rest of the world for a decade. The deficits averaged about \$1 billion annually in 1950-57, about \$3 billion in 1958-64, and in recent years have been over \$7 billion. In 1970 the deficit was \$9.8 billion.

The two official measures of the balance of payments, the liquidity (Lederer) and the official-settlements (Bernstein) measure, differ in their treatment of changes in short-term capital holdings of foreign commercial banks. If dollar liabilities to foreign commercial banks increase, the liquidity, but not the official-settlements, deficit rises. If the liabilities are accumulated by other central banks, both the liquidity and the official deficit increase.

The two measures of the deficit alternate over the business cycle. Foreign commercial banks support the dollar during American booms when interest rates are high as they move funds into the Eurodollar market, while foreign central banks have to support the dollar when interest rates are low and commercial banks move out of the market. The liquidity deficit was high in 1969, but the official measure was in surplus. The official deficit was high in 1970 and will be high in 1971 as long as American interest rates are low and the American economy is more depressed than those abroad.

Even if the dollar had no special status as an international currency, the tremendous size of the American economy would give its balance of payments special significance. The chronic character of the deficit has its origin in the global role of the dollar, which itself is due to the great economic influence of the giant economy. The United States produces financial assets the rest of the world wants to accumulate and that demand is likely to grow as long as the United States is a stable political power.

The rest of the world tolerates the dollar standard because there are only less satisfactory alternatives to it at the present time. Commercial banks and multinational corporations use the dollar abroad as the settlement currency for commercial transactions (vehicle currency). American banks can branch abroad to do what they are forbidden to do at home and dollar deposits in branches of American banks, as well as foreign banks, have grown to tens of billions of dollars serving American and other multinational corporations. The new international banking groups

like Orion use the dollar as the dominant currency. Commercial banking has leapt into the vacuum left by the official banks and created, in effect, a new world currency and central bank. The international corporations use both American branches and national banks, but the major international currency for multinational corporations is overwhelmingly the dollar, which now accounts for perhaps one-fifth of the deposits of foreign banks. Superimposed on this huge private demand for the use of dollars are the official demands of national central banks, which are still important despite the increasing domination of great commercial banks.

A legal detail enhances the international position of the dollar—worth mentioning here only because it would assume importance if the advocates of a passive balance-of-payments policy have their way. In 1949, the U.S. Secretary of the Treasury wrote a letter to the Managing-Director of the IMF affirming that the United States was freely buying and selling gold under the provisions of Article IV-4-b of the Bretton Woods Charter, which exempts a country from provisions of Article IV-4-a requiring it to peg the exchange rates of other members to within one per cent of par value. In 1959 a by-law further enthroned the dollar by formally establishing the key-currency principle, by which a single convertible currency can be pegged in lieu of that of every member. Naturally the dollar was continued as the intervention currency by most countries (except those in the sterling, franc, and escudo areas), and adopted as master currency under the European Monetary Agreement. Only the United States adopted Article IV-4-b, so the dollar is the only currency "freely convertible into gold" for foreign central banks, and the United States is therefore the only country exempt from the need to intervene in the exchange markets. At least since 1968, American gold convertibility has become a bit of a myth, but the risk of the United States formally closing the gold window and changing the system inhibits outright challenge to it. The United States has had no need to close the window, because other countries have not come to it.

Theories of the deficit have grown with its size. Robert Z. Aliber has made a useful distinction between demand theories and supply theories. The demand theory is that the rest of the world wants the dollars it gets and will always follow policies to get the dollars it wants. The supply theory is that the world has to take the excess dollars the United States supplies and that if other countries try to inflate their surpluses away the United States will just feed them more dollars. There is a third theory that is general. The general theory is that the deficit is the outcome of both demand and supply forces and that the initiative for a change in the deficit comes sometimes from demand (as when foreign liquidity ratios are low) and sometimes from supply (as when American

monetary expansion accelerates). The general theory is correct, because both blades of the scissors do the cutting. It is a tautology, however, because both supply and demand can be broken down into voluntary and involuntary components. A theory should explain what Fritz Machlup has called the "involuntary demand" for dollars. The special theories illuminate the difference between the two measures of the deficit.

The difference between the demand theory and the supply theory helps to explain the cyclical variations in the liquidity and official deficits. The liquidity deficit is high when the commercial holding demand for dollars is strong and the official deficit is high when the official American supply of dollars is strong. Thus, during recessions the official deficit is high whereas during booms the liquidity deficit is high, because demand abroad is strong and interest rates are high. The analogy to shifts in the accounts of American banks between demand and time deposits over the cycle is apparent.

The procyclical variation of interest rates in the United States causes, after allowance for cycles abroad, a procyclical movement of the capital account which is usually associated with an anticyclical fluctuation of the trade-balance surplus. This appears to have been the historical pattern for the United States whenever it was not offset by cycles in the rest of the world. The capital account has dominated the trade balance procyclically and led to American payments surpluses in booms and deficits in depressions (the post-devaluation years, 1936-40, are an exception). Because the demand for money is procyclically strong, it is associated with an excess supply of securities or goods, leading to a surplus on capital account, the trade balance, or both. The money goes where the action is

Inflation and the International Demand for Dollars

World inflation increases the demand for dollars because of a *depreciation demand*. This is true for both internal and external use of dollars. A neutral inflation throughout the world thus increases the nominal value of the deficit, though not necessarily its real value, which depends partly on alternatives to the use of dollars.

Analysis of inflation originating in the United States (as when American monetary growth accelerated in the summer of 1965) is slightly more complicated. American monetary acceleration in the face of weak demand abroad creates an excess supply of dollars that fall into the hands of central banks abroad, creating initially unwanted surpluses, but eventually lead to worldwide inflation. Rising prices in the world as a whole increase both the commercial and official demand for dollars to compensate for the decline in the liquidity value (purchasing power) of the outstanding stock. The world demand for dollars depends on the money

value of global transactions, and general price increases raise both the

supply and the demand for dollars.

