

FEDERAL RESERVE BANK OF ST. LOUIS

JUNE 1969



REVIEW



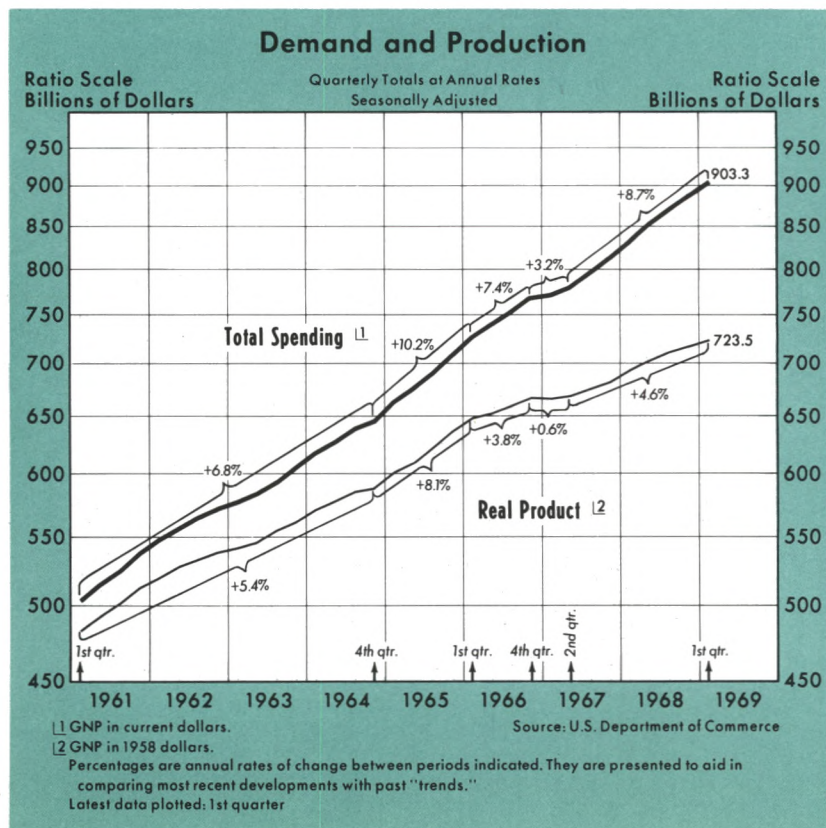
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Real Growth and Prices

THE GROWTH of total spending continues excessive compared to the growth of the nation's long-run output potential, but recent monetary developments give reason to expect slowing in the growth of total spending in coming months. The growth of the money supply has been substantially slower in the last five months than in 1967 and 1968. Some recent

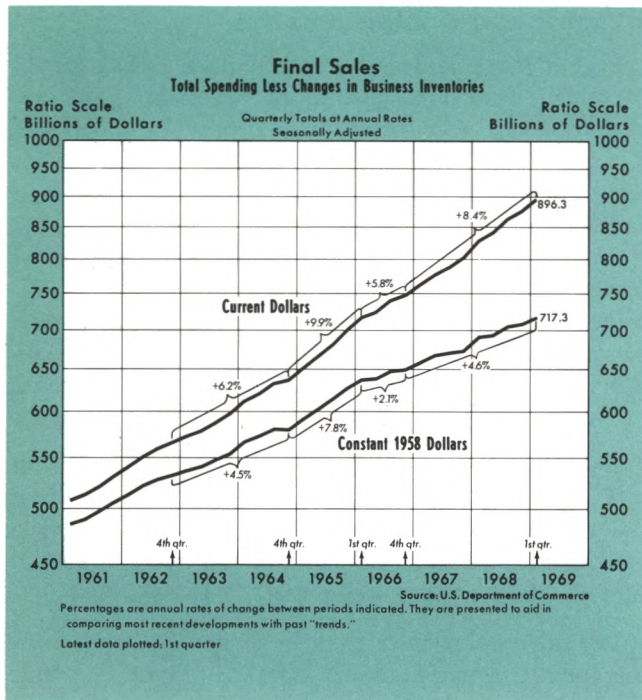
studies indicate that most of the effects on total spending of changes in the rate of monetary growth tend to be distributed over about four quarters. The growth of total spending may therefore slow to a less inflationary pace in the second half of 1969, if the recent slower rate of monetary expansion is maintained.



Total Spending

Total spending (that is, GNP in current dollars) increased \$16 billion, or at a 7.4 per cent annual rate, from the fourth quarter of 1968 to the first quarter of 1969, slower than the 8.3 per cent rate in the second half of 1968 and the 9.3 per cent rise in the preceding year. Even though spending growth has moderated somewhat, it remains well in excess of growth in the economy's ability to produce, generally estimated to be about 4 per cent a year.¹ Final sales, which is total spending less changes in inventories, grew at a 9.2 per cent rate in the first quarter, the same rate as in the previous year.

¹According to the Council of Economic Advisers, production potential grew at a 3½ per cent rate from mid-1955 to the fourth quarter of 1962, at a 3¼ per cent rate from IV/1962 to IV/1965, and at a 4 per cent rate from IV/1965 to IV/1968. See pages 64 and 65 of the 1969 *Economic Report of the President*, United States Government Printing Office, (Washington, 1968).



When total spending in the economy expands at rates greater than the expansion of production potential, the difference is largely manifested in rising prices. From the beginning of the recovery in 1961 to the initial phases of the Vietnam War buildup, the increase in total spending was at a 7 per cent rate, and prices increased on average 1.5 per cent a year. From 1965 to 1968 the average annual increase in total spending was 8 per cent, and since a very high level of employment of resources had been achieved, the rate of increase in real product fell somewhat and the average growth of prices rose to over 3 per cent a year. In order to maintain sustainable economic growth with high employment and a generally stable price level, the growth rate of spending should be slower in periods of high capacity utilization than in periods of recovery from a recession or underutilization of resources.

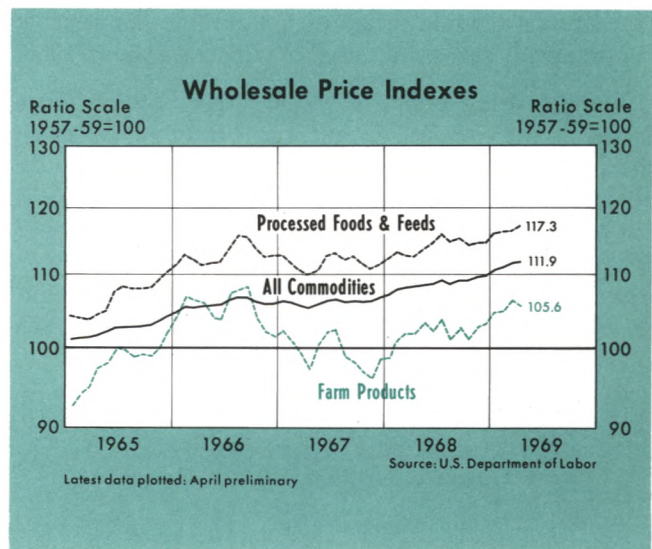
Real Product and Prices

The moderate slowing in the growth of total spending, which has occurred since the middle of last year, has been accompanied by deceleration in the growth of real product. Actual output of goods and services increased at a 6 per cent annual rate in the first three quarters of 1968, then slowed to a 3.5 per cent rate in the fourth quarter, and to less than a 3 per cent rate in the first quarter of 1969.

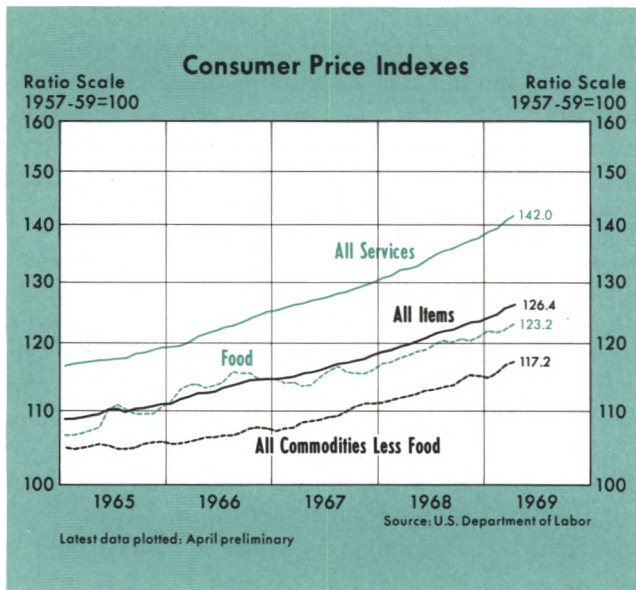
On the other hand, price increases have accelerated in 1969, accounting for about 60 per cent of the in-

crease in total spending in the first quarter. The general level of prices rose at a 4.6 per cent annual rate in the first quarter this year, the most rapid quarterly increase of the recent inflationary years. Prices rose at a 1.9 per cent rate in the 1964-65 period, at a 3 per cent rate to mid-1967, and have risen more than 4 per cent rate since mid-1967.

Wholesale prices rose at a 5.9 per cent annual rate from December to April 1969, much more rapidly than at any time in the previous year. Wholesale prices of industrial commodities rose at a 5.3 per cent annual rate in the December to April period, compared to the 4 per cent rate in the corresponding period a year earlier, and a 2.6 per cent increase in 1968. Wholesale prices of farm products and processed foods and feeds increased at a 7.1 per cent rate from last December to April, compared with a 5.8 per cent rate in the December to April period last year and a 3.4 per cent increase in 1968.



Consumer prices have increased recently with exceptional rapidity, rising at a 6.7 per cent annual rate from December to April compared with a 4.7 per cent rate in the preceding year. During 1968 food prices went up 4.3 per cent, and since last December have risen at a 5 per cent rate. Food prices fluctuate more sharply than prices of other consumer goods because supplies are more strongly influenced by unanticipated factors such as weather and strikes. Prices of consumer commodities other than food increased at an average rate of 1.3 per cent from 1958 to 1968, with prices of nondurable goods rising about twice as fast on average for the whole period as prices of durable goods. In 1968 the prices of nondurable goods went up 4.4 per cent, while durable good prices rose 2.5 per cent. In contrast, so far in 1969 prices of



durable goods have risen at a much more rapid 7.6 per cent rate, while prices of nondurable goods have continued to rise at about the same rate as in 1968.

Rapidly rising prices of services have been a large factor in the increase in average consumer prices in the past decade, and especially since 1966. Currently about 41¢ out of every dollar spent by consumers is for services. Prices of services have risen at a 3 per cent average rate in the last 10 years and at a 4.8 per cent rate since 1966. In 1968 prices of services increased 6.1 per cent, and in early 1969 the rise has accelerated to an 8.7 per cent annual rate.

