

# FEDERAL RESERVE BANK OF ST. LOUIS

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# REVIEW



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# How and Why Fiscal Actions Matter to a Monetarist

An Address by DARRYL R. FRANCIS, President, Federal Reserve Bank of St. Louis  
at The University of Southern Mississippi,  
Hattiesburg, Mississippi, May 3, 1974

**T**HE TOPIC I have chosen to discuss with you this afternoon concerns the relation between monetary policy developments over the past few decades and the U. S. Government debt. The point emphasized will be how the Federal Reserve's response to deficits in the Federal budgets is related to the growing inflationary trend experienced in recent years.

## THE MONETARY BASE AS A TOOL OF POLICY

Before getting into what I want to say, it is necessary to introduce an analytical concept we at the Federal Reserve Bank of St. Louis find very useful. In order to summarize in a single series the net influence of all of the monetary actions of both the Treasury and the Federal Reserve, we employ a concept referred to as the "monetary base". The monetary base represents the net monetary liabilities of the Government<sup>1</sup> held by the public.<sup>2</sup> The monetary base has been referred to as "high powered" money because it can be used as reserves by commercial banks to expand demand deposits by more than the amount of their reserves.

The approach our staff uses to analyze the factors influencing the growth of the nation's money stock — demand deposits plus currency in the hands of the

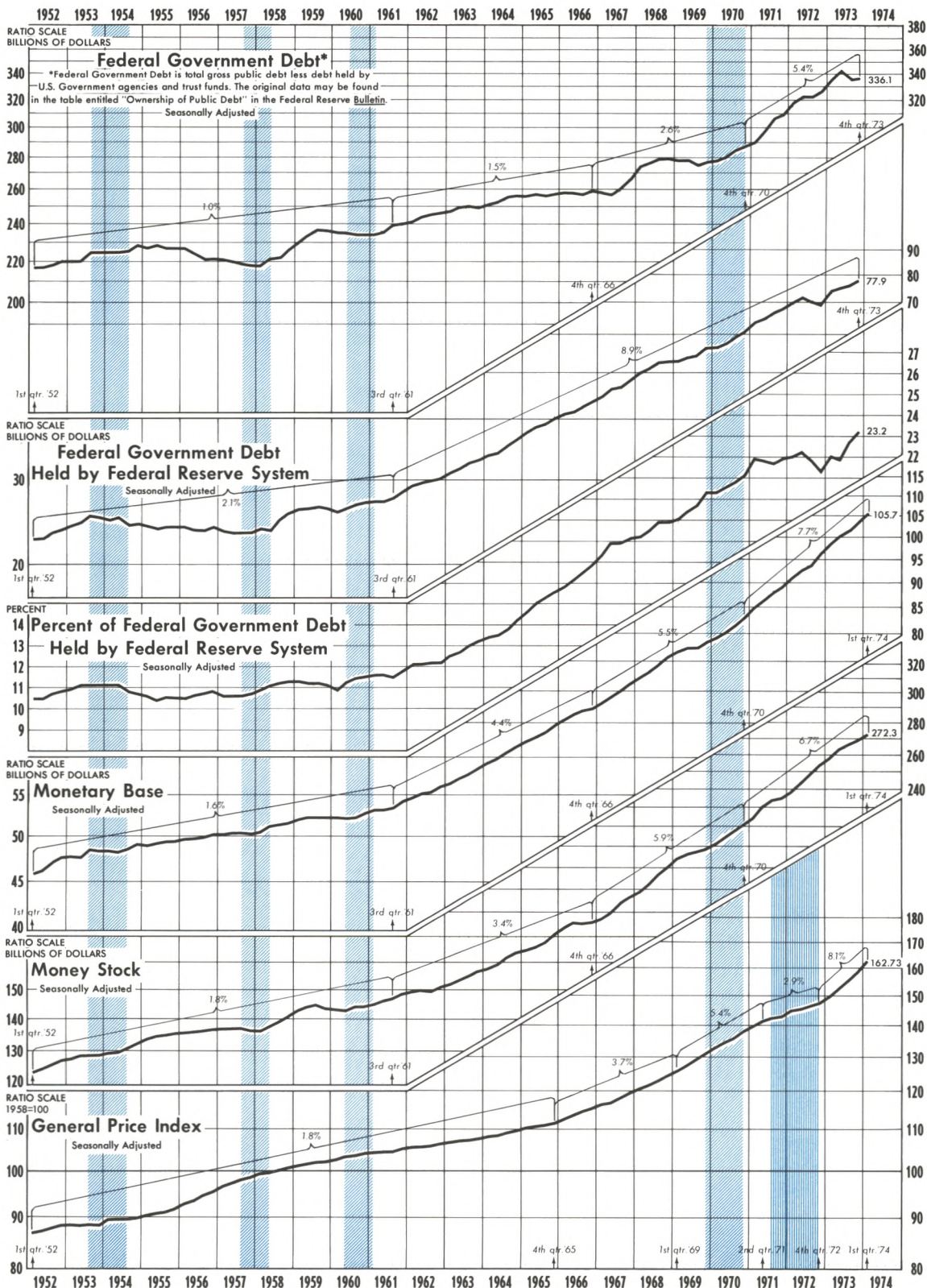
public — holds that the monetary base is the major determinant of changes in the rate of growth of the money stock. As the fourth and fifth tiers on the chart illustrate, the growth rates of the monetary base and the money stock over periods of several years are very similar. The primary reason that money grew somewhat slower on average than the base in the early 1960's is that this was a period of very rapid growth of time deposits at commercial banks, especially large negotiable CDs. Growth in time deposits absorbs reserves, or base money, leaving less available to support the growth of the narrowly defined money stock.

Since our analysis holds that growth in the base determines the growth in money, we want to look at the factors causing the growth of the monetary base. During the past twenty years, growth of the monetary base has been determined primarily by two sources — the gold stock and Federal Reserve credit. An increase in the dollar amount of either of these sources, other things equal, increases the monetary base by an equal amount.

In September 1949, when the gold stock source of the base was at its peak, it comprised almost 58 percent of the monetary base. From 1949 to 1968 the amount of gold owned by the U. S. Treasury declined almost continuously. This decline in gold stock contributed a negative influence on the growth of the base, while increases in Federal Reserve holdings of

<sup>1</sup>U. S. Treasury and Federal Reserve System.

<sup>2</sup>Commercial banks and nonbank public.



The first four shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research.  
 The last shaded area represents Phases I and II of the price-wage control program.  
 Percentages are annual rates of change for periods indicated.  
 Latest data plotted: Money Stock, Monetary Base, and General Price Index-1st quarter 1974; Others 4th quarter 1973

U. S. Government securities contributed a positive influence. Other sources, though their net influence has been positive, have contributed relatively little to movements in the base during the past twenty years.

From 1952 to the middle of 1961 the monetary base grew slowly as increases in securities held by the Federal Reserve System largely offset decreases in the gold stock. Beginning in the 1960s, increases in Federal Reserve holdings of Government securities exceeded reductions in the gold stock, and the monetary base grew more rapidly. A two-tiered gold system, established in March 1968, separated the gold market into private and official sectors, each with its own price, and changes in official gold holdings came to a virtual standstill. From April 1968 through 1971, the gold stock remained roughly constant and contributed little to changes in the monetary base.

At the end of 1971 and again in 1973, the U. S. Government changed the official dollar price of gold — an event commonly referred to as a devaluation. These two devaluations, by themselves, added about \$2 billion to the monetary base, since the book value of the gold held by the Government was raised.<sup>3</sup>

Holdings of Government securities by the Federal Reserve represent the System's acquisitions of Federal Government debt through its open market operations. These security holdings presently comprise 76 percent of the monetary base, and since the early 1960s changes in security holdings have been the dominant influence on the growth of the base. Through purchases and sales of securities, called open market operations, the Federal Reserve can control the growth of the monetary base by offsetting or complementing any movements in other sources.