It sounds paradoxical to say that inflation increases the demand for dollars, but the difficulty is unravelled once the real holding demand is separated from the *nominal holding demand*, and the stock of reserves is distinguished from the flows replenishing those stocks. I have elaborated on this in my Monetary Theory: Inflation, Interest and Growth in the World Economy (1971), especially chapter XIV on "International Liquidity and Inflation," but it is worth reiteration here that foreign countries can be illiquid even during a raging world inflation. The greater the rise in world prices—especially of internationally-traded goods—the greater the erosion of liquidity. To preserve the reserves/imports ratio, nominal reserves have to rise with the rate of inflation even though the reserve expansion itself is the source of the inflation. Assume world reserves are \$80 billion. Then, if the world inflation rate is 5 per cent and dollars are the only source of reserves, the deficit would have to be \$4 billion just to allow other countries to maintain their customary conventional international-liquidity ratio. The conventional liquidity ratio is reached when the ratio of imports to reserves is equal to the ratio of GNP to money, which for most countries implies reserve holdings of about three to four months' imports.

Inflation and the American deficit represent a source of seigniorage for the United States that is analogous to a tax on foreign dollar balances, the rate of the tax being the inflation rate, and its base the real value of existing reserve balances. If the United States gains seigniorage from inflation (because foreigners pay part of the tax) but lose because they pollute the home monetary environment, the gains and losses lead to a theory of an optimum balance-of-payments deficit. This enables the United States to exploit the fact that part of the incidence of the inflation tax is borne abroad, which, for low rates of inflation, exceeds the welfare cost of the inflation to residents of the United States and leads to a concept of optimum inflation rate and optimum balance of payments. (See my "The Optimum Balance of Payments Deficit," paper presented to the Conference on Monetary Policy in Open Economies, Paris, March 1971. The proceedings of this conference will be published in a book edited by Emil Claassen and Pascal Salin of the Jean-Baptiste Say Seminar, University Dauphine, Paris.)

Loose Money and the Deficit

The American deficit increased during the 1969-71 recession, and monetary policy, judged by the level of *real* short-term interest rates, has been extremely easy. For several months the United States has been

pumping the economy full of liquidity in the hope of starting a revival, but the appetite for liquidity has increased as memories of the 1966 and 1969 squeeze linger. The influx of dollars into central banks abroad in 1970 and early 1971 approaches tolerance thresholds in some countries and forward support for the dollar has been thought necessary by the Federal Reserve. At the same time there has been a weakness in real demand in several countries and unemployment rates have risen.

At the Copenhagen IMF meetings in September 1970, the Managing Director asked the United States to accept some reserve losses to cover the deficit. This opens the way for some gold conversions by major countries. Although in principle the United States could use foreign-exchange holdings, IMF drawings, and Basle arrangements to finance the deficit, the credit already provided to the United States by dollar accumulation is an alternative to these sources. Gold conversions are disintermediatory, if not automatically offset by American sterilization operations. Since disintermediation is desirable when there is excess liquidity, the United States could accept some gold losses if it were not allowed to lead to a panic. The purpose of a gold reserve after all is not just deterrent—to have some to lose—but to be willing to lose some when its opportunity cost rises.

Gold losses not offset by credit expansion would tighten the American money market and eliminate the loose-money problem that arises when short-term rates go below either the expected rate of inflation or the anticipated capital losses on bonds. Not much help is given to the domestic recovery program by forcing dollars into an unreceptive money market after interest rates have got below 4 per cent (with a 4-per-cent expected inflation rate) and while there is an expectation of rising long-term interest rates. At that point savers prefer to stay out of the bond market until the expected fall in bond prices has materialized; a liquidity trap thus emerges at a short-term money rate of interest equal to the expected short-term rate of inflation. Further monetary expansion after that point merely leads to expectation of further inflation and rising nominal interest rates. The demand for bank loans will recover only when confidence in recovery is assured and inventories have been run down.

The belief that easy money promotes expansion rather than inflation at home is a gross exaggeration. There is, of course, an international route through which accelerated monetary expansion can help revive demand. Expansionary monetary policy in the United States feeds liquidity abroad and stimulates American exports, as foreign countries try to reduce their surpluses by competitive inflation. Some gains can be expected through this route, but its international risks are very high. To the extent that the slump in employment becomes worldwide, it would be less harmful if—

and the "if" needs emphasis—it did not pari passu aggravate inflationary expectations. The present is of course the best time for other surplus countries to lower trade restrictions and buy more American goods, reciprocating the easy-money advantages provided to Europe by the United States when major European economies were depressed in 1967. But rising unemployment is not confined to the United States alone and a relaxation of trade restrictions is not politically easier in Europe or Japan than in the United States. The United States cannot, therefore, rely much on stimulating exports by stuffing central banks abroad with dollar reserves, forcing them to inflate unwillingly or even revalue their exchange rates outside the framework of an explicit cooperative solution. There is already an overdose of monetary expansion in the Western world. Increased American monetary expansion begets more foreign monetary expansion, leading to more world inflation, not more real expansion.

The phenomenon of inflation makes interest-rate theory more complicated, because it becomes necessary to distinguish between the real and nominal interest rate, and also the natural and market interest rate. The natural interest rate changes with a change in the shortage of capital. The (real) market interest rate rises and falls with the level of employment over the business cycle. Short- and long-term interest rates follow a concertina pattern over the business cycle, because of expectations. Real and money interest rates diverge with increased expectations of inflation.

It is sufficient for most policy purposes to distinguish four main factors leading to a rise in interest rates. Interest rates rise when there is (1) an increased shortage of capital, (2) a strengthening of the domestic economy, (3) expectations of accelerated monetary expansion and inflation, and (4) monetary restriction caused by open-market sales of securities with unchanged expectations. What is needed is higher real interest rates engineered by prompt budgetary expansion. In the meantime, monetary glut should be prevented both to forestall a renewal of inflationary expectations and to protect the balance of payments.