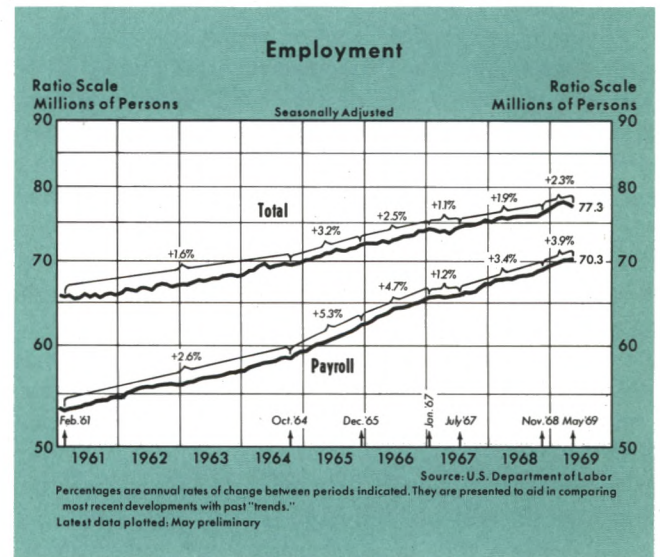


Other Business Indicators

Recent movements in most economic indicators do not show a distinct pattern of acceleration or deceleration of the economy, but do provide some basis for optimism that slowing is gradually being achieved. Personal income has risen at a 7.3 per cent rate since last December, compared with 9.3 per cent in the previous year. Due to higher taxes and larger social security payments, growth of aftertax disposable income has slowed even more. Industrial production has risen at a 5 per cent annual rate since last December, not significantly different from the increase in the previous year.

Retail sales have increased at about a 5 per cent rate in the past six months, considerably less than the rate of increase in the corresponding period a year ago, and about the same as the average annual increase in the past ten years.

Payroll employment grew at about a 1.7 per cent annual rate from February to May, about the same



rate as in the corresponding months a year earlier. Total civilian employment declined at a 2.4 per cent annual rate from February to May. Employment was reported to have increased at a 7 per cent rate from last October to February, following essentially no change from May to October 1968. In the past twelve months employment is reported to have risen 1.8 per cent. This growth rate is about the same as the estimated 1.7 per cent growth of working-age population in 1968.

Unemployment has ranged between 3.3 per cent and 3.5 per cent of the labor force since last October. Unemployment of married men has been below 1.6

ECONOMIC INDICATORS

	Compounded Annual Rates of Change	
	1968*	early 1969†
Total Spending ¹	9.4 %	7.4 %
Final Sales	9.2	9.2
Real Product ²	5.4	2.9
Prices:		
Overall Price Index ³	3.9	4.6
Consumer ⁴	4.7	6.7
Services	6.2	8.7
Food	4.3	5.0
All Commodities less food	3.7	5.3
Durables	2.5	7.6
Nondurables	4.4	4.5
Wholesale — All Commodities	2.8	5.9
Farm Products	4.5	6.8
Processed Foods and Feeds	2.9	7.0
Industrial Products	2.6	5.3
Other Indicators:		
Industrial Production	4.1	5.1
Personal Income	9.3	7.3
Retail Sales	6.8	11.2
Payroll Employment	3.4	3.9
Total Civilian Employment	1.7	3.3

*For Total Spending, Final Sales, Real Product, and Overall Prices, rates of change are from fourth quarter of 1967 to fourth quarter of 1968. For all other indicators rates are from December 1967 to December 1968.

†For Total Spending, Final Sales, Real Product, and Overall Prices, rates of change are from fourth quarter of 1968 to first quarter of 1969. For all other indicators rates are from December 1968 to April 1969.

¹Gross National Product in current dollars.

²Gross National Product in 1958 dollars.

³Implicit Price Deflator for Gross National Product.

⁴Consumer Price Index.

per cent, and unemployment among nonwhites in the labor force also remains well below the average rate of the earlier Sixties.

Reducing the Growth of Total Spending

Experience suggests that policies designed to reduce the rate of growth of total spending are likely to have their initial lagged impact on the growth of real product, with restraint on price increases appearing after an even longer lag. The most recent experience with lags between slowing of total spending and slowing of real product growth and price increases was in 1966 and 1967. From late 1965 to late 1966 total spending increased 8.2 per cent, real product 4.8 per cent, and prices 3.3 per cent. In the first half of 1967 total spending growth dropped sharply to a 3.2 per cent annual rate, following three quarters of monetary restraint. As total spending slowed, real product fell from 4.8 per cent growth in 1966 to a 0.6 per cent annual growth rate in the first half of 1967, while price increases decelerated to a 2.5 per cent rate. This slowing of inflation from a 3.3 per cent rate in 1966 to a 2.5 per cent rate in the first half of 1967 was an unusually rapid response of prices to monetary restraint, but was accompanied by a halt in real product growth.

As spending and real product growth were decelerating sharply in early 1967, the stance of monetary influence was shifted to substantial stimulus. Subsequently, total spending resumed rapid growth in the second half of 1967, and the improvements made on the problem of inflation were short-lived.

With current growth rates of resources and technology, a sustained growth of total spending at about a 5 per cent annual rate would seem to be more desirable than rates as low as 2 per cent or as high as 8 per cent. Policies designed to achieve about a 5 per cent growth of total spending would minimize the likelihood of an abrupt halt in the growth of real product or a hasty reacceleration of price increases.

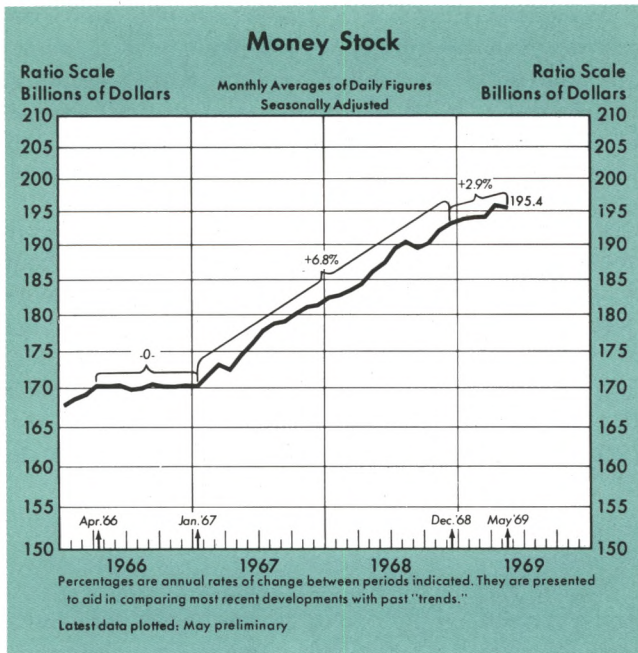
Policies and Policy Indicators

Recent statements by policymakers emphasize a firm commitment to reduce upward price pressures, but also reveal a significant concern for minimizing reductions in the growth of real production and decreases in employment. Confidence that the pace of spending will be brought under control depends upon these statements by policymakers, the fiscal situation, and the recent slower monetary growth, rather than on available evidence from business indicators. Movements of most business indicators are difficult to interpret over short periods because of vagaries in data collection and the influence of random temporary events.

No further restraint from additional fiscal actions is expected in 1969-70. The high-employment budget, estimated to be in surplus at an \$8 billion annual rate in the second quarter of 1969, is projected to move to about a \$6 billion surplus in the next four quarters, assuming extension of the surtax as currently planned. This measure of fiscal action showed a \$16 billion deficit in the second quarter of 1968 and a \$10 billion average surplus from 1961 to 1964.

Recent empirical studies indicate that growth of total spending at a 6 per cent annual rate in the last half of 1969 and about a 5.5 per cent rate in 1970 would require continued monetary restraint. One of these studies indicates that this moderation in the growth of total spending could most likely be attained if the money supply were to continue to increase at about a 3 per cent average annual rate.² Since December the money stock has risen at a 3 per cent

²See "Monetary and Fiscal Actions: A Test of Their Relative Importance in Economic Stabilization," in the November 1968 issue of this *Review*.



annual rate, compared with a 6.5 per cent average annual rate during the previous two years.

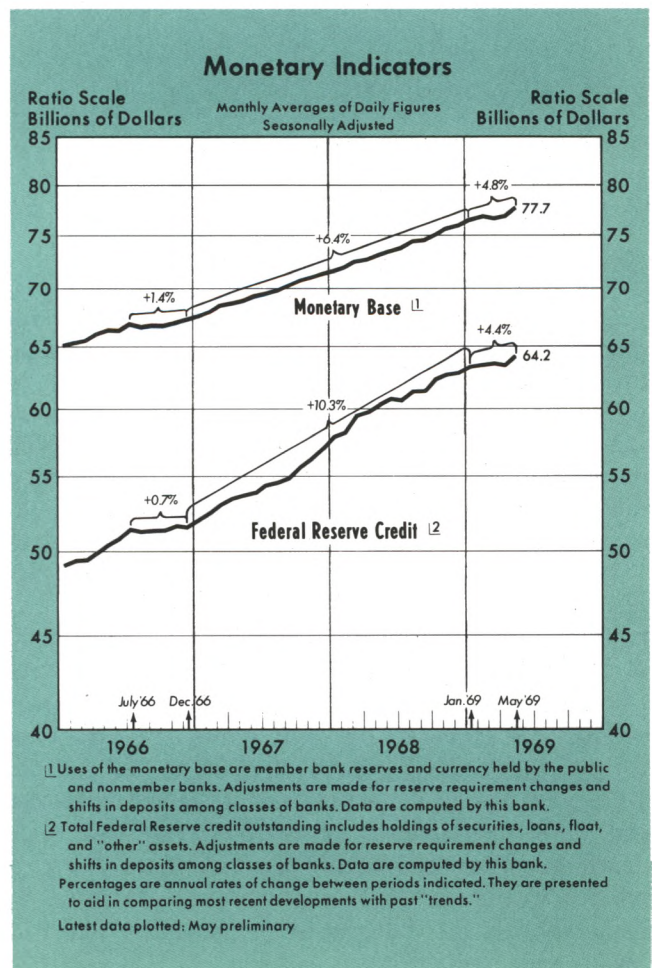
Since last December there has been considerable reference to possible monetary restraint resulting from commercial banks' loss of time deposits, especially large negotiable certificates of deposits. Banks have lost \$6.4 billion in large CD's since then, and growth in other time and savings deposits has moderated. Total time and savings deposits have declined at a 5 per cent annual rate since December, in contrast with an 18 per cent rate of growth in the last half of 1968. This development has been a major factor in the slowing of bank credit growth from a 14 per cent rate in the last half of 1968 to about a 3 per cent rate from December to May. However, for several reasons this development is probably not a reliable indicator of restrictive monetary influence on total spending.