Growth of Government securities held by the Federal Reserve System depends on both the growth of Government debt outstanding, and the percent of this debt the System decides to purchase. Let's now trace the growth of Government debt over the last twenty years, the acquisition of debt by the Federal Reserve System, and the reasons for debt acquisition by the System.

### THE INFLUENCE OF FISCAL ACTIONS ON MONETARY POLICY

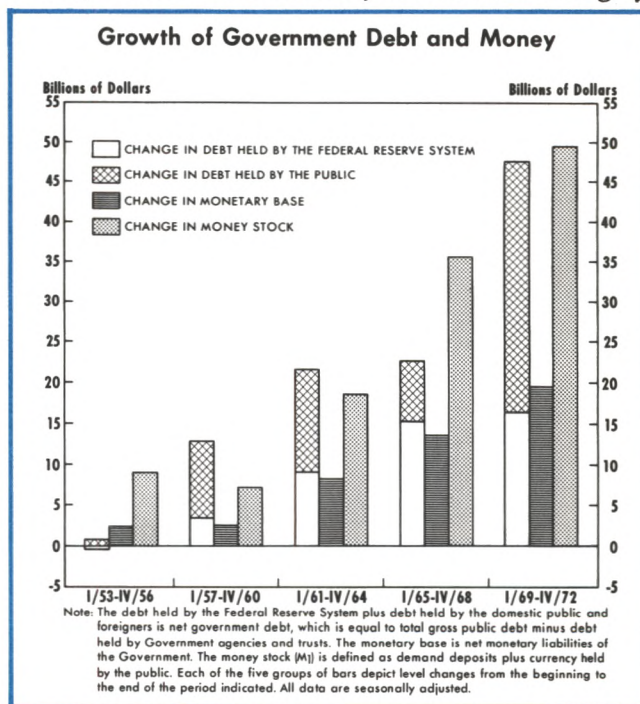
Government debt is shown in the top tier of the chart. The trend growth of Government debt outstanding oscillated around a one percent annual rate

from the first quarter of 1952 to the third quarter of 1961. Unified budget deficits of \$3.4 billion and \$7.1 billion in fiscal years 1961 and 1962, respectively, initiated an increase in the trend rate in the early 1960s. From the third quarter of 1961 to the fourth quarter of 1966, net Government debt rose by \$20 billion, an average of about \$3.8 billion per year, or at an annual trend rate of 1.5 percent.<sup>4</sup>

Large unified budget deficits of \$8.7 billion and over \$25 billion were incurred in fiscal years 1967 and 1968, respectively. These deficits further increased the trend growth rate of Government debt. From the fourth quarter of 1966 to the fourth quarter of 1970 net Government debt grew by over \$28 billion, an average of over \$7 billion per year, or at a 2.6 percent annual rate.

Federal Government debt held by the Federal Reserve System (shown in the second tier of the chart) rose by only about \$0.5 billion per year from 1952 to 1961, but then began to rise more rapidly in the 1960s. Changes in the monetary base during the 1960s roughly paralleled that of the System's holding of debt. The percent of debt held by the Federal Reserve System is shown on the third panel of the chart.

Between the first quarter of 1952 and the third quarter of 1961, the proportion of Government debt held by the Federal Reserve System remained roughly



<sup>4</sup>Net Federal Government Debt is total gross public debt minus debt held by U. S. Government agencies and trust funds.

<sup>3</sup>Albert E. Burger, "The Monetary Economics of Gold," this Review (January 1974).

constant at around 11 percent. As net Government debt increased, securities held by the Federal Reserve System increased proportionally, and as the debt decreased, securities held decreased in the same way. Variations in Government debt outstanding in the 1950s, especially late in the decade, were associated with accelerations and decelerations in growth of the monetary base. Variations in the base, in turn, were a major cause of fluctuations in the money stock.

As the trend rate of growth of Government debt increased in the first half of the 1960s, the percent of the debt held by the Federal Reserve also increased. The rate of acquisition of debt by the Federal Reserve was more rapid than the expansion of Government debt itself. Increased purchases of Government securities by the Federal Reserve directly increased the monetary base, increasing its trend rate of growth, which in turn increased growth of the money stock and economic activity. As resource utilization approached its upper limit, as defined by potential output, the rate of inflation increased.

Before looking at the developments in the late 1960s and early 1970s, I want to digress a moment and discuss with you what I would consider to be the appropriate relation between a central bank's holdings of Government debt and the growth of Government debt outstanding. If the net amount of public debt were roughly constant or declining—that is, Government budgets were in balance or surplus—then the *percent* of the debt held by the Federal Reserve Banks would gradually rise as the *level* of System holdings gradually rose. This assumes that there are no major changes in other factors such as the gold stock or reserve requirements of member banks.

I believe that monetary policy actions can and should be geared to providing a relatively steady, non-inflationary trend growth in the money stock. If this were the case, the rate at which Government debt is acquired by the central bank would not be influenced by the *size* of the budgetary deficits or surpluses. Therefore, one would expect that when there are large budget deficits and the outstanding Government debt is rising at a rapid rate, the *proportion* of the debt owned by the central bank would *decline*. This has not been the case for most of the post-War period.

In contrast to the relation between the Government debt and the central bank holdings that I would like to see, we have had a situation where the monetary authorities have been principally concerned with the general level of and trend of market interest rates,

rather than the growth of the nation's money stock. The experience has been that larger deficits have tended to be accompanied by *more than* proportional debt acquisition by the Federal Reserve Banks. The behavioral sequence is familiar to most market observers. During periods when deficits are large, upward pressure on market interest rates—downward pressure on security prices—occurs at the time the Treasury financings take place. In the past the Federal Reserve often has “even-keeled” the money markets—that is, provided reserves through open market operations to “lean against” the tendency for interest rates to rise in the short run.

In theory, the Federal Reserve would “unwind” after the even-keel operation by reducing its portfolio of securities. In practice, the desire to resist upward pressure on market interest rates, especially during periods of a strengthening economy and rising demands for credit, has militated against behaving according to this ideal. Also, during past fiscal years of very large budget deficits, the Treasury has been involved in some sort of financing the majority of the time, which has left the monetary authorities little opportunity to “unwind.”

Now let us return to a discussion of the developments from 1969 to the present. In 1969 the net stock of outstanding U. S. Government debt declined as the Federal budget moved into surplus for a while. This was the result of the so-called “fiscal package” of mid-1968—which consisted of a 10 percent surcharge on personal and corporate income taxes and a ceiling on the growth of Federal expenditures. The amount of debt held by the Federal Reserve leveled off in 1969, and we experienced a fairly sharp contraction in the growth rates of the monetary base and the money stock. These developments gave us a period of significant monetary restraint, and the ensuing 1970 recession was the consequence.

Since early in 1970 the Federal budget deficits have been sizable, as is shown by the rise in the outstanding debt in the top tier of the chart. In the past three years we have seen a rise in the debt of over \$16 billion per year, or at over a 5 percent annual rate of increase. This adds up to a rise of over \$49 billion. In the same period the debt held by the Federal Reserve Banks has risen over \$17 billion, an average increase of \$5.8 billion per year.

These developments have fostered a rise in the monetary base of almost \$23 billion, or an increase of 7.7 percent per year since 1970. Similarly, the nation's money stock rose at a 6.7 percent average rate

during these three years. In this period we have experienced the fastest rates of increase in the money stock and the monetary base since World War II, and I would submit that the correlation between big Government deficits and rapid increases in the money stock in recent years, as was true during the second World War, are high enough to impress even the most casual of monetary observers.