Passive Policy and the Dollar-Standard Solution

The rest of the world cannot force financial discipline on the United States short of bringing on a crisis or organizing its own system without America. The position of other countries would not be helped if they forced a change in the system by pressing dollar conversions to the point where the Treasury closed the gold window; the 1965 revolt against the dollar was unsuccessful because the alternative of the gold standard did not in 1965 seem preferable to the dollar standard. A solution to the

international-stabilization problem has to be compatible with stability of the American economy.

The announcement of a passive balance-of-payments policy has a legal kick, and would create a credibility gap about American involvement in the international system. If the United States closed the gold window, she would relinquish the privileges of Article IV-4-b and instead become legally required to keep exchange rates of other IMF members within one per cent of parity. A new intervention system would have to be developed to replace the provisions of the 1959 by-law, referred to above. If it fails to support the dollar and "goes it alone" it gives up the status and privileges of a convertible currency and opens the way for the rest of the world to use the IMF to create a new international monetary system without the United States.

I do not want to exaggerate the importance of these legal complications. The Fund has in the past found ways of accommodating aberrant legal behavior ever since its first brush with France in 1948, and since May 1970 the Canadian dollar has been flexible. It is unlikely that the IMF would be used as a means of retaliating against the United States. Nevertheless, unilateral action is not a correct posture for a world leader whose role should be exemplary.

But the disadvantages of a passive policy do not rest on legal issues. A go-it-alone policy has the ring of neomercantilism. For a decade the United States has pledged its commitment to keep the dollar as good as gold and reiterated its commitment to the international system. To adopt a "take-it-or-leave-it" posture with respect to the dollar in 1971 is to invite a backlash and enhance the gulf between Europe and America. Monetary isolationism would bring in its wake isolationism in trade and surrender American influence on the evolving world system, and it would do so for benefits that have never been adequately explained or defended.

The benefits of a passive policy for the United States are almost nil. There are no economic costs to a balance-of-payments policy that can be escaped by avoiding its discipline, unless one sees the answer in more American inflation masquerading as expansion. No additional resources are acquired by giving up concern for the balance of payments, nor is American policy likely to improve as a result of ignoring its balance of payments. One can hardly argue that balance-of-payments policy has caused excess unemployment, at any rate since 1931-34. American policy would not have been better served by a more rapid monetary expansion over the past few years.

The fact is there is no conflict between the external goal of a more acceptable balance-of-payments deficit and the American and worldwide

goal of reduced inflation. Analysis of the causes of balance-of-payments disequilibrium has usually helped guide American policy toward the correct solution of its internal problem.

In the long run the United States may have to weigh the advantage of running a separate dollar network outside the framework of the existing system, accepting the emergence of competing or complementary systems with the emergence of superpowers in Asia and Europe. But the issues should be decided by considerations of global political strategy not by technical considerations of the balance of payments. The balance of power is not served by neglecting the balance of payments, and the former is too important to be left up to economists alone.

WRONG THEORIES AND CORRECT POLICIES

The idea that monetary acceleration necessarily increases employment and output is one of those tired clichés that have had, for short periods in history, sufficient truth in the short run to find a ready market of opinion, but which, by repetition, become elevated into a dogma and end up doing more harm than good. That the connection is tenuous can be readily suggested by asking any economist or layman his expectation for employment of the consequences of a steady 50 per cent annual rate of monetary expansion in the United States. Even better, one could ask any central European who remembers the violent monetary expansions in the 1920s or 1940s whether printing money increases jobs.

The theoretical basis for the cliché is certainly not well founded in economic theory. Keynes regarded monetary expansion as equivalent, in principle, to wage reduction, and did not believe that the route to full employment was through monetary expansion, although it could have some temporary benefits in lowering the real value of fixed-money debts. In the widely accepted expositions of macroeconomic theory, monetary expansion can lead to increased employment only if it increases the money supply in terms of the wage unit, and yet no economist has advanced convincing evidence that wages are rigid upward. In the popular Hicks-Hansen-Modigliani generalizations, expansion in the nominal money supply does not lead to increases in money balances in terms of wages, and, if allowance is made for the higher opportunity costs of holding money under monetary expansion, real money balances decline.

Nor is there any theoretical basis for the view that can be derived from the Quantity Theory of Money. In Keynes' own brilliant generalization of the Quantity Theory of Money in the General Theory, he carefully derived the factors determining the elasticity of the price level with respect to the money supply and correctly allowed for the effect of increases in money on wage rates. The only basis for the connection lies

in an empirical correlation discovered by A. W. Phillips. But recent evidence suggests that the Phillips curve is unstable.

Nevertheless, the idea remains rooted in the psyche of part of the public, especially government officials, and part of the economics profession. Many economists still believe that rapid monetary expansion increases employment, and that reducing the rate of monetary expansion for the sake of stopping inflation (or preserving equilibrium in the balance of payments) would increase unemployment. For that reason we must not neglect the belief, despite the empirical evidence against its validity.

Monetary Expansion and Unemployment

Monetary acceleration should not be equated with economic expansion, but there are some special cases where it can increase employment, and, for short periods, has given it a temporary fillip. Monetary policy can promote real expansion if it bites on some rigidities in the economy. If wage rates are fixed while prices go on rising, real wages would fall relative to productivity and that would stimulate more employment. Another route is through interest rates. Monetary expansion can lower interest rates if expectations about future prices do not adjust, and lower interest rates stimulate spending on durable goods. But these assumptions about rigidities are not valid after inflationary expectations have become rooted in the psychology of the community. When the public anticipates fully the consequences of changes in the money supply the latter loses most of its influence over real economic events, except through its destruction of the real money stock itself. This may have some effect in increasing real saving and growth, but it also lowers the marginal product of labor and capital and does not contribute to employment.