The deceleration in the growth of time deposits (and, consequently, total loans and investments at all commercial banks) has been mainly the result of market interest rates rising relative to Regulation Q ceilings. These ceilings prevent banks from offering interest rates competitive with yields on other market securities. Since the decline in the demand for time deposits, due to their relatively low yields, affected bank holdings of time deposits, the recent rates of growth of time deposits and bank credit are not necessarily an indication of monetary restraint.

While the impingement of Regulation Q has brought commercial banks under severe pressure,

funds otherwise held in time deposits flow through other channels. Funds not available to banks are available in other money markets, and funds less readily available through banks are more readily available than otherwise in these other markets. Similarly, the 18 per cent growth of time deposits in the last half of 1968, compared with a 5 per cent rate in the first half, reflected reintermediation of time deposits as interest rates declined relative to Regulation Q ceilings, rather than a marked easing of monetary policy and influence.

Beginning with the reserve computation period ending April 23, the banking system has been required to hold about \$660 million more in reserves because of a 1/2 percentage point increase in reserve requirements against demand deposits. The Federal Reserve, through open market operations, has provided banks with part of the increase in required reserves. At the same time banks have increased their borrowings from Federal Reserve Banks. In the eight weeks following the reserve requirement increase, member bank borrowings averaged \$1309 mil-

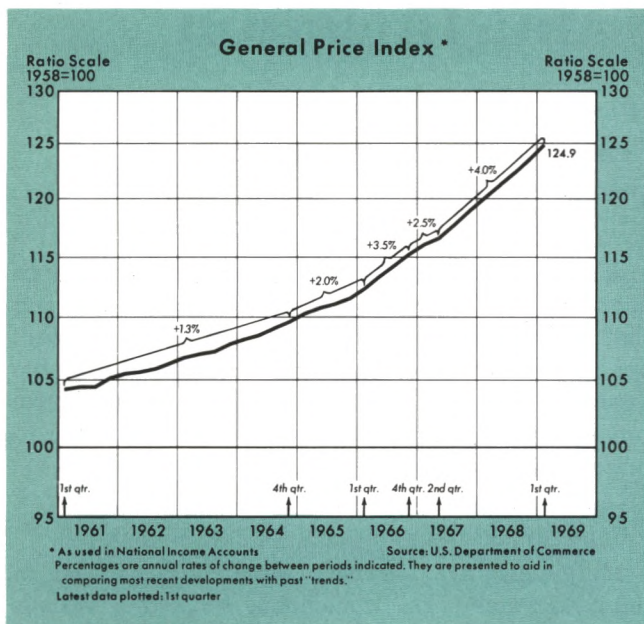


1 Uses of the monetary base are member bank reserves and currency held by the public and nonmember banks. Adjustments are made for reserve requirement changes and shifts in deposits among classes of banks. Data are computed by this bank.

2 Total Federal Reserve credit outstanding includes holdings of securities, loans, float, and "other" assets. Adjustments are made for reserve requirement changes and shifts in deposits among classes of banks. Data are computed by this bank.

Percentages are annual rates of change between periods indicated. They are presented to aid in comparing most recent developments with past "trends."

Latest data plotted: May preliminary



lion compared with \$876 million in the previous eight weeks. Member bank reserves (adjusted for the increase in reserve requirements in April) averaged \$27.3 billion in the eight weeks after the increase in reserve requirements compared with \$27.1 billion in the eight weeks prior to the change.

The Federal Reserve System can control the growth of the money stock over periods of a few months by controlling the growth of Federal Reserve credit and thereby the monetary base. Since January the mone-

tary base has increased at a 4.8 per cent annual rate, compared with a 6.4 per cent average rate in the previous two years. The base increased only \$400 million, or at a 2 per cent rate, from January to April. However, from April to May the base increased about \$800 million, or at a 13 per cent rate (after adjustment for reserve requirement changes in April), largely as a result of a \$1241 million increase in the total of member bank borrowings plus Federal Reserve System holdings of U.S. Government securities. If the growth of the monetary base resumes the relatively slow rate that prevailed in the first four months this year, then no sustained reacceleration in the growth of the money stock would be expected.

Summary

The small reduction in the growth of total spending since mid-1968 has been accompanied by a decline in the growth of real product; price increases have not moderated. Recent history suggests that it is not unusual for real product growth to slow earlier or more rapidly than price increases during the transition from a period of rapid inflation to a period of greater price stability. Experience suggests that a sustained slower growth of the money stock can reduce the rate of increase in total spending, and that slower price rises are likely to follow. Once the economy fully adjusts to the slower growth of spending, output and employment can resume growing at long-run potential rates.

Reprint Series

OVER THE YEARS certain articles appearing in the REVIEW have proved to be helpful to banks, educational institutions, business organizations, and others. To satisfy the demand for these articles, our reprint series has been made available on request. The following seven articles are recent additions to the series. Please indicate the title and number of article in your request to: Research Department, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, Mo. 63166

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Monetary Policy and Inflation

A speech given by DARRYL R. FRANCIS, President, Federal Reserve Bank of St. Louis, to the 79th Annual Convention of the Arkansas Bankers Association, Arlington Hotel, Hot Springs, Arkansas, May 12, 1969

IT IS GOOD to have this opportunity to discuss some important policy issues with Arkansas Bankers.¹ The issues which I propose to discuss revolve around Government policies and actions designed for economic stabilization.

Until recently there was quite general acceptance of the view that there is basic instability in the economy which produces wide fluctuations in output and employment. Some recent studies have cast considerable doubt upon this view. In its place is proposed the view that there is a high degree of inherent stability in our economic system. According to this view, population, natural resources, capital formation, and technology determine growth in output of goods and services. Since these factors change slowly and exert a powerful influence, they provide great underlying stability to the trend growth of output and employment. However, it is also increasingly recognized that fiscal and monetary actions of the government can be a source of short-run instability since, if improperly used, such actions can force the economy off of a high-employment stable-price growth path. One of the most important controversies presently facing those of us concerned with stabilization policies is the choice of reliable indicators or summary measures of the ways fiscal and monetary actions of the government influence the economy. I would like to discuss this problem with you.

Recent Experience

The recent record of national economic stabilization policy has left much to be desired. For almost five years we have had an accelerating inflation which we have not arrested either for lack of will or lack of knowledge as to how to do it. Uncertainty about the role of the Federal budget and about monetary policy has prevailed. Did the inflation come from the Federal spending, the budget deficit, monetary expansion or from some combination? Is the cure for the inflation to be found primarily in budget policy or in monetary policy?

¹The issues discussed in this speech have been presented to other groups recently by President Darryl R. Francis.

A recent experience with overt stabilization actions occurred last summer when taxes were raised and the growth rate of Federal spending was slowed. Some believed that these actions would bring the excessive growth of total spending under control quickly and would soon limit the rate of inflation. Yet, prices have continued to rise.

Fiscal Views

More generally, we have heard a great deal in the Sixties about the tremendous success of various fiscal policies, and particularly deficit spending, in keeping the economy growing. Not too long ago, the financial press made frequent reference to the number of months since the last recession. The implication was that the economy — at long last — could be “fine tuned.” However, as inflation has accelerated, we have heard fewer references to successes. Rather, attention has been focused on the need to dampen the excessive total spending.

With respect to fiscal actions, we are often reminded that the Federal Government cut taxes in early 1964, and that the economy has grown rapidly ever since. This observation generally implies a cause and effect relation, namely, that the growth we have experienced since the early Sixties has been chiefly a result of that 1964 tax cut.

Also, the total national debt has increased every year in this decade. It is widely believed that these deficits have kept the economy growing and, therefore, have been desirable. Then, last year, this great fiscal force was reversed in order to cool an overheating economy. Yet, so far the only thing that has cooled is the talk about the beneficial powers of fiscal action.

Monetary Views

In addition to fiscal policy, it is generally thought that monetary developments can influence economic activity. There are several monetary approaches. One focuses on interest rates and other money market conditions and another concentrates on credit. According to still another approach, the growth rate of the stock of money provides the best measure of the

influence of stabilization actions on total spending. Money is defined as demand deposits plus currency. The Federal Reserve can manage the growth of money through controlling Federal Reserve credit and the monetary base. According to this view, the level or movement of interest rates or the growth of bank credit are frequently misleading.

I will approach the monetary view of economic stabilization by discussing the following points: First, why have budget measures recently failed? Second, more generally, how reliable have such measures been? Third, what are the merits of "money market conditions" compared with monetary aggregates as measures of monetary influence? Fourth, what may we conclude about desirable monetary actions in the near future and the probable course of the economy?

Failure of the Fiscal Plan

Both before and after Congress passed the budget package last summer we heard many different ways in which the impact of such actions would reach the economy. Let us talk about a few of these. One approach was to argue that since taxpayers would have \$13 billion less purchasing power as a result of the tax increase and the Federal Government would spend \$6 billion less than otherwise, a total of \$19 billion would be "taken out of the spending stream." It was further argued that, after the initial \$19 billion reduction in total demand, incomes would grow less than otherwise and increases in other spending would also be moderated. Because of this "multiplier" effect, the ultimate reduction in total spending would be several times the initial \$19 billion.

A second method of assessing the influence of the budget package was to note that the Federal cash deficit in fiscal 1968 was over \$25 billion, compared with only a \$5 billion deficit projected for fiscal 1969. Hence, it was said that total spending in the economy would be at least \$20 billion less. If there were a multiplier effect, the ultimate reduction in total spending would have been much greater. Arguments along these lines ignore the way the deficit is financed, a point we will return to in a few minutes.

A third way of assessing the influence of the budget package on the economy was with reference to the change it would cause in a cyclically adjusted budget, commonly called the "high employment" budget. Throughout the early Sixties, this budget had been in large surplus, but the amount of this surplus began to shrink rapidly in 1964, and toward the latter part of 1965 moved into deficit. From about 1966 to mid-1968 the deficit increased rather rapidly, reaching

an annual rate of \$15 billion in the second quarter last year. Thus, this measure of the budget moved from a \$15 billion surplus at the end of 1963 to a \$15 billion deficit in mid-1968. Then, in mid-1968 it was planned by means of the surtax and the cut in the growth of Federal spending to swing the budget back from the \$15 billion deficit a year ago to a \$10 billion surplus in the present quarter. According to popular analysis, this swing in one year was to provide a "massive dose of fiscal restraint."

In our judgment, the spending-stream view, the deficit view, and the high-employment budget view of assessing the influence of the fiscal package of June 1968 on total spending in the economy overlooked several key points. One question is whether the surtax would really reduce total spending or merely redistribute it. When the Federal Government obtains funds by taxing rather than by borrowing from the public, taxpayers have less to spend, the private investors have more. Total demand for the goods and services in the economy is not necessarily changed. Similarly, if the Government decision to spend less means only that less taxes will be collected and/or the Government will borrow less from the public, then total spending—Government plus private—may not be affected.