Having presented my view of the relation between Government deficits and monetary growth, let me turn to what I see as being the consequences. I draw your attention to the lower two tiers on the chart, the money stock and the general price index. Through much of the economic history of this country as well as others for which data are available, the general relation between monetary growth and the price index has shown that the rate of inflation reflects the average rate of growth of the money stock over the prior two or more years.

The lower two tiers on the chart depict this relationship. The average rate of money stock growth of less than 2 percent from 1952 to 1962 was accompanied by an average rise in prices at less than a 2 percent rate through 1965. After money growth accelerated to a 3.4 percent average rate from 1961 through 1966, the average rate of increase in the general price index accelerated to 3.7 percent from the end of 1965 to early 1969.

Following the period of monetary restraint in the last half of 1966, the average rate of money growth accelerated further to a 6 percent rate for the next four years. With the usual lag, the rate of inflation began to accelerate, and on balance during the period early-1969 to mid-1971, prior to the wage-price freeze, we experienced a rise in prices at a rate of 5.4 percent. During the three years since the end of the 1970 recession, money growth has averaged 6.7 percent per year. During Phases I and II of the price-wage control program, the average rise in prices was only 3 percent, but with the very sharp increases since the end of Phase II early last year, in the past five quarters the general price index has risen at an 8 percent average annual rate.

In view of this acceleration in inflation and the popular notion of a "trade-off" between inflation and unemployment, let's look at what we have gained. In the decade 1952 to 1962 average real output growth was 3 percent per year, unemployment averaged 4.4 percent, and the general price index rose at less than a 2 percent average annual rate. Then from 1962 through 1969, with the huge defense expenditure of

Vietnam, output growth averaged 4.6 percent per year, unemployment again averaged 4.4 percent, and the rate of inflation doubled from less than 2 percent before 1966 to almost 4 percent over the next few years.

In the last period under review, 1969 through 1973, the average growth in output was only 3.6 percent, about the same as from 1952 to 1962. Also, in the recent period we experienced an average unemployment rate of 5 percent, slightly higher than the 1952-1962 period. However, the past few years have seen accelerating inflation, without significant benefits in terms of more output or less unemployment.

## SUMMARY AND CONCLUDING OBSERVATIONS

Let me now try to summarize my view of the relation that has existed between Government deficits, monetary growth, and inflation over the past twenty or more years. In the decade 1952 until the latter part of 1961, the net Government debt rose by a total of about \$22 billion. Of that amount, the Federal Reserve System, through its open market operations, purchased and therefore "monetized," about \$5 billion. This acquisition of Government debt by the central bank was the primary factor causing a rise in the monetary base of about \$7.5 billion — a growth rate of only 1.5 percent per year. The relatively slow growth of Government debt, debt owned by the Federal Reserve, and the monetary base produced a growth of our money stock of only \$23 billion over a decade, or a rise of less than 2 percent per year. That is why prices rose so slowly through the 1950s and into the early 1960s.

Beginning in the early 1960s, first with the increased emphasis of economic policies on stimulating real growth and achieving lower unemployment rates, followed by the massive Federal expenditures associated with Vietnam, net outstanding Government debt rose by about \$48 billion from late 1961 to late 1970. In this period, the Federal Reserve System purchased in the open market about \$33 billion of Government debt, producing a rise in the monetary base of over \$29 billion, and a rise in the money stock of over \$73 billion in roughly 9 years. I assert that this was the original economic policy development underlying our current troubles. More recently, in only three years, Government debt has risen another \$49 billion, the Federal Reserve has purchased over \$17 billion, giving us a rise in the monetary base of over \$20 billion and a \$48 billion increase in the money stock. Com-

binning the periods since 1961, in the past twelve years the Federal Reserve has acquired over one-half of the almost \$100 billion increase in the net national debt, contributing to almost a doubling of our money supply, or in actual dollar terms a \$120 billion increase.

In my view, the successive upward ratcheting in the average growth rate of the money stock has been the primary cause of the acceleration in the average rate of inflation. I do not accept the analyses which point to the food price increases, the petroleum product price increases, or other special factors as *causes* of the underlying inflationary trend. Certainly these factors influenced the timing and possibly the magnitude of the recent sharp increases in the price indexes; but a rise in the price of any single commodity does not *cause* inflation any more than a fall in the price of a single commodity *causes* deflation. No one is arguing that the recent declines in prices of a number of agricultural commodities indicate we are experiencing deflation.

Finally, let me turn to the outlook. My staff tells me that by mid-year the average rate of increase in the money stock will have been at 7 percent for three and one-half years. Past experience would indicate that if this rate of money growth were maintained, we would expect also to observe an average inflation rate of about 7 percent to persist. Thus, our analysis holds that an essential step towards bringing

inflation down to more tolerable rates is to reduce the average growth of money. Specifically, I would like to see no more than a 5 percent rate of money growth in the second half of this year, and then possibly reduce it somewhat further next year. This approach would not bring an early end to inflation, but it would be tangible progress without necessarily involving the hardships associated with a recession.

However, although I believe the desirability of achieving lower average money growth is clear, there are reasons to be less than optimistic that it will occur. The Federal budget for fiscal 1975, which begins in just two months, implies a deficit of about \$9 billion, and many private analysts speculate that it could be much larger than that. Current estimates are for very sizable Treasury borrowing in the second half of this calendar year. Since we are already faced with a quite high structure of market interest rates and prospects for a strengthening economy, the temptation may be great to repeat the ways of the past and add substantial quantities of securities to the System portfolio through open market operations. If that were done, then the pattern I have outlined to you would be repeated — increases in outstanding Government debt matched by increased holdings of debt by the central bank, which means continued rapid growth of the monetary base and the money stock. That would mean continued rapid inflation.



# Economic Slowdown: Demand or Supply Induced?

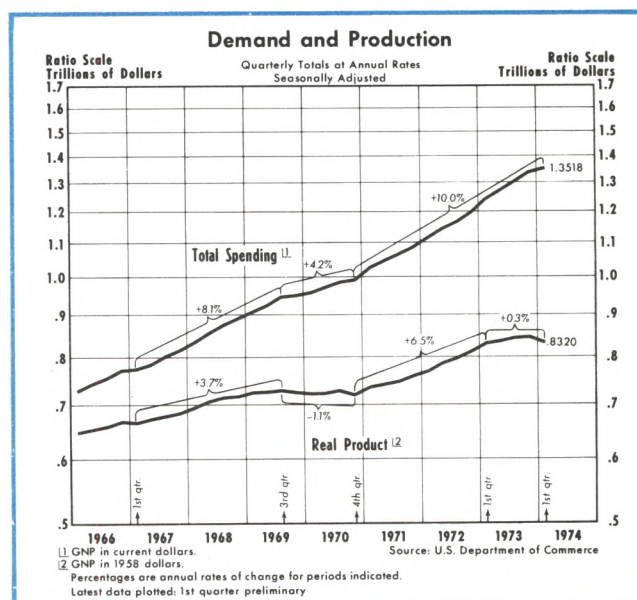
GERALD P. DWYER, JR.

**F**ORECASTS of a decline in real product in the first quarter of 1974, accompanied by substantial increases in prices and an increase in the unemployment rate, were widely held. Preliminary data for the first quarter are consistent with these expectations, although the decline in output was greater than generally anticipated and large by historical standards. Real product fell in the first quarter at an annual rate of 5.8 percent, the implicit price deflator rose at an annual rate of 10.8 percent, and the unemployment rate rose 0.5 percentage points to 5.2 percent.

The decline in real product, in conjunction with the slowing of real product growth in the last three quarters of 1973, plays an especially important role in the formation of expectations about economic prospects for the rest of the year. Analysts are not agreed in their interpretations of recent business developments. Some analysts interpret the deceleration in growth of real product and the recent decline as indicative of potential weakness in aggregate demand. On the other hand, some emphasize the effects of structural problems — wage and price controls, the oil embargo, and resource allocation programs — in their interpretation of recent economic developments. To the extent that the recent performance of real product reflects these structural problems, there is little that a program of stimulating aggregate demand can do to increase output and employment for the remainder of this year.