Inflation has not maintained full employment in countries like Brazil or any of the Latin American or African countries that have adopted inflation. Nor did the inflations in Germany or Central Europe in the 1920s stimulate employment. In each of these cases unemployment was the eventual result of the inflation policy. As inflation becomes rampant, velocity increases and both capital and labor are deprived of part of a complementary factor of production—money itself—and suffer productivity losses.

But the relation between monetary acceleration and unemployment is not confined to cases of monetary pathology. It may have been an influence in the recent recession. In the United States in 1970, the money supply expanded at a rate of 5 per cent and, if one includes time deposits, at a rate of 12 per cent, but unemployment jumped from 4 per cent to 6

per cent while prices continued to rise at the rate of almost 5 per cent. This occurrence alone should wake people up.

The theory that inflation reduces unemployment is historically false. It can be refuted empirically by countless examples of countries in various parts of the world in the 1960s and at other times.

The weakness of current theory lies in its failure to relate monetary acceleration to expectations. Monetary acceleration feeds expectations of inflation and raises wage demands on the part of unions and wage supplies on the part of business. But if wages rise with the supply of money there can be no significant employment effect. After the experience of wage-price trends between 1965 and 1970, it should be clear that labor unions do not suffer from much money illusion, and this means that the link between monetary acceleration and increases in employment is broken.

It is true, of course, that real wages can be inflated away by price inflation for the duration of existing labor contracts and that the labor-contract cycle has tended to be a three-year cycle. But the contract period is not synchronized between industries, and unions can compare the fates of contracts in different industries. They can also get their own back at the next settlement. These considerations suggest the myopia of policies that have to rely on inflating away gains in real wages by monetary acceleration.

There is some truth to the contention of economists who stress money illusion that in the early stages of inflation monetary policy can stimulate expansion by increasing aggregate demand; this is true in an economy with unsophisticated expectations. An important route is through a reduction in interest rates, which may fall with monetary acceleration if the public is not aware of the link between monetary policy and inflation. But bondholders quickly learn to incorporate an allowance for capital losses of purchasing power (inflation premium) into interest rates. Thus, interest rates rise with monetary acceleration. But, if they overadjust to the inflation, monetary acceleration can reduce real demand, because interest rates rise by more than the actual inflation rate. Expectations themselves become conditioned by the expected monetary policy and make their adjustments accordingly. The effect of monetary acceleration on real demand depends on whether expectations are underadjusted or overadjusted.

This proposition needs to be emphasized, for, even though it was known to Alfred Marshall and carefully elaborated by Keynes in the General Theory, many policy-makers and economists still identify monetary acceleration with economic expansion and think of it as an instrument to stimulate employment. The gist of the correct theory can be

seen even in its quasi-static formulation. An increase in the supply of money in a closed economy does not increase employment, if all prices and wages increase in the same proportion and contracts are scaled in proportion to the index of the quantity of money. But employment would decrease if wages were scaled upward by a factor exceeding unity. Real variables, like real wages, employment, and the natural rate of interest, are not budged by monetary expansion per se. The only route through which monetary expansion can increase employment is through rigidities, raising expected future prices relative to current prices and thus lowering the rate of interest.

Inflation itself rids the economy of these rigidities and they become less and less important as the economy learns to anticipate the effects of monetary changes. Rigidities did exist during the Great Depression and in part of the postwar period. But the 1960s have shaken most of these rigidities out of the system, and in the process made most of the econometric studies based on the past inapplicable to the present. The expectations lags have become increasingly short and eroded away money illusion. The past no longer provides a prevision of the future unless it is adjusted to allow for the learning mechanism of the economy itself and the implications of this mechanism for the shortening of lags.

The situation has now changed to the extent that monetary acceleration does not lead to expansion; it leads to more inflation. There are in fact strong reasons why monetary expansion increases unemployment.

One reason is that an acceleration of monetary expansion leads to an even greater acceleration of prices. This is because the velocity of money increases as inflationary expectations lead to a decreased real demand for money. Insofar as unions succeed in protecting their real wages, the supply of money in terms of wage units falls, with negative effects on employment.

Perhaps the most important effect, however, is the interaction between nominal price variables and the fiscal system. The United States and most other countries do not have inflation-immune tax structures. If a country has a progressive-tax system, an increase in the price level increases the real value of taxes and therefore, on this account, reduces real aggregate demand. This means that an increase in the money supply combined with a proportionate increase in all money wages, prices, and contractual obligations, reduces employment. The longer inflation goes on without an adjustment of taxes the more it reduces actual output below potential output.

The importance of this point needs to be strongly emphasized. Money is not "neutral." Monetary expansion causes drift into fiscal restraint,

which reverberates back by restricting output expansion. The countries with successful growth policies, such as Germany, Japan, and Italy, have generally more than offset this effect with annual tax reductions, whereas the countries with unsuccessful growth policies, have generally emphasized tax increases.

It is true, of course, that government expenditures could be adjusted to offset the purely budgetary impact of this effect. But government spending within a given fiscal year is circumscribed by appropriations that are fixed in nominal terms, a factor that reinforces the fiscal drag. The slowdown in real defense spending was a major cause of the increase in unemployment in 1970.

Inflation causes a drift into fiscal drag, which slows growth and eventually causes unemployment.

The Recession Method of Stopping Inflation

A simplified interpretation of (too) much current thinking is as follows: In the midst of an inflationary boom a recession is necessary to stop the inflation and it is better to stop it quickly, because letting it continue will make a greater depression necessary later on. To stop inflation the rate of monetary expansion has to be cut back. This will bring about a recession and some unemployment, but it will also check the rate of wage expansion, in relation to productivity, and thus restore full employment at the new noninflationary rate of wage expansion.