A key point in evaluating the effects of such increased taxes is the question of what the Government would have done as an alternative, and what would have been the source of its command over resources if taxes had not been increased?

When the Federal Government operates at a deficit it means that the Government spends more than it takes in through taxation. But this does not mean that the Government really spends more than it takes in, since it borrows an amount equivalent to the deficit. Total demand is only increased if the deficit is financed by newly created money, as it has been for much of this decade and especially in 1967 and 1968. If, as the Federal Government runs a deficit and increases its sales of bonds, the Federal Reserve adds to the total reserves of the banking system by purchasing securities on the open market, then total purchasing power is increased. The source of this increase in total purchasing power and demands for goods and services flows from the newly created money, not from the deficit *per se*.

Key Fiscal Measures Unreliable

An analysis which uses the budget as a measure of the influence of stabilization policies on the eco-

nomy is incomplete. I am not familiar with any theory, nor any empirical evidence, which supports the use of this measure alone. The high-employment budget moved sharply into deficit during 1966 and 1967, indicating a high and accelerating degree of fiscal stimulus. As a result, the economy was expected to remain very strong. According to any commonly used measure of fiscal influence, the pause in the growth of total spending in early 1967 was unexpected and, in retrospect, unexplainable. Similarly, the sharp swing in the high employment budget from large deficits to large surplus after mid-1968 supposedly indicated a massive dose of fiscal restraint. However, we have yet to see the results of this fiscal action. Furthermore, recent research at the Federal Reserve Bank of St. Louis has cast considerable doubt on the use of changes in the high-employment budget as a measure of either fiscal or overall stabilization influence on the economy.

In short, the way the deficit is financed makes a crucial difference in determining how much stimulus is indicated by a budget deficit or how restrictive an influence results from a surplus.

We have no reason to believe that large deficits such as we have had in the Sixties are in themselves any more stimulative to total spending than the relatively small deficits in the Fifties after the Korean War. What matters is how much monetary creation accompanies the deficit. Therefore, when actions were taken last year to substantially reduce the deficit, the relevant questions for assessing the restraining influence of such action should have been: What will be the change in the rate of money creation? And, how long will it take before any slowing in the rate of monetary creation begins to slow total spending? Since the rate of monetary growth has since slowed only gradually, it is not surprising that there has been no reduction in the rate of inflation in the first three quarters following the tax increase.

Interest Rates Also Poor Guideposts

Since it appears increasingly clear that monetary actions are the prime stabilization influences in the economy, I would like now to consider the choice between the growth of a monetary aggregate such as the money supply and "money market conditions" or movements in interest rates as the primary indicator of monetary actions. One criterion for choosing an indicator of the influence of monetary actions from among the various available monetary variables is that movements in the indicator be attributable to policy

actions. The policymakers must be able to know what they have done.

Financial and business publications make frequent reference to tight and easy money, and we all know what these words generally imply in terms of interest rates. High or rising levels of interest rates are often misjudged as tight money and low or falling rates are often thought to be a sign of easy money. But what is really meant, is that *credit* is tight or easy, and it throws no light on what influence on total spending is being exercised by the monetary authority.

The Brazilian economy has typically experienced a very rapid rate of inflation and, simultaneously, interest rates of about 40 per cent. These high interest rates were a result of a very easy or inflationary monetary policies rather than a sign of monetary restraint. On the other hand, if we examine the experience in the Swiss economy, we find that interest rates have typically been the lowest in the world, averaging around 2 or 3 per cent. Once again, I think that we could agree that these low interest rates in Switzerland have, in large part, been a result of public policies of restraint.

Why is it then that high or rising interest rates, coupled with accelerating inflation, really represent expansionary policies, and that if interest rates decline this would indicate monetary restraint? This is not a new paradox. It was recognized many years ago that actual market interest rates are equivalent to the expected rate of productivity of real capital plus the rate of anticipated price increase over the term of the loan. For instance, if the marginal productivity of capital is currently estimated to be about 3 per cent a year, and most lenders and borrowers expect inflation for the indefinite future at about 3 or 4 per cent per year, one would expect market rates of interest of 6 to 7 per cent. Is there one of us here today who would be willing to lend our money for the indefinite future at a 4 per cent rate if we expected the rate of price increases to be 4 per cent per year more or less indefinitely?

My point is that market rates of interest are directly responsive to supplies and demands of funds in the capital markets. Any changes in the demands for or in the supplies of credit by the private sector of the economy cause changes in market interest rates. In addition, any change in the flow of funds from Treasury operations, changes in international liquidity flows, expectations about future events, international crises, etc., call for fluctuations of interest rates. Acceptance of the effect of all of these factors on interest rates makes it only slightly less than amazing

that we still frequently hear references to movements in interest rates or changes in "money market conditions" as a measure of the "tightness" or "ease" of monetary policies. Can stabilization policymakers in this country use interest rates as their indicators if they cannot assess the influence of their own actions on interest rates?

Money Stock Best Indicator

On the other hand, we have a theory which says that changes in the growth rate of the money supply cause changes in total spending in the same direction. To support this theory there is substantial empirical evidence indicating that marked and sustained changes in the rate of growth of the money supply have always been followed by changes in the growth of total spending in the same direction. Research indicates that changes in the growth of money have been fully manifested on total spending within a few quarters.

The Federal Reserve System, through its power to create and destroy bank reserves, can control the money supply. Since there are close causal links between changes in Federal Reserve actions and in the money supply and between changes in the money supply and changes in spending, I submit that the money supply gives us the best overall measure of the influence of monetary policy actions.

An example of the difference between the use of interest rates and the growth of money as indicators of the thrust of monetary actions is found in early 1968. Throughout the first half of 1968 the Federal Open Market Committee agreed that a restrictive monetary policy was appropriate. However, at several of the Committee meetings, the proceedings of which have been published, some participants argued that a substantial degree of monetary restraint had already been achieved, as indicated by the high and rising market interest rates. Now it is true that interest rates rose rapidly through the first five months of last year, but these rising prices of funds were the result of very strong demands for credit enlarged by the anticipation that inflation would be with us for quite a while longer. If the rising interest rates a year ago indicated "a substantial degree of monetary restraint," then when will this economy feel the effects of that restraint?

In contrast to the unreliable signposts provided by interest rates, the money stock indicator pointed in the direction that the economy actually moved. The money stock grew at a very rapid 7 per cent annual

rate in the first half of last year, about as rapid as in any six-month period in the past twenty years. This rapid monetary growth in early 1968 has since been stimulating the economy. It was not surprising to those who observe the economy from the monetary point of view that there was little slowing in total spending in late 1968 and early 1969, and no improvement in the inflation problem.

Most recently a monetary interpretation of the developments since this past December indicates that a substantial degree of monetary restraint has been achieved, but the ultimate impact of this restraint on total spending will depend on its duration.

The money stock increased at less than a 2 per cent annual rate from last December to March, which our research shows was a sufficient degree of monetary restraint to eventually bring an end to the inflation. However, in April some special factors caused money to jump sharply, and the level of money remained fairly high in May. Indications now are that the growth of money from the first to second quarter will be about the same as the fourth quarter last year to the first quarter; I think we have made substantial, although not yet sufficient, progress towards attaining the necessary monetary restraint.

The available data, combined with statements of policymakers, indicate that sufficient monetary restraint probably will be achieved, and if so, in the second half of this year smaller increases in total spending can be expected. Slowing in the growth of total spending will be accompanied at first by a slowing in the growth of real output, a decline in business profits, and a temporary rise in unemployment. On the more favorable side, such conditions would start reducing inflation, and as inflationary expectations recede, market interest rates will probably decline.

Let me summarize in a few words the message I hope gets through from all I have said this morning. It is my confident belief that the long-run best interest of all the people in this country is best served by a Federal budget that is in balance or even moderate surplus. Within the framework of a balanced budget, monetary policy can create and maintain an economic atmosphere that is conducive to optimum economic growth, effective full employment, and a constantly improving standard of living for all. The record of the recent past has been sufficiently overt to convince thoughtful people that further fine-tuning budget experimentation can lead only to the injection of unnecessary instability into an otherwise inherently stable economic system.

EDITOR'S NOTE:

The following paper was presented at a seminar at this bank by Harry G. Johnson, Professor of Economics at both the London School of Economics and Political Science and The University of Chicago. Professor Johnson prepared the paper in March 1969 for The Institute of Economic Affairs, London, England. Together with a paper by John E. Nash, it has been published by The Institute of Economic Affairs as "UK and Floating Exchanges," *Hobart Papers* No. 46, London, England, May 1969.

The Case For Flexible Exchange Rates, 1969*

by HARRY G. JOHNSON

BY "flexible exchange rates" is meant rates of foreign exchange that are determined daily in the markets for foreign exchange by the forces of demand and supply, without restrictions imposed by governmental policy on the extent to which rates can move. Flexible exchange rates are thus to be distinguished from the present system (the International Monetary Fund system) of international monetary organization, under which countries commit themselves to maintain the foreign values of their currencies within a narrow margin of a fixed par value by acting as residual buyers or sellers of currency in the foreign exchange market, subject to the possibility of effecting a change in the par value itself in case of "fundamental disequilibrium." This system is frequently described as the "adjustable peg" system. Flexible exchange rates should also be distinguished from a spectral system frequently conjured up by opponents of rate flexibility — wildly fluctuating or

"unstable" exchange rates. The freedom of rates to move in response to market forces does not imply that they will in fact move significantly or erratically; they will do so only if the underlying forces governing demand and supply are themselves erratic — and in that case any international monetary system would be in serious difficulty. Finally, flexible exchange rates do not necessarily imply that the national monetary authorities must refrain from any intervention in the exchange markets; whether they should intervene or not depends on whether the authorities are likely to be more or less intelligent and efficient speculators than the private speculators in foreign exchange — a matter on which empirical judgment is frequently inseparable from fundamental political attitudes.

The fundamental argument for flexible exchange rates is that they would allow countries autonomy with respect to their use of monetary, fiscal, and other policy instruments, consistent with the maintenance of whatever degree of freedom in international transactions they chose to allow their citizens, by automatically ensuring the preservation of external equilibrium. Since in the absence of balance-of-payments reasons for interfering in international trade and payments, and given autonomy of domestic policy, there

*The title acknowledges the indebtedness of all serious writers on this subject to Milton Friedman's modern classic essay, "The Case for Flexible Exchange Rates," written in 1950, and published in 1953 (M. Friedman, *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953), pp. 157-203, abridged in R. E. Caves and H. G. Johnson (eds.), *Readings in International Economics* (Homewood, Illinois: Richard D. Irwin, for the American Economic Association, 1968), chapter 25, pp. 413-37.

is an overwhelmingly strong case for the maximum possible freedom of international transactions to permit exploitation of the economies of international specialization and division of labour, the argument for flexible exchange rates can be put more strongly still: flexible exchange rates are essential to the preservation of national autonomy and independence consistent with efficient organization and development of the world economy.