## BUSINESS DEVELOPMENTS

Given the severity of the current inflation, it is important to consider the extent to which recent developments reflect these structural problems. For if



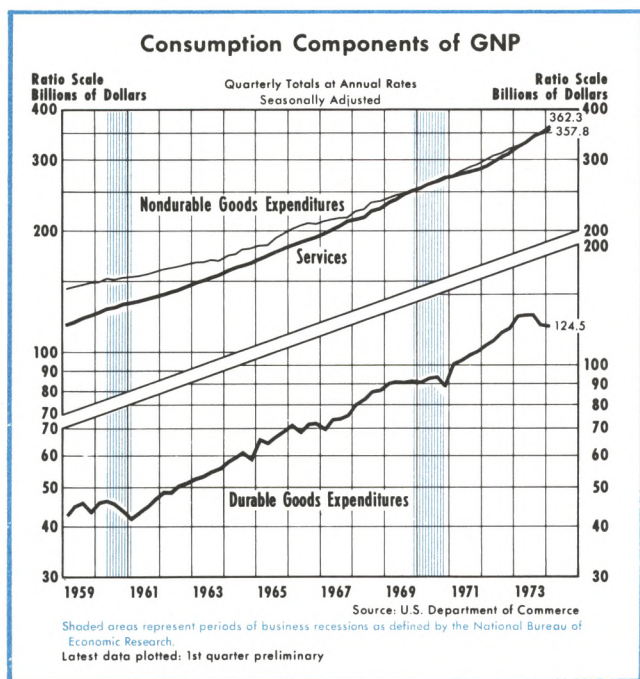
the slowing and decline in real product largely reflect structural problems, then a policy of stimulating aggregate demand would further aggravate the rate of inflation.

## Total Spending and its Components

Preliminary data indicate that the growth of total spending slowed in the first quarter from the rapid pace experienced over the previous three years. Total spending increased at an annual rate of 4.3 percent in the first quarter, considerably less than the 10.5 percent rate from the fourth quarter of 1970 to the fourth quarter of 1973.

**Consumption** — Personal consumption expenditures, the largest single component of GNP, rose at an an-

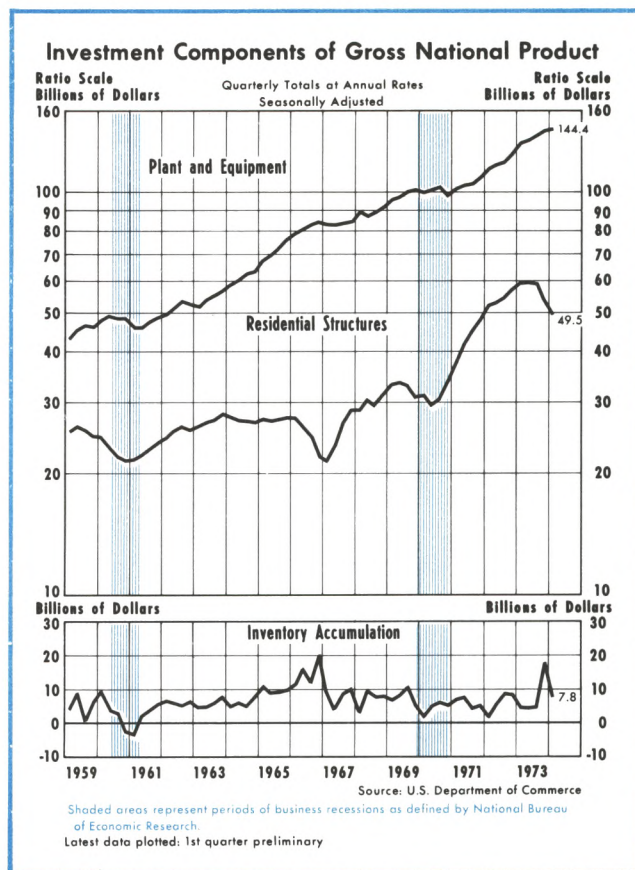




nual rate of 9.7 percent in the first quarter, about the same rate as over the previous three years. A decline in consumption expenditures on durable goods in the first quarter was more than offset by accelerated growth of consumption expenditures on nondurable goods and services. Recent reductions in spending for durable goods largely reflect a decline in purchases of autos and home appliances. Expenditures on durable goods fell at an annual rate of 3.5 percent in the first quarter, following a decline at a rate of 20 percent in the fourth quarter of last year. In comparison, expenditures on durables grew at an annual rate of 16.1 percent from the beginning of the most recent expansion in the fourth quarter of 1970 to the third quarter of 1973. Consumer spending on nondurable goods and services increased at an annual rate of 12.2 percent, compared to a 9 percent rate of increase from the fourth quarter of 1970 to the fourth quarter of 1973.

**Investment** – With substantial declines in residential construction and inventory accumulation, gross private domestic investment decreased at a 20.8 percent rate in the first quarter. In comparison, gross investment grew at an annual rate of 15.9 percent from the fourth quarter of 1970 to the fourth quarter of 1973.

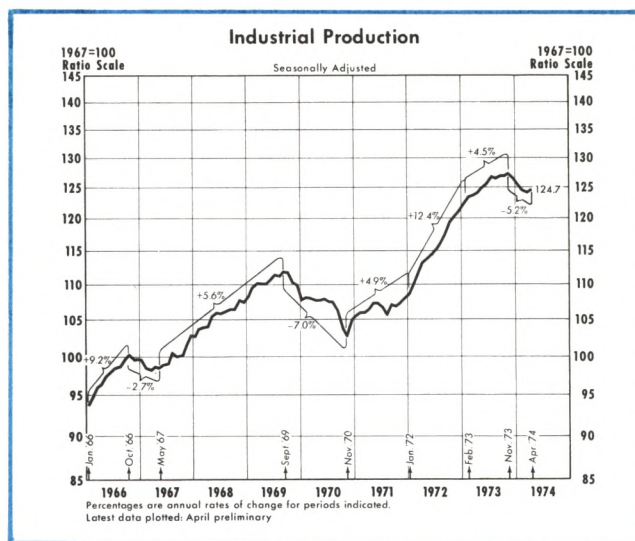
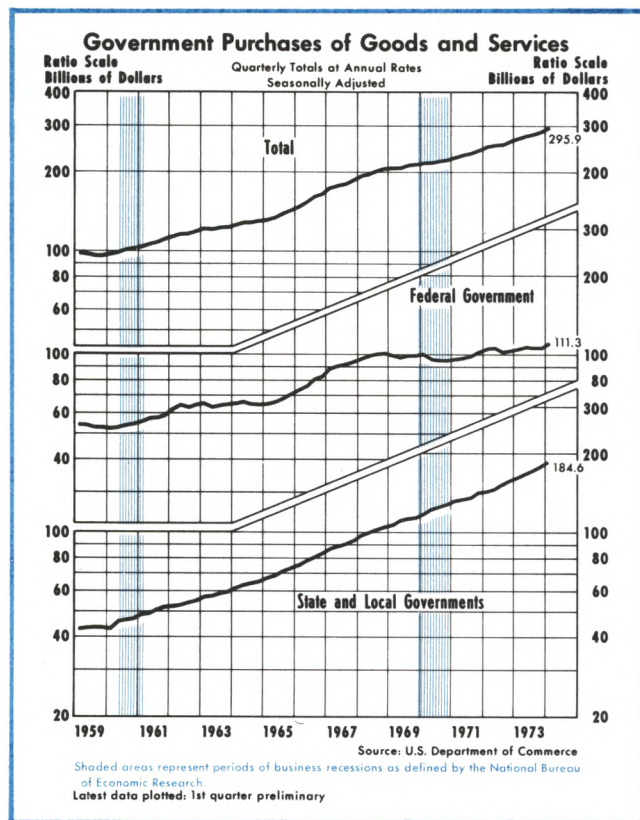
A decline in auto inventories accounted for much of the slower inventory accumulation in the first quarter. This followed a high rate of inventory accumulation in the fourth quarter. Inventory investment was \$7.8 billion at an annual rate in the first quarter, less than half the \$18 billion rate in the previous quarter. Deal-



ers' inventories of autos fell at a \$4.9 billion annual rate in the first quarter, after climbing at a \$4.3 billion rate in the fourth quarter and rising at an average rate of \$1.6 billion in the first three quarters of 1973.