This theory raises, first, the question of whether the economy operates in this way and, second, whether, if it does, the *recession method* of stopping inflation would be acceptable. There are grounds for doubting the theory, since monetary deceleration operates directly on expectations and slows inflation without causing a depression. But let us for the moment suppose it were true. Would a recession be an efficient way to stop inflation?

There are several ways of measuring the unemployment cost of a recession. One of the earliest and simplest was "Okun's Law,"

$$\frac{P-A}{P}$$
 = 3.2 (μ -.04),

where P and A are potential and actual output; μ is the unemployment percentage. This means that each one percentage unemployment in excess of the conventional 4 per cent costs the economy, at the current GNP level, \$32 billion. Now let us build a fairly optimistic profile of the near past and future, and suppose that unemployment and inflation rates were or will be as follows:

	Unemployment	Cost	Inflation
1969	4%	0	3%
1970	6%	\$64 b.	4%
1971	5%	\$32 b.	3%
1972	4%	0	2%

The table shows that the economic cost of the recession method is \$96 billion. This bloodletting is probably the minimum bill for getting inflation to 2 per cent a year by the method adopted and yet it probably understates the actual bill the economy is likely to pay. Spread over two years, \$96 billion is greater than the annual GNP of most countries in the world. It is a fantastic cost that, if it is accepted, would undermine the entire philosophy of monetary management. If indeed the cost of reducing the inflation rate from 4 per cent to 2 per cent were put to the American public as a bill of \$96 billion, or almost \$500 per person payable over two years, the public might prefer to put up with the inflation. Even so, \$96 billion is probably an underestimate.

If the recession method operated in the way I have formulated, it would be an incorrect application of the science of policy. It would use a target variable, the unemployment rate, as an intermediate instrument to achieve the full-employment rate of wage expansion. But it is too expensive to use a goal of policy (employment levels) as an instrument for achieving another goal (price stability). Both full employment and price stability are targets of policy. If monetary policy is used as an instrument to bring about price stability, it should not be allowed to operate by the roundabout manipulation of the level of employment. The principle of effective market classification is violated, and the circuit becomes inefficient.

The economic generals have unfortunately learned the wrong lesson from their mistake. Unemployment has generated pressure to step up the rate of monetary expansion and get unemployment back down to 4 per cent. The mistake here is twofold. It was not monetary tightness that caused the 1969-71 depression; it was fiscal changes. The corollary is that monetary acceleration is not the appropriate policy to revive employment. Monetary policy has its comparative advantage in controlling inflation and the balance of payments, and should be reserved for that purpose. Financial instruments should be allocated to financial targets; real instruments to real targets.

A Digression on the Nature of Policy Formation and the Dilemma of Policy

The stabilization plan developed to stop the inflation and promote growth with the new administration was confused and eclectic. It failed.

Many reasons could be offered for this, and the American economics profession is far from guiltless.

Coordination of monetary and fiscal policies is the outcome of the competition for influence of the Federal Reserve Board, the Treasury, the Council of Economic Advisers, and the White House Staff, with occasional forays by the Departments of Commerce, Labor, Defense, or State, hortatory interventions by the Joint Economic Committee (which lacks legislative power), the Ways and Means, and the Banking and Currency Committees, academic consultants, and the prima donnas of economic academe. During this period no strong hand emerged to pilot the economy through one of its most difficult periods since the World War.

If policy formation could be improved in Washington the saving in real output could amount to tens of billions of dollars. Before the Employment Act of 1946 the government was not formally required to stabilize employment and prices. After that time, policies have been good only in comparison with the huge errors made during the depression. American policy-makers have been less sophisticated than their counterparts in Europe. The 1969-71 recession was an economic catastrophe which cost more in wasted resources than the cumulative economic cost of the war in Asia, more than the entire GNP of 800 million Chinese. Stabilization policy in the United States is far behind the techniques used in Europe and Japan despite the higher stakes. The European countries have been more successful in taming the business cycle, in paring unemployment to a minimal figure. A complete professionalization of the science of stabilization policy that draws on the experience of all countries is now possible. The underinvestment in research in an area where potential gains of tens of billions of dollars are at stake is probably the most shocking waste in government in the United States today.

The cause of the 1969-71 economic catastrophe was faulty information. I am not speaking here of the measurement blunder due to the use of an incorrect monetary series (now corrected), but to the failure to use or interpret properly information already in the system. It is enough to cite the opening statements of last year's tri-weekly policy directives of the Federal Reserve Open Market Committee, and the full statement of the December 1970 meeting published in the March issue of the Federal Reserve Bulletin. Each statement begins with "The information reviewed at this meeting. . . ." Then we get:

Dec. 16, 1969

". . . indicates that real economic activity has expanded only moderately in recent quarters and that

a further slowing of growth appears to be in process."

Jan. 15, 1970

"... suggests that real economic activity leveled off in the fourth quarter of 1969 and that little change is in prospect for the early part of 1970."
"... suggests that real economic activity, which

Feb. 10, 1970

"... suggests that real economic activity, which leveled off in the fourth quarter of 1969, may be weakening further in early 1970."

Mar. 10, 1970

". . . suggests that real economic activity which leveled off in the fourth quarter of 1969, is weakening further in early 1970."

Apr. 7, 1970

"... suggests that real economic activity weakened further in early 1970, while prices and costs continued to rise at a rapid pace. Fiscal stimulus, of dimensions that are still uncertain, will strengthen income expansion in the near term."

May 5, 1970

"... indicates that real economic activity weakened further in the first quarter of 1970. Growth in personal income, however, is being stimulated in the second quarter by the enlargement of social security benefit payments and the Federal pay raise."

June 23, 1970

"... suggests that real economic activity is changing little in the current quarter after declining appreciably earlier in the year."

July 21, 1970

"... indicated that real economic activity changed little in the second quarter after declining appreciably earlier in the year."