The case for flexible exchange rates on these grounds has been understood and propounded by economists since the work of Keynes and others on the monetary disturbances that followed the First World War. Yet that case is consistently ridiculed, if not dismissed out of hand, by "practical" men concerned with international monetary affairs, and there is a strong revealed preference for the fixed exchange rate system. For this one might suggest two reasons: First, successful men of affairs are successful because they understand and can work with the intricacies of the prevalent fixed rate system, but being "practical" find it almost impossible to conceive how a hypothetical alternative system would, or even could, work in practice; Second, the fixed exchange rate system gives considerable prestige and, more important, political power over national governments to the central bankers entrusted with managing the system, power which they naturally credit themselves with exercising more "responsibly" than the politicians would do, and which they naturally resist surrendering. Consequently, public interest in and discussion of flexible exchange rates generally appears only when the fixed rate system is obviously under serious strain and the capacity of the central bankers and other responsible officials to avoid a crisis is losing credibility.

Pressures Towards a More Flexible Exchange Rate System

The present period has this character, from two points of view. On the one hand, from the point of view of the international economy, the long-sustained sterling crisis that culminated in the devaluation of November 1967, the speculative doubts about the dollar that culminated in the gold crisis of March 1968, and the franc-mark crisis that was left unresolved by the Bonn meeting of November 1968 and still hangs over the system, have all emphasized a serious defect of the present international monetary system.¹

¹The exchange speculation in favor of the Deutsche Mark in early May 1969 is only the latest example of instability in the present fixed exchange rate system.

This is the lack of an adequate adjustment mechanism — a mechanism for adjusting international imbalances of payments towards equilibrium sufficiently rapidly as not to put intolerable strains on the willingness of the central banks to supplement existing international reserves with additional credits, while not requiring countries to deflate or inflate their economies beyond politically tolerable limits. The obviously available mechanism is greater automatic flexibility of exchange rates (as distinct from adjustments of the "pegs"). Consequently, there has been a rapidly growing interest in techniques for achieving greater automatic flexibility while retaining the form and assumed advantages of a fixed rate system. The chief contenders in this connection are the "band" proposal, under which the permitted range of exchange rate variation around parity would be widened from the present one per cent or less to, say, five per cent each way, and the so-called "crawling peg" proposal, under which the parity for any day would be determined by an average of past rates established in the market. The actual rate each day could diverge from the parity within the present or a widened band, and the parity would thus crawl in the direction in which a fully flexible rate would move more rapidly.

Either of these proposals, if adopted, would constitute a move towards a flexible rate system for the world economy as a whole. On the other hand, from the point of view of the British economy alone, there has been growing interest in the possibility of a floating rate for the pound. This interest has been prompted by the shock of devaluation, doubts about whether the devaluation was sufficient or may need to be repeated, resentment of the increasing subordination of domestic policy to international requirements since 1964, and general discontent with the policies into which the commitment to maintain a fixed exchange rate has driven successive Governments — "stop-go policies," higher average unemployment policies, incomes policies, and a host of other domestic and international interventions.

From both the international and the purely domestic point of view, therefore, it is apposite to re-examine the case for flexible exchange rates. That is the purpose of this essay. For reasons of space, the argument will be conducted at a general level of principle, with minimum attention to technical details and complexities. It is convenient to begin with the case for fixed exchange rates; this case has to be constructed, since little reasoned defense of it has been produced beyond the fact that it exists and

functions after a fashion, and the contention that any change would be for the worse. Consideration of the case for fixed rates leads into the contrary case for flexible rates. Certain common objections to flexible rates are then discussed. Finally, some comments are offered on the specific questions mentioned above, of providing for greater rate flexibility in the framework of the IMF system and of floating the pound by itself.

The Case for Fixed Exchange Rates

A reasoned case for fixed international rates of exchange must run from analogy with the case for a common national currency, since the effect of fixing the rate at which one currency can be converted into another is, subject to qualifications to be discussed later, to establish the equivalent of a single currency for those countries of the world economy adhering to fixed exchange rates. The advantages of a single currency within a nation's frontiers are, broadly, that it simplifies the profit-maximizing computations of producers and traders, facilitates competition among producers located in different parts of the country, and promotes the integration of the economy into a connected series of markets, these markets including both the markets for products and the markets for the factors of production (capital and labour). The argument for fixed exchange rates, by analogy, is that they will similarly encourage the integration of the national markets that compose the world economy into an international network of connected markets, with similarly beneficial effects on economic efficiency and growth. In other words, the case for fixed rates is part of a more general argument for national economic policies conducive to international economic integration.

International Immobility

The argument by analogy with the domestic economy, however, is seriously defective for several reasons. In the first place, in the domestic economy the factors of production as well as goods and services are free to move throughout the market area. In the international economy the movement of labour is certainly subject to serious barriers created by national immigration policies (and in some cases restraints on emigration as well), and the freedom of movement of capital is also restricted by barriers created by national laws. The freedom of movement of goods is also restricted by tariffs and other barriers to trade. It is true that there are certain kinds of artificial barriers to the movement of goods and

factors internally to a national economy (apart from natural barriers created by distance and cultural differences) created sometimes by national policy (e.g., regional development policies) and sometimes by the existence of state or provincial governments with protective policies of their own. But these are probably negligible by comparison with the barriers to the international mobility of goods and factors of production. The existence of these barriers means that the fixed exchange rate system does not really establish the equivalent of a single international money, in the sense of a currency whose purchasing power and whose usefulness tends to equality throughout the market area. A more important point, to be discussed later, is that if the fixity of exchange rates is maintained, not by appropriate adjustments of the relative purchasing power of the various national currencies, but by variations in the national barriers to trade and payments, it is in contradiction with the basic argument for fixed rates as a means of attaining the advantages internationally that are provided domestically by a single currency.

Concern Over Regional Imbalance

In the second place, as is well known from the prevalence of regional development policies in the various countries, acceptance of a single currency and its implications is not necessarily beneficial to particular regions within a nation. The pressures of competition in the product and factor markets facilitated by the common currency instead frequently result in prolonged regional distress, in spite of the apparent full freedom of labour and capital to migrate to more remunerative locations. On the national scale, the solution usually applied, rightly or wrongly, is to relieve regional distress by transfers from the rest of the country, effected through the central government. On the international scale, the probability of regional (national in this context) distress is substantially greater because of the barriers to both factors and goods mobility mentioned previously; yet there is no international government, nor any effective substitute through international co-operation, to compensate and assist nations or regions of nations suffering through the effects of economic change occurring in the environment of a single currency. (It should be noted that existing arrangements for financing balance-of-payments deficits by credit from the surplus countries in no sense fulfill this function, since deficits and surpluses do not necessarily reflect respectively distress in the relevant sense, and its absence.)

Lack of Central Control of Currencies

Thirdly, the beneficent effects of a single national currency on economic integration and growth depend on the maintenance of reasonable stability of its real value; the adjective "reasonable" is meant to allow for mild inflationary or deflationary trends of prices over time. Stability in turn is provided under contemporary institutional arrangements through centralization of control of the money supply and monetary conditions in the hands of the central bank, which is responsible for using its powers of control for this purpose. (Formerly, it was provided by the use of precious metals, the quantity of which normally changed very slowly.) The system of fixed rates of international exchange, in contrast to a single national money, provides no centralized control of the overall quantity of international money and international monetary conditions. Under the ideal old-fashioned gold standard, in theory at least, overall international monetary control was exercised automatically by the available quantity of monetary gold and its rate of growth, neither of which could be readily influenced by national governments, operating on national money supplies through the obligation incumbent on each country to maintain a gold reserve adequate to guarantee the convertibility of its currency under all circumstances at the fixed exchange rate. That system has come to be regarded as barbarous, because it required domestic employment objectives to be subordinated to the requirements of international balance; and nations have come to insist on their right to use interventions in international trade and payments, and in the last resort to devalue their currencies, rather than proceed farther than they find politically tolerable with deflationary adjustment policies.

The result is that the automatic mechanisms of overall monetary control in the international system implicit in the gold standard have been abandoned, without those mechanisms being replaced by a discretionary mechanism of international control comparable to the national central bank in the domestic economic system, to the dictates of which the national central banks, as providers of the currency of the "regions" of the international economy, are obliged to conform. Instead, what control remains is the outcome on the one hand of the jostling among surplus and deficit countries, each of which has appreciable discretion with respect to how far it will accept or evade pressures on its domestic policies mediated through pressures on its balance of payments, and

on the other hand of the ability of the system as a system to free itself from the remnants of the constraint formerly exercised by gold as the ultimate international reserve, by using national currencies and various kinds of international credit arrangements as substitutes for gold in international reserves.

In consequence, the present international monetary system of fixed exchange rates fails to conform to the analogy with a single national currency in two important respects. Regions of the system are able to resist the integrative pressures of the single currency by varying the barriers to international transactions and hence the usefulness of the local variant of that currency, and in the last resort by changing the terms of conversion of the local variant into other variants; moreover, they have reason to do so in the absence of an international mechanism for compensating excessively distressed regions and a mechanism for providing centralized and responsible control of overall monetary conditions. Second, in contrast to a national monetary system, there is no responsible centralized institutional arrangement for monetary control of the system.

This latter point can be rephrased in terms of the commonly held belief that the fixed rate system exercises "discipline" over the nations involved in it, and prevents them from pursuing "irresponsible" domestic policies. This belief might have been tenable with respect to the historical gold standard, under which nations were permanently committed to maintaining their exchange rates and had not yet developed the battery of interventions in trade and payments that are now commonly employed. But it is a myth when nations have the option of evading discipline by using interventions or devaluation. It becomes an even more pernicious myth when it is recognized that abiding by the discipline may entail hardships for the nation that the nation will not tolerate being applied to particular regions within itself, but will attempt to relieve by interregional transfer payments; and that the discipline is not discipline to conform to rational and internationally accepted principles of good behavior, but discipline to conform to the average of what other nations are seeking to get away with. Specifically, there might be something to be said for an international monetary system that disciplined individual nations into conducting their policies so as to achieve price stability and permit liberal international economic policies. But there is little to be said for a system that on the one hand obliges nations to accept whatever rate of world price

inflation or deflation emerges from the policies of the other nations in the world economy, and on the other hand obliges or permits them to employ whatever policies of intervention in international trade and payments are considered by themselves and their neighbours not to infringe the letter of the rules of international liberalism.