The decline in spending on residential structures reflected a variety of factors including higher relative costs of buying new homes, scarcity of some building materials, and higher mortgage interest rates. Investment in residential structures has decreased at an annual rate of 21.9 percent since the second quarter of 1973. This decline follows an annual growth rate of 26.4 percent from the second quarter of 1970 to the second quarter of 1973.

**Government Spending** – Total government purchases of goods and services increased at an accelerated 15.2 percent annual rate in the first quarter. In comparison, government purchases increased at an annual rate of 8.5 percent from the fourth quarter of 1970 to the fourth quarter of 1973. In recent years, Federal Government purchases have grown at a slower rate than state and local government purchases, but in the first quarter, purchases by the Federal Government accelerated more rapidly than purchases by state and local governments.



**Net Exports** – In the first quarter, net exports, the difference between the dollar value of goods and services exported and those imported, decreased to an annual rate of \$9.5 billion, compared to \$12.8 billion in the fourth quarter of 1973. The value of exports exceeded imports by \$5.8 billion in 1973, following a deficit of \$4.6 billion in 1972. In addition to the devaluations of the dollar in 1971 and 1973 and the floating of exchange rates in 1973, a variety of special factors intervened to increase the growth of exports relative to imports in 1973 and early 1974. In particular, poor harvests in other parts of the world and price controls contributed to the movement of net exports into surplus in 1973.

**Production and Employment**

**Production** – The decline of real product at a 5.8 percent annual rate in the first quarter followed three quarters of growth at a 2.5 percent growth rate. The decrease of real product in the first quarter, \$12.6 billion at an annual rate, is only slightly larger than the decrease of real auto product, \$12 billion at an annual rate. The growth of real product over the last four quarters represents a deceleration from the rapid, unsustainable 6.5 percent annual rate of increase from the beginning of the most recent expansion, the fourth quarter of 1970, to the first quarter of 1973. In com-

parison, real product grew at a 3.7 percent annual rate over the period 1955-69.

Industrial production fell from November 1973 to March of this year at an annual rate of 8.2 percent. This decline followed growth of industrial production at a 4.5 percent rate from February to November of last year and a rapid 12.4 percent rate from January 1972 to February 1973.

The decline of industrial production was heavily concentrated in industries that were affected by the petroleum embargo and the associated allocation program in fourth quarter 1973 and first quarter 1974. Production by the petroleum industry itself, a relatively small component of total industrial production, declined at an annual rate of 21.6 percent from November to March. Production fell more in the transportation equipment industry, which includes motor vehicles and parts, than in any other industry; production in this industry fell at an annual rate of 38.4 percent from November to March. Electricity and natural gas utilities experienced a decline in production at an annual rate of 12.6 percent. This is not a surprising consequence of the embargo since a petroleum product, residual oil, is used to generate a significant proportion of electricity. The machinery industry and the primary and fabricated metals groups also had decreases in production at annual rates of 10 percent or more. These declines can be interpreted as the result of decreased demand by the motor vehicles and parts industry, as well as of decreased availability of energy input.

**Employment** – The decline in real product has been accompanied by a slowing in the growth of employment. Following a rapid 3.8 percent increase from the fourth quarter of 1972 to the fourth quarter of 1973,

total civilian employment remained virtually unchanged in the first quarter.

The unemployment rate rose from 4.7 percent in the second half of last year to 5.2 percent in the first quarter and fell to 5 percent in April of this year. Restrictions on the supply of petroleum, in conjunction with price controls on petroleum and the Government's mandatory allocation program, accounted for much of the increase in the unemployment rate from the fourth quarter of last year to the first quarter of this year.<sup>1</sup>

**Inflation**

The rate of price increase accelerated sharply in the first quarter. The implicit GNP deflator rose at a 10.8 percent annual rate, following a 7.3 percent increase during 1973. The average annual rate of increase in 1971 and 1972 was 3.5 percent.

Consumer prices rose at a 12.2 percent annual rate in the first quarter, substantially greater than the 8.4

percent increase from the fourth quarter of 1972 to the fourth quarter of 1973. Fuel oil and coal prices soared at a rate of 155 percent in the first quarter, gasoline and motor oil prices climbed at an 89 percent rate, and food prices rose at a rate of 18 percent (Table I).

An increased supply of many food products, which is likely during the course of this year, will tend to decrease food prices relative to the prices of other goods and services.<sup>2</sup> This relative decline in food prices may not, however, be reflected in actual declines of food prices; food prices may only grow slower than prices of other goods and services. In any case, recent movements of the wholesale price index for farm products and processed foods and feeds suggest that food prices will not continue to rise at recent rates. This index has varied erratically in recent months, but recently it has generally been falling or increasing more slowly than previously. From October 1972 to June 1973, prices of farm products and processed foods and feeds rose at an annual rate of 47.4 percent, and from June 1973 to April 1974, they rose at the much slower annual rate of 5.9 percent.

**FINANCIAL DEVELOPMENTS**

**Money Growth and Inflation**

While some of the price increases in recent quarters are undoubtedly due to reductions in the supply of food and petroleum, the rate of price inflation is dominated by the growth of the money stock in the long run.<sup>3</sup> From 1952 to 1962, the money stock grew at an annual rate of 1.8 percent; the general level of prices also rose at an annual rate of 2 percent from 1955 to 1965. The growth of money accelerated to a 3.9 percent annual rate from 1962 to 1967; the rate of increase of prices accelerated to a 4.1 percent annual rate from 1965 to 1970. Furthermore, it is evident from the accompanying chart that the rate of inflation has increased as growth of the money stock has increased.

More recently, the growth of money slowed in the second half of 1973, but it is too early to tell if this represents a change in the trend growth of money. In the first quarter of this year, the money stock rose at