Aug. 18, 1970

". . . suggests that real economic activity, which edged up slightly in the second quarter after declining appreciably earlier in the year, may be expanding somewhat further."

Sept. 15, 1970

"... suggests that real economic activity, which edged up slightly in the second quarter, is expanding somewhat further in the third quarter, led by an upturn in residential construction."

Oct. 20, 1970

"... suggests that real output of goods and services increased slightly in the third quarter but that employment declined and unemployment continued to rise; activity in the current quarter is being adversely affected by a major strike in the automobile industry."

Nov. 17, 1970

"... suggests that real output of goods and services is changing little in the current quarter and that unemployment has increased. Part but not all of the weakness in over-all activity is attributed to the strike in the automobile industry which apparently is now coming to an end. Wage rates generally are continuing to rise at a rapid pace, but gains in productivity appear to be slowing the increase in unit labor costs."

Dec. 15, 1970

"... suggests that real output of goods and services has declined since the third quarter, largely as a consequence of the recent strike in the automobile industry, and that unemployment has increased. Resumption of higher automobile production is expected to result in a bulge in activity in early 1971. Wage rates generally are continuing to rise at a rapid pace, but gains in productivity appear to be slowing the increase in unit labor costs.

"Movements in major price measures have been diverse; most recently, wholesale prices have shown little change while consumer prices have advanced substantially. Market interest rates declined considerably further in the past few weeks, and Federal Reserve discount rates were reduced by an additional one-quarter of a percentage point. Demands for funds in capital markets have continued heavy, but business loan demands at banks have been weak. Growth in the money supply was somewhat more rapid on average in November than in October, although it remained below the rate prevailing in the first three quarters of the year. Banks acquired a substantial volume of securities in November, and bank credit increased moderately after changing little in October. The foreign trade balance in September and October was smaller than in any other 2-month period this year. The overall balance of payments deficit on the liquidity basis remained in October and November at about its third-quarter rate. The deficit on the official settlements basis was very large as banks continued to repay Euro-dollar liabilities.

"In light of the foregoing developments, it is the

policy of the Federal Open Market Committee to foster financial conditions conducive to orderly reduction in the rate of inflation, while encouraging the resumption of sustainable economic growth and the attainment of reasonable equilibrium in the country's balance of payments.

"To implement this policy, System open market operations shall be conducted with a view to maintaining the recently attained money market conditions until the next meeting of the Committee, provided that the expected rates of growth in money and bank credit will at least be achieved."

The above excerpts show that monetary policy—or dithering—during the unfolding depression in 1970 was made in a vacuum, independent of the ability to control or even know the impact of fiscal actions. As the Federal Open Market Committee saw the depression unfold, inflation continue, and the balance of payments worsen, they acted like the ass of Buridan.

Real GNP in 1970 was \$976.8 billion, down by more than 0.5 per cent in real terms from 1969. A whole year's growth, worth almost \$50 billion, was lost.

The Anatomy of the Blunder

What caused the 1969-71 depression? Was it monetary policy or fiscal policy? A tax surcharge was imposed in 1968. Fiscal tightness by any plausible measure amounted to several billions of dollars. The high-employment budget moved from a stimulus position at the rate of —\$15 billion in the first part of 1968 to a restraint position of +\$10 billion in the first part of 1969, a turnaround of \$25 billion within a single year. Fiscalists warned of overkill. But inflation did not slow down in 1969, or even in 1970; and the maintenance of high employment in 1969 led fiscalists to lose faith in the significance of fiscal policy. When in 1970 monetary expansion was stopped, unemployment rose but inflation continued, and it was the turn of the monetarists to be depressed.

The first impulse of depression can be observed not so much on employment as on productivity. Because of fixed costs to labor, the productivity cycle leads the unemployment cycle. The fiscal tightness of 1968 and 1969 produced its impact on output before its impact on employment. The rate of growth of real output declined from 5 per cent between 1967 (II) and 1968 (II) to 2.9 per cent from 1968 (II) to 1969 (III) and then to -1.1 per cent from 1969 (III) to 1970 (IV).

The lead of the productivity cycle over the unemployment cycle is thus confirmed, since the productivity recession started in 1969 but the recession was delayed until 1970. The productivity recession started in the closing months of the Johnson administration and was caused by the fiscal restraint. Unemployment was only 3.7 per cent at the end of 1969, but output expansion had already slowed. It jumped to 5 per cent in the middle, and to 6 per cent at the end of 1970. The productivity depression started a full year before the unemployment depression because of the changes in the utilization rate just described.

The anti-inflation policy was a failure. Prices had risen steadily since the end of 1965, accelerating from 3 per cent in 1966 to 4 per cent in 1967 to 4.2 per cent by the middle of 1968. After the tax increase the price inflation accelerated to 4.7 per cent from 1968 (III) to 1969 (II), and to 5.7 per cent from 1969 (II) to 1970 (I). In 1970 the inflation rate declined only slightly to 4.9 per cent, despite the cessation of monetary growth in the previous year. Interest rates came tumbling down and the foreign deficit went up to \$9.8 billion.

The facts speak for themselves. The 1968 tax increase and fiscal tightness throughout 1968 (II) to 1971 (I) was a colossal blunder that, for the monetary policy adopted, caused the productivity depression and, along with the monetary policy chosen, far from stopping the inflation, aggravated it. For, while money GNP was expanding at a rate of about 7 per cent from 1965 to 1970, the tax increase in 1968 interposed a barrier to *real* expansion, causing the inflation rate to accelerate rather than decline. The tax increase cut into real expansion and increased inflation.

We can now summarize the analysis, therefore, by relating the policy mix adopted to the rates of change of real output (λ) , price inflation (π) and money income (μ) . The fiscal tightness bore down too heavily on real expansion—the rate of increase of real GNP (λ) —and not heavily enough on the rate of increase of prices (π) . The λ/π ratio was too high on the contraction. Because λ fell with the surtax, π did not fall with the monetary tightness.