“Harmonization” and “Surveillance”

The defenders of the present fixed rate system, if pressed, will generally accept these points but argue the need for a solution along two complementary lines: “harmonization” of national economic policies in accordance with the requirements of a single world currency system, and progressive evolution towards international control of the growth of international liquidity combined with “surveillance” of national economic policies. The problem with both is that they demand a surrender of national sovereignty in domestic economic policy which countries have shown themselves extremely reluctant to accept. The reasons for this have already been mentioned; the most important are that there is no international mechanism for compensating those who suffer from adhering to the rules of the single currency game, and that the nations differ sharply in their views on priorities among policy objectives, most notably on the relative undesirability of unemployment on the one hand and price inflation on the other. The main argument for flexible exchange rates at the present time is that they would make this surrender of sovereignty unnecessary, while at the same time making unnecessary the progressive extension of interventions in international trade and payments that failure to resolve this issue necessarily entails.

The case for fixed exchange rates, while seriously defective as a defense of the present system of international monetary organization, does have one important implication for the case for flexible exchange rates. One is accustomed to thinking of national moneys in terms of the currencies of the major countries, which currencies derive their usefulness from the great diversity of goods, services and assets available in the national economy, into which they can be directly converted. But in the contemporary world there are many small and relatively narrowly specialized countries, whose national currencies lack usefulness in this sense, but instead derive their usefulness from their rigid convertibility at a fixed price into the currency of some major country with which the small country trades extensively or on which it depends for capital for investment. For such coun-

tries, the advantages of rigid convertibility in giving the currency usefulness and facilitating international trade and investment outweigh the relatively small advantages that might be derived from exchange rate flexibility. (In a banana republic, for example, the currency will be more useful if it is stable in terms of command over foreign goods than if it is stable in terms of command over bananas; and exchange rate flexibility would give little scope for autonomous domestic policy.) These countries, which probably constitute a substantial numerical majority of existing countries, would therefore probably choose, if given a free choice, to keep the value of their currency pegged to that of some major country or currency bloc. In other words, the case for flexible exchange rates is a case for flexibility of rates among the currencies of countries that are large enough to have a currency whose usefulness derives primarily from its domestic purchasing power, and for which significant autonomy of domestic policy is both possible and desired.

The Case For Flexible Exchange Rates

The case for flexible exchange rates derives fundamentally from the laws of demand and supply — in particular, from the principle that, left to itself, the competitive market will establish the price that equates quantity demanded with quantity supplied and hence clears the market. If the price rises temporarily above the competitive level, an excess of quantity supplied over quantity demanded will drive it back downwards to the equilibrium level; conversely, if the price falls temporarily below the competitive level, an excess of quantity demanded over quantity supplied will force the price upwards towards the equilibrium level. Application of this principle to governmental efforts to control or to support particular prices indicates that, unless the price happens to be fixed at the equilibrium level — in which case governmental intervention is superfluous — such efforts will predictably generate economic problems. If the price is fixed above the equilibrium level, the government will be faced with the necessity of absorbing a surplus of production over consumption. To solve this problem, it will eventually have to either reduce its support price, or devise ways either of limiting production (through quotas, taxes, etc.) or of increasing consumption (through propaganda, or distribution of surpluses on concessionary terms). If the price is fixed below the equilibrium level, the government will be faced with the necessity of meeting the excess of consumption over production out of

its own stocks. Since these must be limited in extent, it must eventually either raise its control price, or devise ways either to limit consumption by rationing, or reduce the costs of production (e.g., by producer subsidies, or by investments in increasing productivity).

Effects of Fixed-Rate Disequilibrium

Exactly the same problems arise when the government chooses to fix the price of foreign exchange in terms of the national currency, and for one reason or another that price ceases to correspond to the equilibrium price. If that price is too high, i.e., if the domestic currency is undervalued, a balance-of-payments surplus develops and the country is obliged to accumulate foreign exchange. If this accumulation is unwelcome, the government's alternatives are to restrict exports and encourage imports either by allowing or promoting domestic inflation (which in a sense subsidizes imports and taxes exports) or by imposing increased taxes or controls on exports and reducing taxes or controls on imports; or to appreciate its currency to the equilibrium level. If the price of foreign exchange is too low, the domestic currency being overvalued, a balance-of-payments deficit develops and the country is obliged to run down its stocks of foreign exchange and borrow from other countries. Since its ability to do this is necessarily limited, it ultimately has to choose among the following alternatives: imposing restrictions on imports and/or promoting exports (including imports and exports of assets, i.e., control of international capital movements); deflating the economy to reduce the demand for imports and increase the supply of exports; deflating the economy to restrain wages and prices and/or attempting to control wages and prices directly, in order to make exports more and imports less profitable; and devaluing the currency.

In either event, a deliberate choice is necessary among alternatives which are unpleasant for various reasons. Hence the choice is likely to be deferred until the disequilibrium has reached crisis proportions; and decisions taken under crisis conditions are both unlikely to be carefully thought out, and likely to have seriously disruptive economic effects.

All of this would be unnecessary if, instead of taking a view on what the value of the currency in terms of foreign exchange should be, and being therefore obliged to defend this view by its policies or in the last resort surrender it, the government were to allow the price of foreign exchange to be determined by the interplay of demand and supply in the foreign

exchange market. A freely flexible exchange rate would tend to remain constant so long as underlying economic conditions (including governmental policies) remained constant; random deviations from the equilibrium level would be limited by the activities of private speculators, who would step in to buy foreign exchange when its price fell (the currency appreciated in terms of currencies) and to sell it when its price rose (the currency depreciated in terms of foreign currencies).

On the other hand, if economic changes or policy changes occurred that under a fixed exchange rate would produce a balance-of-payments surplus or deficit, and ultimately a need for policy changes, the flexible exchange rate would gradually either appreciate or depreciate as required to preserve equilibrium. The movement of the rate would be facilitated and smoothed by the actions of private speculators, on the basis of their reading of current and prospective economic and policy developments. If the government regarded the trend of the exchange rate as undesirable, it could take counter-active measures in the form of inflationary or deflationary policies. It would never be forced to take such measures by a balance-of-payments crisis and the pressure of foreign opinion, contrary to its own policy objectives. The balance-of-payments rationale for interventions in international trade and capital movements, and for such substitutes for exchange rate change as changes in border tax adjustments or the imposition of futile "incomes policies," would disappear.

If the government had reason to believe that private speculators were not performing efficiently their function of stabilizing the exchange market and smoothing the movement of the rate over time, or that their speculations were based on faulty information or prediction, it could establish its own agency for speculation, in the form of an exchange stabilization fund. This possibility, however, raises the questions of whether an official agency risking the public's money is likely to be a smarter speculator than private individuals risking their own money, whether if the assumed superiority of official speculation rests on access to inside information it would not be preferable to publish the information for the benefit of the public rather than use it to make profits for the agency at the expense of unnecessarily ill-informed private citizens, and whether such an agency would in fact confine itself to stabilizing speculation or would try to enforce an official view of what the exchange rate should be — that is, whether the agency would

not retrogress into *de facto* restoration of the adjustable peg system.

Freeing Domestic Economic Management

The adoption of flexible exchange rates would have the great advantage of freeing governments to use their instruments of domestic policy for the pursuit of domestic objectives, while at the same time removing the pressures to intervene in international trade and payments for balance-of-payments reasons. Both of these advantages are important in contemporary circumstances. On the one hand, there exists a great rift between nations like the United Kingdom and the United States, which are anxious to maintain high levels of employment and are prepared to pay a price for it in terms of domestic inflation, and other nations, notably Western Germany, which are strongly adverse to inflation. Under the present fixed exchange rate system, these nations are pitched against each other in a battle over the rate of inflation which is to prevail in the world economy, since the fixed rate system diffuses that rate of inflation to all the countries involved in it. Flexible rates would allow each country to pursue the mixture of unemployment and price trend objectives it prefers, consistent with international equilibrium, equilibrium being secured by appreciation of the currencies of "price stability" countries relative to the currencies of "full employment" countries.

On the other hand, the maximum possible freedom of trade is not only desirable for the prosperity and growth of the major developed countries, but essential for the integration of the developing countries into the world economy and the promotion of efficient economic development of those countries. While the postwar period has been characterized by the progressive reduction of the conventional barriers to international trade and payments—tariffs and quotas, inconvertibility and exchange controls—the recurrent balance-of-payments and international monetary crises under the fixed rates system have fostered the erection of barriers to international economic integration in new forms—aid-tying, preferential governmental procurement policies, controls on direct and portfolio international investment—which are in many ways more subtly damaging to efficiency and growth than the conventional barriers.

The removal of the balance-of-payments motive for restrictions on international trade and payments is an important positive contribution that the adoption of flexible exchange rates could make to the achievement of the liberal objective of an integrated inter-

national economy, which must be set against any additional barriers to international commerce and finance, in the form of increased uncertainty, that might follow from the adoption of flexible exchange rates. That such additional uncertainty would be so great as to seriously reduce the flows of international trade and investment is one of the objections to flexible rates to be discussed in the next section.

The Mechanics of Flexible Exchange Rates

At this point, it is sufficient to make the following observations. First, as pointed out in the preceding section, under a flexible rate system most countries would probably peg their currencies to one or another major currency, so that much international trade and investment would in fact be conducted under fixed rate conditions, and uncertainty would attach only to changes in the exchange rates among a few major currencies or currency blocs (most probably, a U.S. dollar bloc, a European bloc, and sterling, though possibly sterling might be included in one of the other blocs). For the same reason—because few blocs would imply that their economic domains would be large and diversified—the exchange rates between the flexible currencies would be likely to change rather slowly and steadily. This would mean that traders and investors would be able normally to predict the domestic value of their foreign currency proceeds without much difficulty.

But, secondly, traders would be able to hedge foreign receipts or payments through the forward exchange markets, if they wished to avoid uncertainty; if there were a demand for more extensive forward market and hedging facilities than now exist, the competitive profit motive would bring them into existence.

Third, for longer-range transactions, the economics of the situation would provide a substantial amount of automatic hedging, through the fact that long-run trends towards appreciation or depreciation of a currency are likely to be dominated by divergence of the trend of prices inside the currency area from the trend of prices elsewhere. For direct foreign investments, for example, any loss of value of foreign currency earnings in terms of domestic currency due to depreciation of the foreign currency is likely to be roughly balanced by an increase in the amount of such earnings consequent on the relative inflation associated with the depreciation. Similarly, if a particular country is undergoing steady inflation and its currency is depreciating steadily in consequence, money interest

rates there are likely to rise sufficiently to compensate domestic investors for the inflation, and hence sufficiently to compensate foreign portfolio investors for their losses from the depreciation.

Finally, it should be noted that the same sort of political and economic developments that would impose unexpected losses on traders and investors through depreciation under a flexible exchange rate system, would equally impose losses in the form of devaluation, or the imposition of restrictions on trade and capital movements, under the present fixed rate system.