**Table I**  
**The Consumer Price Index and Components:**  
**1971-1974**

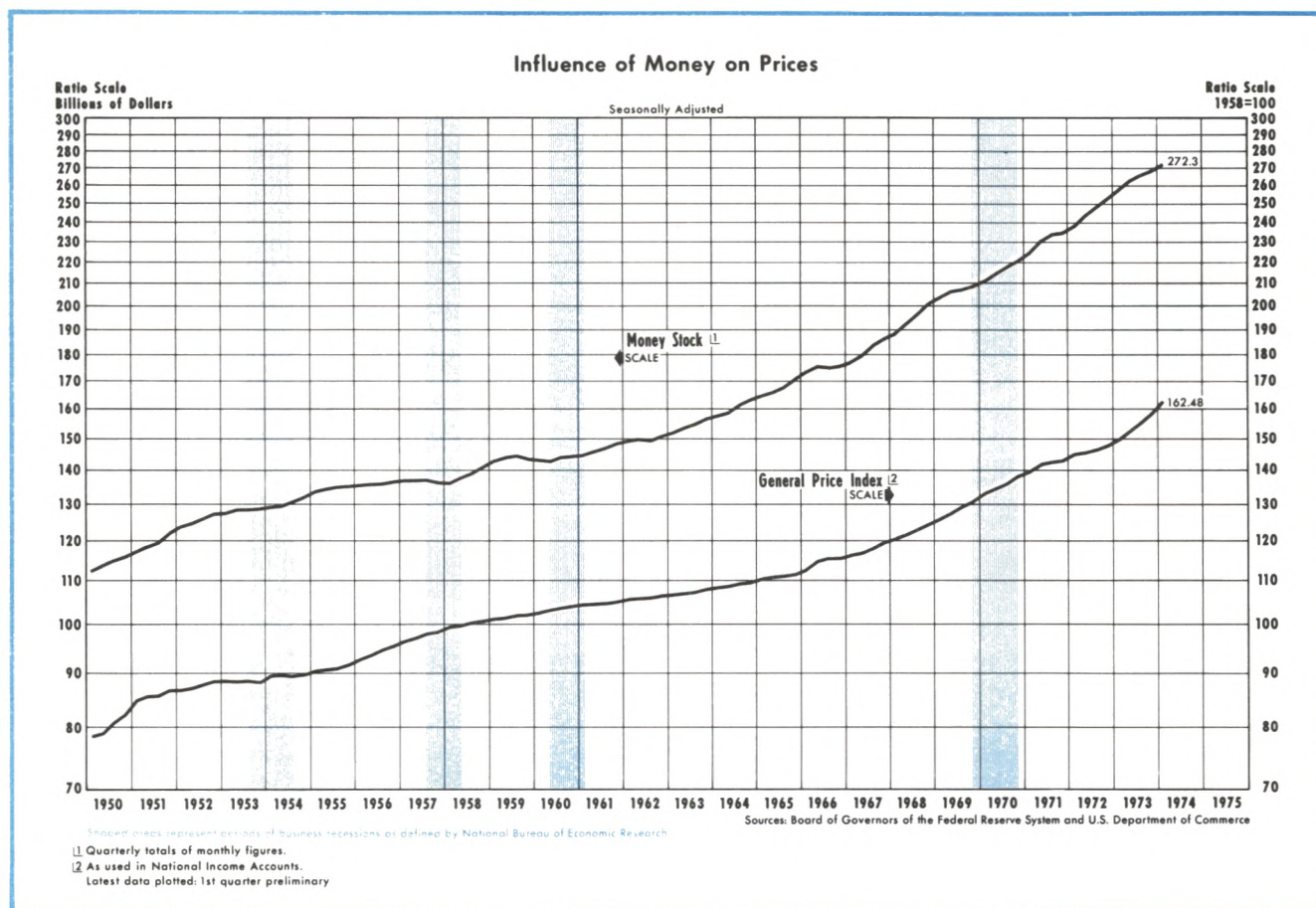
	Weights <sup>2</sup>	Annual Rates of Change <sup>1</sup>		
		IV/73 to 1/74	I/73 to 1/74	I/71 to 1/73
Consumer Price Index (All Items)	100%	12.2%	9.9%	3.8%
<b>Commodity and Service Groups</b>				
Durable Commodities	18.78%	3.3%	3.0%	2.1%
Nondurable Commodities	47.19	19.1	14.5	4.5
Services	34.03	8.4	7.1	3.8
<b>Expenditure Classes</b>				
Food	22.43%	18.1%	19.3%	6.4%
Housing	33.23	12.3	8.8	3.7
Fuel and Utilities	5.26	35.3	15.5	4.7
Fuel Oil and Coal	0.73	155.3	59.2	3.4
Gas and Electricity	2.71	24.5	10.1	5.2
Apparel and Upkeep	10.63	6.3	5.4	2.4
Transportation	13.88	14.4	7.1	1.5
Gasoline and Motor Oil	3.78	89.4	31.8	2.4
Health and Recreation	19.45	5.9	4.9	3.3

<sup>1</sup>All rates of change are based on quarterly averages of the monthly data.  
<sup>2</sup>These weights are proportions of the index contributed by the components. The weights are based on a survey of expenditure patterns of urban wage-earners and clerical workers taken in 1960-61 and evaluated at 1963 prices. In other words, the weights reflect the composition and type of consumer spending as of 1960-61.

<sup>1</sup>U.S. Department of Labor, Bureau of Labor Statistics, "The Employment Situation: February 1974," pp. 4-5.

<sup>2</sup>An analysis of recent food price increases and the outlook is presented by Clifton B. Luttrell and Neil A. Stevens, "The 1974 Outlook for Food and Agriculture," this *Review* (March 1974), pp. 11-19.

<sup>3</sup>For a more extended discussion, see Darryl R. Francis, "How and Why Fiscal Actions Matter to a Monetarist," this issue of the *Review*, pp. 2-7.



an annual rate of 5.6 percent, compared to a 4.8 percent rate in the second half of 1973 and a 7 percent average rate from the first quarter of 1970 through the second quarter of 1973.<sup>4</sup>

The monetary base, the primary determinant of the trend growth of money, rose at an 8.7 percent annual rate in the first quarter of 1974. This is faster than the 7.5 percent annual rate of increase from the first quarter of 1970 to the fourth quarter of 1973.<sup>5</sup> Since the growth rates of the monetary base and the money stock tend to be similar over extended periods of time, money stock growth can be expected to accelerate in the future unless growth of the base slows.

<sup>4</sup>Money growth rates are based on quarterly averages of the revised money series. These rates of growth and those using quarterly rates based on the last month in each quarter are compared in Anatol Balbach and Jerry L. Jordan, "FOMC Policy Actions in 1973," this *Review* (April 1974).

<sup>5</sup>The money stock ( $M_1$ ) can be expressed as a function of the monetary base ( $B$ ) and a money multiplier ( $m$ ), such that  $M_1 = mB$ . The money multiplier summarizes the decisions of the Government, banks, and the public to hold currency and bank deposits. For a presentation of this analysis, see Jerry L. Jordan, "Elements of Money Stock Determination," this *Review* (October 1969), and Albert E. Burger, *The Money Supply Process* (Belmont, California: Wadsworth Publishing Co., 1971).

### Recent Increases in Interest Rates

Substantial increases in the demand for credit caused short-term interest rates to climb in March, April, and early May. The prime rate on bank loans was 11 percent in early May — 250 basis points above its level in early March and 150 basis points above its level at the beginning of the year. The secondary market rate for 90-day certificates of deposit rose to 11 percent in early May, from a low of 8 percent in late February; this rate was about 9.25 percent at the beginning of the year. The discount rate, which had been 7.5 percent since August of last year, was raised to 8 percent at the end of April in response to rising money market yields.

Long-term rates rose moderately during the first four months of this year. The long-term Aaa corporate rate was about 8.35 percent in early May, about 60 basis points above its level at the beginning of the year.

### ALTERNATIVE VIEWS

There are essentially two interpretations of the decline in real product in the first quarter. One view

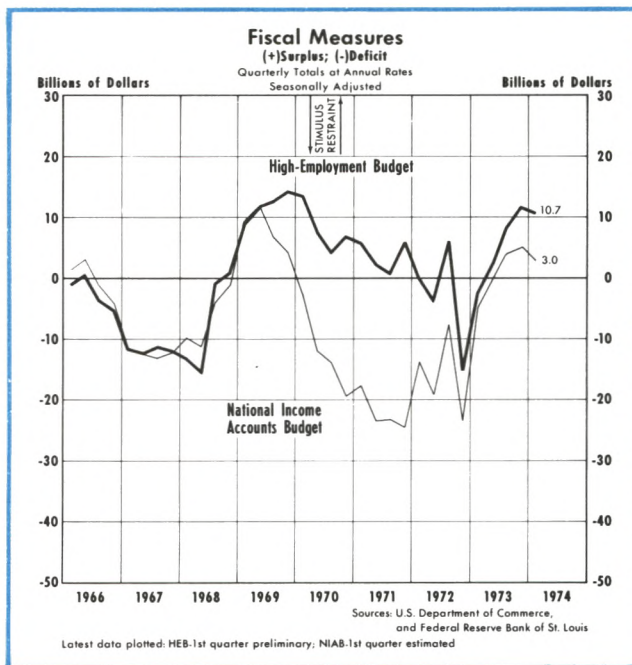
focuses on the slowing in real product growth which began in early 1973, and attributes the slowing to a weakening of aggregate demand. This weakening in total demand, in turn, is related to a slowing in Federal expenditure growth, a decline in real money balances, and increases in interest rates. The other view is that shifts in demand, with associated adjustments, and constraints in the growth of aggregate supply were the major causes of the slowing in real product growth. This second view can be termed "constrained aggregate supply."