Both "fiscalists" and "monetarists" made costly errors in 1968-70. The fiscalists did not consider sufficiently the impact of the 1968 tax increase and later fiscal tightness on aggregate supply. They thought it would stop inflation; instead it lowered the expansion rate of real output which aggravated inflation.

The monetarists underestimated the significance of the fiscal tightness on the real economy, the tax drift due to the monetary inflation, and the impact of the tax increase on wage demands. As a result the monetary expansion adopted was more inflationary than realized.

The correct policy mix was a reduction in the rate of monetary expansion (perhaps best achieved by a credit ceiling) combined with a tax reduction. This would have stopped the inflation rate without causing a depression.

The actual policy mix was fiscal tightness combined with an excessive monetary expansion. So we got a depression without stopping the

inflation.

POLICY MIX FOR 1971

A Parallel

A parallel can be made between the first two years of the Kennedy and Nixon administrations. In 1961 President Kennedy had inherited a recession and a balance-of-payments deficit from the outgoing administration. The recession had exhausted itself by the end of 1961, but for the next two years the unemployment rate stuck at 5½ per cent, held up by an overly restrictive budgetary policy, and no progress was made in eliminating the payments deficit. The economy needed a tax cut to correct unemployment, accelerate growth, and protect the balance of payments, and the delay in getting one cost tens of billions of dollars in lost GNP.

The Kennedy administration persisted for almost two years in "operation twist"—trying to lower long-term interest rates to stimulate growth, while maintaining short-term rates to protect the balance of payments, and maintain a tight budget to prevent inflation. The twisters did not match real instruments to real targets and monetary instruments to monetary targets, and the policy caused great delay in getting the country moving again. The reversal came when President Kennedy recommended a tax cut to Congress in his first messages of 1963, but it took over a year before Congress finally agreed to it.

The delay in getting tax reduction caused a great waste. It was only in 1964 that President Johnson got the tax cut through Congress, although prior to that the investment credit was granted and anticipations of expansion had already got a boom started. There followed the great expansion of 1964-65. Both the investment-credit tax and the anticipatory effect of the expansion program and lower taxes helped to set the economy in motion. The tax cut, which should have been implemented years earlier, did, however, accelerate the growth of the economy. Unemployment fell steadily, the growth of real output picked up to over 6 per cent, the rate of monetary growth was stimulated, interest rates rose, and the balance-of-payments deficit was reduced.

It is important today to recognize the mistakes of the past, not to revive unpleasant memories but to prevent their repetition. Congress

was as much or more to blame than the Administration, and it will be

important to see why shortly.

It is a sad irony that in only two years of the entire decade of the 1960s could it be said that economic policy was appropriate, conforming to correct principles of economic policy. The direction of policy from 1963-65 was correct. Things went wrong again in late 1965, when the increase in defense spending was not properly financed. But the relevant point to be made here is that the failure of 1965-68 policy should not obscure the success of 1963-65 expansion.

In 1969 President Nixon inherited inflation and a balance-of-payments deficit from the Johnson administration. The problem was financial and its solution should have been financial. The correct policy was monetary tightness; the actual policy was fiscal tightness. As a result of the wrong mix from 1968 to early 1971 unemployment moved up to 6 per cent and the inflation continued. The policy mix in the first two years of the Nixon administration was wrong, just as it had been in the first two years of the Kennedy administration.

The problem of 1971 is now analogous to the problem of 1961, when there was unemployment, a balance-of-payments deficit, and too slow a growth rate. The unemployment rate now is about 6 per cent and the balance-of-payments deficit was \$9.8 billion in 1970 and remains high in early 1971. But superimposed on these problems (which are the same as those faced by Kennedy but not solved until the Johnson administration) is the additional problem of inflation that has persisted at a rate above 4 per cent since 1965. In 1971 the problem is to reduce unemployment, to protect the balance of payments, and to slow inflation. Because of the additional inflation, tighter money is even more urgent than in 1962. Because of the higher level of unemployment, it is even more important to reverse the tight budget policy.

The correct policy mix is based on *fiscal ease* to get more production out of the economy, in combination with *monetary restraint* to stop inflation. The increased momentum of the economy provided by the stimulus of a tax cut will cause a sufficient demand for credit to permit real monetary expansion at higher interest rates.

Loose money is not the solution to reviving the economy. That solution overlooks the link between monetary expansion and expectations and incorrectly uses a monetary instrument to achieve a real target. Monetary expansion stimulates nominal money demand for goods, but, without rigidities or illusions to bite on, it does not lead to real expansion. But growth of real output raises real money demand and thus abets the absorption of real monetary expansion into the economy without inflation. Tax reduction increases employment and growth and this raises

the demand for money and hence enables the Federal Reserve to supply additional real money balances to the economy without causing sagging interest rates associated with conditions of loose money. Monetary acceleration is inflationary, but tax reduction is expansionary when there is unemployment.

Tax Reduction and Growth

In reviving the economy in 1971 a better division of money-income expansion between output expansion and inflation needs to be achieved. The real-growth rate is the sum of employment growth and productivity growth. Real growth must be raised rapidly to restore the economy's full potential-growth path; and to further this goal both employment and productivity growth can be increased. The policy-theoretic problem is to find the best trajectory to reach the noninflationary growth path with full employment and maximum productivity. Monetary acceleration is not the appropriate starting point from which to initiate the expansion, because of the risk of igniting inflationary expectations. Tax reduction is the appropriate method. It increases demand for consumer goods, which reverberates on supply and increases the demand for labor and money, which puts enough pressure on the loan market to enable monetary expansion with modest increases in interest rates. Because of the idle capacity and unemployment, in many industries increased supply can be generated without causing economy-wide increases in costs. In many industries costs per unit of output will decline and, to the extent that competition rules, prices will fall. Tax reduction is not, therefore, inflationary from the standpoint of the economy as a whole.