The Case Against Flexible Exchange Rates

The case against flexible exchange rates, like the case for fixed exchange rates, is rarely if ever stated in a reasoned fashion. Instead, it typically consists of a series of unfounded assertions and allegations, which derive their plausibility from two fundamentally irrelevant facts. The first is that, in the modern European economic history with which most people are familiar, flexible exchange rates are associated either with the acute monetary disorders that followed the First World War, or with the collapse of the international monetary system in the 1930's; instead of being credited with their capacity to function when the fixed exchange rate system could not, they are debited with the disorders of national economic policies that made the fixed exchange rate system unworkable or led to its collapse. The second, and more important at this historical distance from the disastrous experiences just mentioned, is that most people are accustomed to the fixed exchange rate system, and are prone to assume without thinking that a flexible rate system would simply display in an exaggerated fashion the worst features of the present fixed rate system, rather than remedy them.

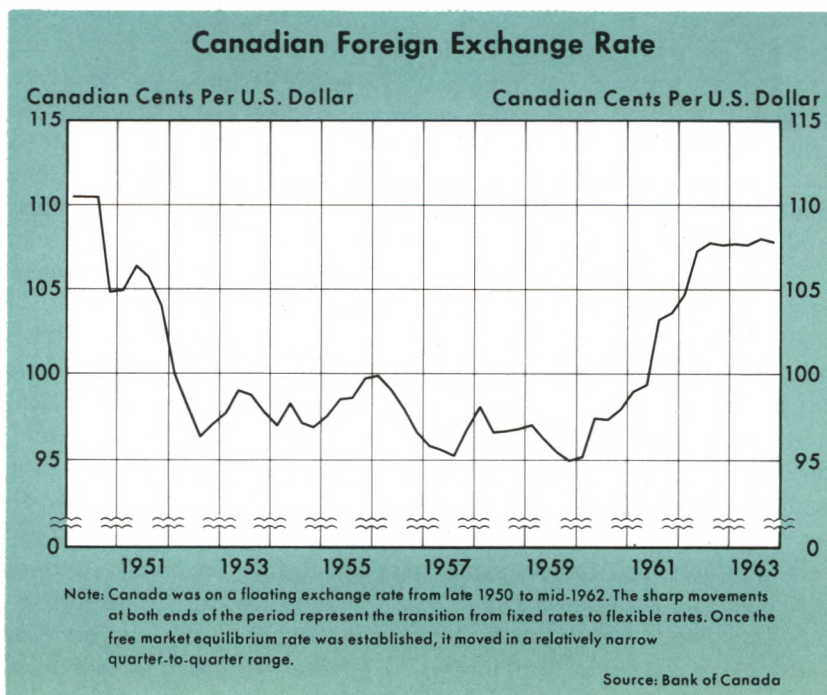
The historical record is too large a topic to be discussed adequately in a brief essay. Suffice it to say that the interwar European experience was clouded by the strong belief, based on pre-First World War conditions, that fixed exchange rates at historical parity values constituted a natural order of things to which governments would seek eventually to return, and that

scholarly interpretation of that experience leaned excessively and unjustifiably towards endorsement of the official view that any private speculation on the exchanges based on distrust of the ability of the authorities to hold an established parity under changing circumstances was necessarily "destabilizing" and anti-social. It should further be remarked that European interwar experience does not constitute the whole of the historical record, and that both previously (as in the case of the United States dollar from 1862 to 1879) and subsequently (as in the case of the Canadian dollar from 1950 to 1962) there have been cases of a major trading country maintaining a flexible exchange rate without any of the disastrous consequences commonly forecast by the opponents of flexible rates.

The *penchant* for attributing to the flexible rate system the problems of the fixed rate system can be illustrated by a closer examination of some of the arguments commonly advanced against floating exchange rates, most of which allege either that flexible rates will seriously increase uncertainty in international transactions, or that they will foster inflation.

Flexible Rates and Uncertainty

Instability of the Exchange Rate — One of the common arguments under the heading of uncertainty is that flexible rates would be extremely unstable rates, jumping wildly about from day to day. This allegation ignores the crucial point that a rate that is free to



move under the influence of changes in demand and supply is not forced to move erratically, but will instead move only in response to such changes in demand and supply — including changes induced by changes in governmental policies — and normally will move only slowly and fairly predictably. Abnormally rapid and erratic movements will occur only in response to sharp and unexpected changes in circumstances; and such changes in a fixed exchange rate system would produce equally or more uncertainty-creating policy changes in the form of devaluation, deflation, or the imposition of new controls on trade and payments. The fallacy of this argument lies in its assumption that exchange rate changes occur exogenously and without apparent economic reason; that assumption reflects the mentality of the fixed rate system, in which the exchange rate is held fixed by official intervention in the face of demand and supply pressures for change, and occasionally changed arbitrarily and at one stroke by governmental decisions whose timing and magnitude is a matter of severe uncertainty.

Reduction of Foreign Trade — A related argument is that uncertainty about the domestic currency equivalent of foreign receipts or payments would seriously inhibit international transactions of all kinds. As argued in the preceding section, trends in exchange rates should normally be fairly slow and predictable, and their causes such as to provide more or less automatic compensation to traders and investors. Moreover, traders averse to uncertainty would be able to hedge their transactions through forward exchange markets, which would, if necessary, develop in response to demand. It is commonly argued at present, by foreign exchange dealers and others engaged in the foreign exchange market, that hedging facilities would be completely inadequate or that the cost of forward cover would be prohibitive. Both arguments seek to deny the economic principle that a competitive system will tend to provide any good or service demanded, at a price that yields no more than a fair profit. They derive, moreover, from the experience of recent crises under the fixed rate system. When exchange rates are rigidly fixed by official intervention, businessmen normally do not consider the cost of forward cover worth their while; but when everyone expects the currency to be devalued, everyone seeks to hedge his risks by selling it forward, the normal balancing of forward demands and supplies ceases to prevail, the forward rate drops to a heavy discount, and the cost of forward cover becomes “prohibitive.” Under a flexible exchange rate system, where the spot rate is also free

to move, arbitrage between the spot and forward markets, as well as speculation, would ensure that the expectation of depreciation was reflected in depreciation of the spot as well as the forward rate, and hence tend to keep the cost of forward cover within reasonable bounds.

Incentive to “Destabilizing Speculation” — A further argument under the heading of uncertainty is that it will encourage “destabilizing speculation.” The historical record provides no convincing supporting evidence for this claim, unless “destabilizing speculation” is erroneously defined to include any speculation against an officially pegged exchange rate, regardless of how unrealistic that rate was under the prevailing circumstances. A counter-consideration is that speculators who engage in genuinely destabilizing speculation — that is, whose speculations move the exchange rate away from rather than towards its equilibrium level — will consistently lose money, because they will consistently be buying when the rate is “high” and selling when it is “low” by comparison with its equilibrium value; this consideration does not however exclude the possibility that clever professional speculators may be able to profit by leading amateur speculators into destabilizing speculation, buying near the trough and selling near the peak, the amateurs’ losses being borne out of their (or their shareholders’) regular income. A further counter-consideration is that under flexible rates, speculation will itself move the spot rate, thus generating uncertainty in the minds of the speculators about the magnitude of prospective profits, which will depend on the relation between the spot rate and the expected future rate of exchange, neither of which will be fixed and independent of the magnitude of the speculators’ transactions. By contrast, the adjustable peg system gives the speculator a “one-way option”: in circumstances giving rise to speculation on a change in the rate, the rate can only move one way if it moves at all, and if it moves it is certain to be changed by a significant amount — and possibly by more, the stronger is the speculation on a change. The fixed exchange rate system courts “destabilizing speculation,” in the economically incorrect sense of speculation against the permanence of the official parity, by providing this one-way option; in so doing it places the monetary authorities in the position of speculating on their own ability to maintain the parity. It is obviously fallacious to assume that private speculators would speculate in the same way and on the same scale under the flexible rate system, which offers them no such easy mark to speculate against.

Flexible Rates and Inflation

The argument that the flexible exchange rate system would promote inflation comes in two major versions. The first is that under the flexible rate system governments would no longer be subject to the "discipline" against inflationary policies exerted by the fixity of the exchange rate. This argument in large part reflects circular reasoning on the part of the fixed rate exponents: discipline against inflationary policies, if necessary for international reasons, is necessary only because rates are fixed, and domestic inflation both leads to balance-of-payments problems and imposes inflation on other countries. Neither consequence would follow under the flexible exchange rate system. Apart from its external repercussions, inflation may be regarded as undesirable for domestic reasons; but the fixed rate system imposes, not the need to maintain domestic price stability, but the obligation to conform to the average world trend of prices, which may be either inflationary or deflationary rather than stable.² Moreover, under the adjustable peg system actually existing, countries can evade the discipline against excessively rapid inflation by drawing down reserves and borrowing, by imposing restrictions on international trade and payments, and in the last resort by devaluing their currencies. The record since the Second World War speaks poorly for the anti-inflationary discipline of fixed exchange rates. The reason is that the signal to governments of the need for anti-inflationary discipline comes through a loss of exchange reserves, the implications of which are understood by only a few and can be disregarded or temporized with until a crisis descends — and the crisis justifies all sorts of policy expedients other than the domestic deflation which the logic of adjustment under the fixed rate system demands. Under a flexible rate system, the consequences of inflationary governmental policies would be much more readily apparent to the general population, in the form of a declining foreign value of the currency and an upward trend in domestic prices; and proper policies to correct the situation, if it were desired to correct it, could be argued about in freedom from an atmosphere of crisis.

The second argument to the effect that a flexible exchange rate would be "inflationary" asserts that any random depreciation would, by raising the cost of living, provoke wage and price increases that would

make the initially temporarily lower foreign value of the currency the new equilibrium exchange rate. This argument clearly derives from confusion of a flexible with a fixed exchange rate. It is under a fixed exchange rate that wages and prices are determined in the expectation of constancy of the domestic currency cost of foreign exchange, and that abrupt devaluations occur that are substantial enough in their effects on the prices of imports and of exportable goods to require compensatory revision of wage bargains and price-determination calculations. Under a flexible rate system, exchange rate adjustments would occur gradually, and would be less likely to require drastic revisions of wage- and price-setting decisions, especially as any general trend of the exchange rate and prices would tend to be taken into account in the accompanying calculations of unions and employers. Apart from this, it is erroneous to assume that increases in the cost of living inevitably produce fully compensatory wage increases; while such increases in the cost of living will be advanced as part of the workers' case for higher wages, whether they will in fact result in compensatory or in less than compensatory actual wage increases will depend on the economic climate set by the government's fiscal and monetary policies. It is conceivable that a government pledged to maintain full employment would maintain an economic climate in which any money wage increase workers chose to press for would be sanctioned by sufficient inflation of monetary demand and the money supply to prevent it from resulting in an increase in unemployment. But in that case there would be no restraint on wage increases and hence on wage and price inflation, unless the government somehow had arrived at an understanding with the unions and employers that only wage increases compensatory of previous cost of living increases (or justified by increases in productivity) would be sanctioned by easier fiscal and monetary policy. That is an improbable situation, given the difficulties that governments have encountered with establishing and implementing an "incomes policy" under the fixed rate system; and it is under the fixed rate system, not the flexible rate system, that governments have a strong incentive to insist on relating increases in money incomes to increases in productivity and hence are led on equity grounds to make exceptions for increases in the cost of living. It should be noted in conclusion that one version of the argument under discussion, which reasons from the allegation of a persistent tendency to cost-push inflation to the prediction of a persistent tendency towards depreciation

²A good example is Germany, which is suffering from balance-of-payments surpluses, because its price increases have been less than the average world trend.

of the currency, must be fallacious: it is logically impossible for all currencies to be persistently depreciating against each other.