### Weak Aggregate Demand

Those analysts emphasizing the weakness of aggregate demand point to the slowing of economic activity which preceded the Middle-East oil embargo. Real product grew at an annual rate of 2.9 percent from the first to the third quarter of last year, significantly less than its annual trend growth rate of 4.2 percent from 1958 to 1972. Real expenditures on consumer durable goods — expenditures on consumer durable goods adjusted for price increases — fell at a 2.7 percent annual rate from the first to the third quarter, compared to growth at a 14 percent annual rate over the previous four quarters. In addition, retail sales grew at a 3.6 percent annual rate from March to November in 1973, compared to growth at an annual rate of 13.4 percent from November 1970 to March 1973. Adjusted for price increases, retail sales actually fell during this period.

Proponents of this view also point to one or more measures of stabilization policy that indicate it was less stimulative in recent quarters than in the prior three years. The Federal budget, on a national income accounts basis, was approximately in balance during calendar year 1973, after an average deficit of \$16.7 billion from 1970 through 1972. Some analysts have referred to the recent behavior of so-called real money balances — the money stock divided by a price index — as a measure of the influence of monetary actions.<sup>6</sup> The real money stock grew at a 0.7 percent annual rate in the first half and fell at a 2.9 percent rate in the second half of 1973, compared to a 3 percent annual growth rate from 1970 through 1972. Also, interest rate increases in 1973 are interpreted by some analysts as an indication of monetary restraint.

<sup>6</sup>For a discussion of the problems associated with this indicator and the incorrect policy conclusions that can follow from its use, see Denis Karnosky, "Real Money Balances: A Misleading Indicator of Monetary Actions," this *Review* (February 1974), pp. 2-10.



### Constrained Aggregate Supply

Analysts who emphasize constraints on aggregate supply and adjustments to changes in demand point out that a dip in the growth of GNP is an expected consequence of uncertainty caused by the energy situation and the reduced supplies of some goods.

These analysts also point out that the decline of real consumer purchases of durable goods or retail sales is not necessarily an indication of a decline in demand. Consumer purchases of durable goods reflect the forces of both supply and demand. And a combination of higher prices and reduced quantities suggests the overwhelming influence of short-run supply considerations.

Furthermore, even though some components of total spending declined during the past year, this is not evidence of a general decrease in demand. On the contrary, a measure of total demand — total spending on goods and services — increased at an annual rate of 10.3 percent from the first to the fourth quarter of 1973, virtually the same rate as since the beginning of the recent expansion. This is during the same period when real product grew at a slower rate.

Price controls contributed to the decline in the growth of output, according to the constrained supply view. By artificially suppressing the prices of some products which are inputs into production processes, shortages of many inputs resulted. This supply reduction would be expected to limit the production of final goods and services.

Substantial *shifts* in demand occurred in the past year, and such shifts can contribute to a lower rate of output for a time. Most notable were the shifts in demand, caused by higher petroleum prices and the oil embargo, away from goods and services using relatively more gasoline and other petroleum products. Decreases in the output of these goods account for much of the decline in total real product. In addition, resources are not transferred instantaneously from previous uses to new ones.<sup>7</sup> Thus, following a *shift* in demand, a decline in output and employment usually occurs for a short period of time.

A decrease in the supply of resources, in this case, petroleum, can have a similar effect on the quantity of final goods and services produced. Some industries, such as electric utilities, were affected directly by reduced allocations of petroleum. Furthermore, increases in the price of petroleum as an input in the production process have the effect of reducing output supply at its current price.

## CONCLUSION

In the first quarter, real product declined, unemployment rose somewhat, and the rate of inflation

<sup>7</sup>For a discussion of the reasons that resources are not shifted immediately, see Roger W. Spencer, "High-Employment Without Inflation: On the Attainment of Admirable Goals," this *Review* (September 1971), pp. 12-26. While that article specifically applies to workers, the discussion can also be applied to other resources. For more technical analysis, see Edmund S. Phelps, et al., *Microeconomic Foundations of Inflation and Employment Theory* (New York: W. W. Norton & Co., Inc., 1970), esp. Armen A. Alchian, "Information Costs, Pricing and Resource Unemployment," pp. 27-52, and Donald F. Gordon and Allan Hynes, "On the Theory of Price Dynamics," pp. 369-93.

increased to greater than a 10 percent annual rate. The rather dismal performance of real product in the first quarter has been interpreted from at least two different vantage points — one emphasizing that aggregate demand is weak, the other emphasizing that supply constraints were the major factor. Many weak demand proponents base their position on such pre-embargo developments as the slowing in real expenditures on consumer durables and the slower growth of retail sales. According to this view, these developments are, in part, a response to the slowing in Federal expenditure growth, a decline in real money balances, and increases in interest rates.

The other interpretation of the decline in real product in the first quarter concentrates on the factors operating to reduce the supply of goods and services available for purchase. The maintenance of and subsequent dismantling of price and wage controls, the shortages of some petroleum products and the associated allocation program, and the inability to move resources immediately in response to a *shift* in demand — all of these factors are cited as influencing the production of goods and services.

The data for the past year offer no clear-cut evidence that there has been a substantial weakening in aggregate demand. Marked shifts in demand have strained the ability of business to alter its product mix, especially in view of the distortion of market information and opportunities resulting from Government controls. Now that the embargo is ended and price controls have been removed from all sectors of the economy except the petroleum industry, these constraints on production are easing.



# Recent and Prospective Developments in International Trade and Finance

HANS H. HELBLING

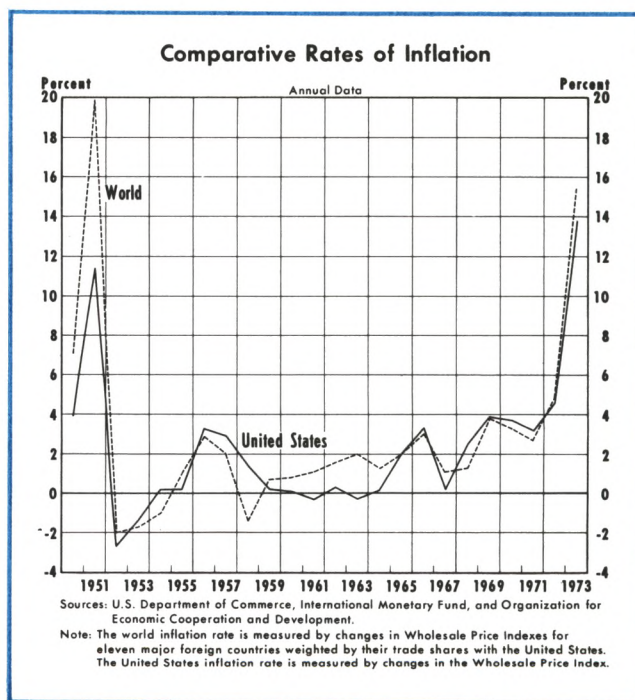
**A** REVIEW of U.S. economic developments in 1973 generally tends to focus on some of the “negative” domestic events, such as accelerating inflation, slow-downs in production and employment growth, and shortages of many necessary inputs to the production process. However, so often overlooked is this country’s performance in the international arena. For the first time in the past three years, our international accounts registered surpluses or greatly reduced deficits.