The tax reduction and revival of demand should increase profits and raise the return to capital. Incomes increase and, if the increase is expected to be permanent, the community as a whole will hold a larger stock of real money balances and there will be no significant spillover into inflation or losses on the balance of payments. There is no reason why the historical relation between returning prosperity and an improved balance of payments will not reassert itself.

Tax reduction and monetary expansion have substantially different effects both on effective demand and aggregate supply. A purchase of securities in the open market, for example, is an exchange of noninterest-bearing government debt for interest-bearing debt. This does not have any wealth effect, except for the impact of the capitalized value of the lower future tax liabilities, needed to pay interest on the public debt, a factor which in the short run can be regarded as of only second-order magnitude. The effectiveness of monetary policy, therefore, rests on the substitution effect, which, however, cancels out if expectations of price

changes rise pari passu with the increase in the rate of monetary expansion—an implication of the homogeneity postulate of monetary theory and its behavioral expression in the formation of expectations. By contrast, tax reduction increases disposable income and stimulates spending, output, and employment, because it unambiguously makes consumers better off, while the method of financing the deficit increases the stock of marketable assets in the hands of the public. Pure fiscal policy in which tax reduction is financed by sales of government securities involves an increment to the cash flow of households or businesses and an increase in government assets accumulating in the hands of savers. The short-run effect of this combined action (the tax reduction plus the borrowing) is certainly stimulative to demand in the short run, although in the longer run the effects are less certain. But it is precisely the short-run effectiveness of fiscal policy that makes it such a superb weapon of incomestabilization policy, and gives it its great comparative advantage over monetary policy as an instrument of demand management in the short run and for real goals, provided Congress will permit it to be used.

Two major arguments that the man in the street or the Congress will raise against tax reduction is that it can contribute to inflation. When inflation fears compete with unemployment horrors this argument should be candidly met by analysis of the total chain of interrelated events. It is first essential for the policy authorities to understand that, even though the effects of pure fiscal and monetary policies can be analyzed separately, the implementation of a program of tax reduction would almost certainly involve a combination of both changes in taxes (and bond sales) and changes in the supply of money and interest rates. Even if tax reduction and the stimulation of demand and supply did not prompt any new monetary action by the Federal Reserve, there is enough (probably too much) elasticity of the world monetary system not just to finance expansion but to revive inflationary tendencies as well.

Tax reduction however is expansionary, not inflationary, when there is substantial underutilized capacity, as we have stressed enough. The distinction revolves around the effect on supply. Whether tax reduction raises or lowers prices depends on how aggregate supply responds to aggregate demand, and on the impact of tax reduction on costs. Prices will rise only if the increase in aggregate demand exceeds the increase in aggregate supply and if any excess of the demand price over the supply price of aggregate output is not offset by a reduction in wage (cum tax) and other costs.

Economic theory does not question the evidence that, in the short run, tax reduction stimulates demand, and that supply will expand to utilize capacity. But it has neglected the effect on supply and costs. There are

two effects that need particularly to be stressed. The first is a once-for-all inventory effect, as producers release inventories held in anticipation of the tax reduction in order to realize profits at the lower tax rates. This once-for-all inventory effect is immediate and can be an enormous benefit in stopping inflation and reversing expectations quickly, because it releases supply in a short period of time. The tax cut of 1948, sponsored by Senator Robert Taft over the opposition of President Truman, is the best example of this. It may even have gone too far in the sense that it not only ended the great (1945-48) postwar inflation, in conjunction with other factors, but created oversupply. The inventory effect is immediate, temporary, and deflationary and is the best way to work off excess inventories and set the stage for new orders and a revival of industrial production. The second factor, to which we have alluded before, is the impact on costs due to the reduced pressure of workers to maintain their income shares. This effect too has been neglected in both theoretical and policy discussions, and was not adequately taken into account in connection with the ill-considered tax surcharge of 1968.

Our concern up to the present has been with expansion from trough to peak in the sense of restoring utilization of capacity, and we have not considered secular-growth factors. Tax reduction has beneficial effects on economic growth although it operates over a longer time horizon. This is obvious to those who have considered the growth patterns of, say, Japan, Germany, and Italy, and the opposite case of the United Kingdom. At the new growth equilibrium of the economy following a tax reduction, higher interest rates (after taxes) imply a higher saving rate. The growth-interest relation, under suitable assumptions, can be shown to be

$$\frac{d\lambda}{dr}=\frac{s\eta}{r\beta}$$
,

where s is the fraction of income saved, r is the rate of interest, η is the compensated saving elasticity, and β is the capital-output ratio (assumed constant). If s=.1, r=.05, $\beta=2.5$ and $\eta=0.2$, then $d\lambda/dr=.16$, so that an increase in the rate of interest from 5 per cent to 6 per cent would result in an increase in the growth rate of 0.16 per cent, solely on account of a change in secular savings.

These considerations, taken as a whole, suggest unexploited possibilities for using tax reductions to stimulate growth, that should become part of the National Growth Plan—when one is made.

The immediate problem for 1971, however, is to increase the supply of jobs. The economy of the unemployed, numbering about 5 million, has a GNP potential of about twice the GNP of, say, Belgium. The social

problems to which this gives rise are especially acute during a period of social tension and demobilization. It is absurd to argue that unemployment on such a scale or duration is socially necessary. Twelve million were demobilized after World War II and the recession (March-December 1945) lasted only a few months and left unemployed only 3 per cent of the labor force. Nor can the case be made that the unemployment rate has reached a higher equilibrium plateau, except one artificially generated (as in 1957-63) by an excessively restrictive fiscal system dragging the economy into stagnation.

But, if the arguments of those who oppose tax reduction were correct, if it were indeed true that employing, say, two-thirds or three-quarters of the unemployed would cause inflation—and I deny that any evidence for it has been advanced—it would be a shocking indictment of the system itself.

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