Contemporary Proposals for Greater Exchange Rate Flexibility

Increased Flexibility in the IMF System

The extreme difficulties that have been encountered in recent years in achieving appropriate adjustments of the parity values of certain major currencies within the present "adjustable peg" system of fixed exchange rates, as exemplified particularly in the prolonged agony of sterling from 1964 to 1967 and the failure of the "Bonn crisis" of November 1968 to induce the German and French governments to accept the revaluations of the franc and the mark agreed on as necessary by the officials and experts concerned with the international monetary system, have generated serious interest, especially in the United States Administration, in proposals for reforming the present IMF system so as to provide for more flexibility of exchange rates. It has been realized that under the present system, a devaluation has become a symbol of political defeat by, and a revaluation (appreciation) a symbol of political surrender to, other countries, both of which the government in power will resist to the last ditch; and that this political symbolism prevents adjustments of exchange rates that otherwise would or should be accepted as necessary to the proper functioning of the international monetary system. The aim therefore is to reduce or remove the political element in exchange rate adjustment under the present system, by changing the system so as to allow the anonymous competitive foreign exchange market to make automatic adjustments of exchange rates within a limited range.

The two major proposals to this end are the "wider band" proposal and the "crawling peg" proposal. Under the "wider band" proposal, the present freedom of countries to allow the market value of their currencies to fluctuate within one per cent (in practice usually less) of their par values would be extended to permit variation within a much wider range (usually put at five per cent for argument's sake). Under the "crawling peg" proposal, daily fluctuations about the par value would be confined within the present or somewhat wider limits, but the parity itself would be determined by a moving average of the rates actually set in the market over some fixed period of the immediate past, and so would gradually adjust itself upwards or downwards over time to the mar-

ket pressures of excess supply of or excess demand for the currency (pressures for depreciation or appreciation, rise or fall in the par value, respectively).

Both of these proposals, while welcomed by advocates of the flexible exchange rate system to the extent that they recognize the case for flexible rates and the virtues of market determination as contrasted with political determination of exchange rates, are subject to the criticism that they accept the principle of market determination of exchange rates only within politically predetermined limits, and hence abjure use of the prime virtue of the competitive market, its capacity to absorb and deal with unexpected economic developments.³ The criticism is that *either* economic developments will not be such as to make the equilibrium exchange rate fall outside the permitted range of variation, in which case the restriction on the permitted range of variation will prove unnecessary, *or* economic change will require more change in the exchange rate than the remaining restriction on exchange rate variation will permit, in which case the problems of the present system will recur (though obviously less frequently). Specifically, sooner or later the exchange rate of a major country will reach the limit of permitted variation, and the speculation-generating possibility will arise that the par value of that currency will have to be changed by a finite and substantial percentage, as a result of lack of sufficient international reserves for the monetary authorities of the country concerned to defend the par value of the currency.

In this respect, there is a crucial difference between the wider band proposal and the crawling peg proposal. The wider band system would provide only a once-for-all increase in the degree of freedom of exchange rates to adjust to changing circumstances. A country that followed a more inflationary policy than other nations would find its exchange rate drifting towards the ceiling on its par value, and a country that followed a less inflationary policy than its neighbours would find its exchange rate sinking towards the floor under its par value. Once one or the other fixed limit was reached, the country would to all intents and purposes be back on a rigidly fixed exchange rate. The crawling peg proposal, on the other hand, would permit a country's policy, with respect to the relative rate of inflation it preferred, to diverge permanently from that of its neighbours, but only within the limits set by the permitted range

³It is quite likely that a crawling peg would not have provided an equilibrium exchange rate in France after the events of May 1968.

of daily variation about the daily par value and the period of averaging of past actual exchange rates specified for the determination of the par value itself. For those persuaded of the case for flexible exchange rates, the crawling peg is thus definitely to be preferred. The only question is the empirical one of whether the permitted degree of exchange rate flexibility would be adequate to eliminate the likelihood in practice of a situation in which an exchange rate was so far out of equilibrium as to make it impossible for the monetary authorities to finance the period of adjustment of the rate to equilibrium by use of their international reserves and international borrowing power. This is an extremely difficult empirical question, because it involves not only the likely magnitude of disequilibrating disturbances in relation to the permitted degree of exchange rate adjustment, but also the effects of the knowledge by government of the availability of increased possibilities of exchange rate flexibility on the speed of governmental policy response to disequilibrating developments, and the effects of the knowledge by private speculators that the effects on the exchange rate of current speculation will determine the range within which the exchange rate will be in the future, on the assumption that the crawling peg formula continues to hold.

Evaluation of how both the wider band and the crawling peg proposals should work in practice requires a great deal of empirical study, which has not yet been carried out on any adequate scale. In the meantime, those persuaded of the case for flexible exchange rates would probably be better advised to advocate experimentation with limited rate flexibility, in the hope that the results will dispel the fears of the supporters of the fixed rate system, than to emphasize the dangers inherent in the residual fixity of exchange rates under either of the contemporary popular proposals for increasing the flexibility of rates under the existing fixed rate systems.

A Floating Pound?

The argument of the preceding sections strongly suggests the advisability of a change in British exchange rate policy from a fixed exchange rate to a market-determined flexible exchange rate. The main arguments for this change are that a flexible exchange rate would free British economic policy from the apparent necessity to pursue otherwise irrational and difficult policy objectives for the sake of improving the balance of payments, and that it would release the country from the vicious circle of "stop-go" policies of control of aggregate demand.

A flexible exchange rate is not of course a panacea; it simply provides an extra degree of freedom, by removing the balance-of-payments constraints on policy formation. In so doing, it does not and cannot remove the constraint on policy imposed by the limitation of total available national resources and the consequent necessity of choice among available alternatives; it simply brings this choice, rather than the external consequences of choices made, to the forefront of the policy debate.

The British economy is at present riddled with inefficiencies consequential on, and politically justified by, decisions based on the aim of improving the balance of payments. In this connection, one can cite as only some among many examples the heavy protection of domestic agriculture, the protection of domestic fuel resources by the taxation of imported oil, the subsidization of manufacturing as against the service trades through the Selective Employment Tax, and various other subsidies to manufacturing effected through tax credits. One can also cite the politically arduous effort to implement an incomes policy, which amounts to an effort to avoid by political pressure on individual wage- and price-setting decisions the need for an adjustment that would be effected automatically by a flexible exchange rate. A flexible exchange rate would make an incomes policy unnecessary. It would also permit policy towards industry, agriculture, and the service trades to concentrate on the achievement of greater economic efficiency, without the biases imparted by the basically economically irrelevant objectives of increasing exports or substituting for imports.

The adoption of flexible exchange rates would also make unnecessary, or at least less harmful, the disruptive cycle of "stop-go" aggregate demand policies which has characterized British economic policy for many years. British Governments are under a persistently strong incentive to try to break out of the limitations of available resources and relatively slow economic growth by policies of demand expansion. This incentive is reinforced, before elections, by the temptation to expand demand in order to win votes, in the knowledge that international reserves and international borrowing power can be drawn down to finance the purchase of votes without the electorate knowing that it is being bribed with its own money — until after the election the successful party is obliged to clean up the mess so created by introducing deflationary policies, with political safety if it is a returned government, and with political embarrassment if it is an opposition party newly come to power. If the

country were on a flexible exchange rate, the generation of the "political cycle" would be inhibited by the fact that the effort to buy votes by pre-election inflationary policies would soon be reflected in a depreciation of the exchange rate and a rise in the cost of living. Even if this were avoided by use of the Government's control of the country's international reserves and borrowing powers to stabilize the exchange rate, a newly elected Government of either complexion would not be faced with the absolute necessity of introducing deflationary economic policies to restore its international reserves. It could instead allow the exchange rate to depreciate while it made up its mind what to do. Apart from the question of winning elections, Governments that believed in demand expansion as a means of promoting growth could pursue this policy *a outrance*, without being forced to reverse it by a balance-of-payments crisis, so long as they and the public were prepared to accept the consequential depreciation of the currency; Governments that believed instead in other kinds of policies would have to argue for and defend them on their merits, without being able to pass them off as imposed on the country by the need to secure equilibrium in the balance of payments.

The Feasibility of Floating

While these and other elements of the case for a floating pound have frequently been recognized and advocated, it has been much more common to argue that a flexible exchange rate for sterling is "impossible," either because the position of sterling as an international reserve currency precludes it, or because the International Monetary Fund would not permit it. But most of the arguments for the presumed international importance of a fixed international value of sterling have been rendered irrelevant

by the deterioration of sterling's international position subsequent to the 1967 devaluation, and in particular by the Basle Facility and the sterling area agreements concluded in the autumn of 1968, which by giving a gold guarantee on most of the overseas sterling area holdings of sterling have freed the British authorities to change the foreign exchange value of sterling without fear of recrimination from its official holders. Moreover, the relative decline in the international role of sterling, and in the relative importance of Britain in world trade, finance and investments that have characterized the post-war period, has made it both possible and necessary to think of Britain as a relatively small component of the international monetary system, more a country whose difficulties require special treatment than a lynch-pin of the system, the fixed value of whose currency must be supported by other countries in the interests of survival of the system as a whole.

Under the present circumstances, adoption of a floating exchange rate for the pound would constitute, not a definitive reversal of the essential nature of the IMF system of predominantly fixed exchange rates, but recognition of and accommodation to a situation in which the chronic weakness of the pound is a major source of tension within the established system. The International Monetary Fund is commonly depicted in Britain as an ignorantly dogmatic but politically powerful opponent of sensible changes that have the drawback of conflicting with the ideology written into its Charter. But there is no reason to believe that the Fund, as the dispassionate administrator of an international monetary system established nearly a quarter of a century ago to serve the needs of the international economy, is insensitive to the tensions of the contemporary situation and blindly hostile to reforms that would permit the system as a whole to survive and function more effectively.

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