This reversal resulted partly from policy actions initiated by the United States and other industrial countries in August and December 1971. These actions were intended to facilitate adjustments in the then existing balance-of-payments disequilibrium. The expected adjustment began to take hold in mid-1972, but the speed and magnitude of the adjustment in 1973 was affected by “special” factors prevailing that year, such as a world-wide economic boom and poor harvests in many parts of the world.

Although world-wide agricultural developments are expected to improve and many economies are beginning to show signs of slowing, 1974 is likely to be affected by another set of “special” circumstances — though not in the same direction. In particular, a great deal of uncertainty exists resulting from the combined influence of 1) continued U.S. dependence on imported oil, 2) uncertainty about crude oil prices in world markets, and 3) varying rates of growth in economic activity throughout the world.

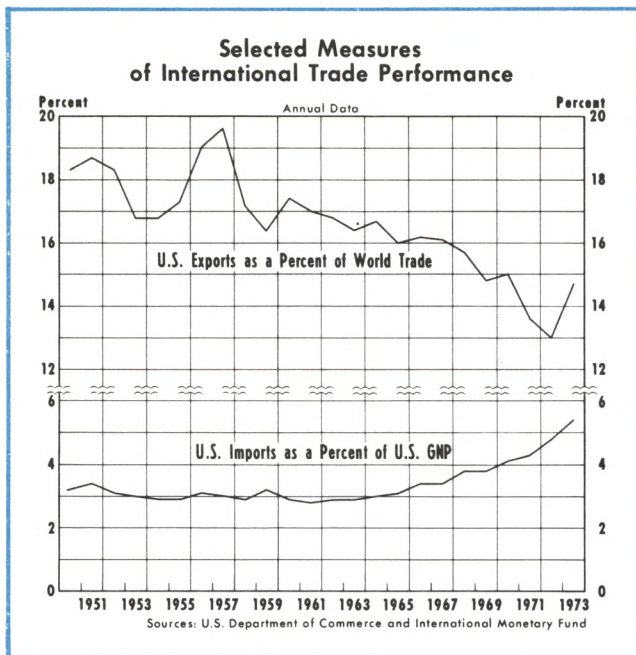
## DEVELOPMENTS IN U.S. TRADE AND FINANCE PRIOR TO 1973

Economic relationships between the United States and the rest of the world have undergone an evolution during the post-World War II era. Reflecting this, the U.S. external accounts swung from trade surpluses in the period from the late 1940s to the mid-1960s, to



trade deficits in 1971 and 1972, and finally, in 1973, back to a surplus again. At the same time, the U.S. dollar changed from the world’s strongest currency to one which was subjected to massive speculation in foreign exchange markets.

As inflationary pressures developed in the United States in 1965 (see chart entitled “Comparative Rates of Inflation”), the trade surplus began to diminish. Under the prevailing regime of fixed exchange rates, prices in the U.S. increased relative to foreign price levels, and the demand for imports accelerated. The relative price decrease of foreign goods in the United States and relative price increases of U.S. goods in foreign markets were conducive to a sharp increase in imports as a share of U.S. gross national product and to the continued decline in the U.S. share of world

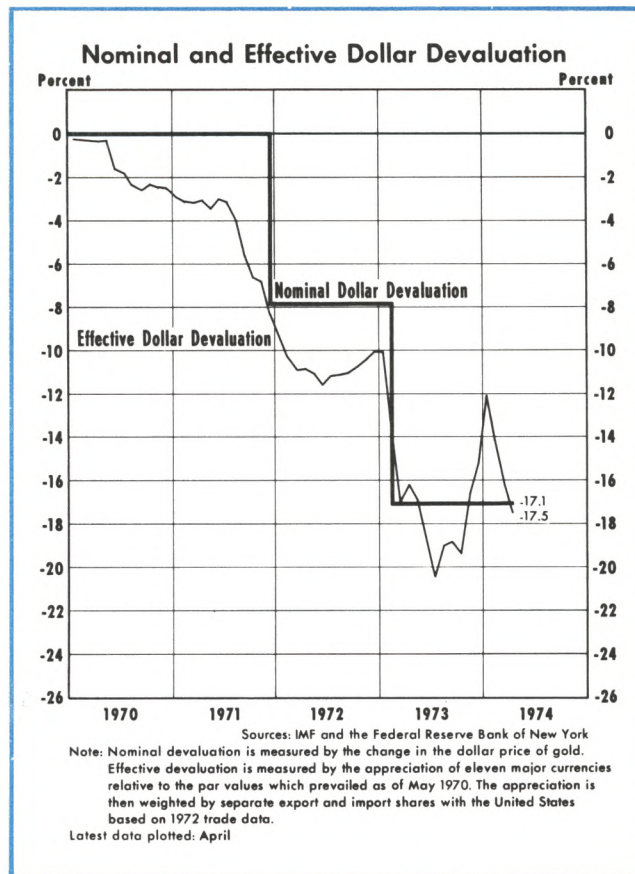


exports (see chart entitled “Selected Measures of International Trade Performance”). As private and government capital continued to flow out and as the trade surplus narrowed, the basic balance deficit increased.<sup>1</sup>

In 1971 it became obvious that the disequilibrium in the U.S. basic balance was unsustainable. As a result, confidence in the maintenance of the international price of the dollar eroded to such an extent that the foreign demand for dollars as an international currency declined significantly. Increasing deficits in both the liquidity and the official settlements balances precipitated an international monetary crisis in the spring of 1971.<sup>2</sup> In August 1971 the United States responded to this crisis by suspending the convertibility of officially held foreign dollars into gold, imposing a 10 percent surcharge on merchandise shipped to this country, and letting it be known to their trading part-

<sup>1</sup>In addition to goods, services, and unilateral transfers, the basic balance includes long-term capital movements. Ideally, this balance should be in equilibrium over time such that outflows of long-term capital are offset by inflows resulting from a trade surplus (or vice-versa). If a temporary imbalance exists, the deficit (surplus) could be financed by temporary short-term capital inflows (outflows). Since 1949 the U.S. basic balance, however, has been persistently in deficit, which has given rise to the accumulation of foreign owned dollar balances. As the basic balance deficit increased in recent years, the accumulation of actual dollar balances by foreigners apparently exceeded desired dollar balances.

<sup>2</sup>The liquidity balance, in addition to the basic balance, includes non-liquid short-term private capital and errors and omissions. This balance is a measure of potential short-term claims of foreigners, both private and official, against the U.S. dollar. The official settlements balance adds changes in liquid private capital to the liquidity balance. Thus, if private foreigners sell short-term dollar claims to their central bank, the official settlements balance would exceed the liquidity deficit by the amount of the sale.



ners that changes in the international competitive position of the United States were necessary. Specifically, there was an expressed desire for equilibrium in the basic balance. International negotiations and departures from a fixed exchange rate resulted in the depreciation of the dollar relative to other currencies (see chart entitled “Nominal and Effective Dollar Devaluation”).<sup>3</sup>

It seems that international trade and financial transactions between the United States and the rest of the world have responded to these actions. Beginning in mid-1972, U.S. imports from foreign countries in-

<sup>3</sup>At the December 1971 Smithsonian Conference, new exchange rates were negotiated and the United States lifted the surcharge on imports. The permissible range of exchange rate flexibility was also widened from 1.0 percent to 2.25 percent on each side of the par value. The U.S. received commitments from its major trading partners concerning a reduction of trade restrictions. However, this did not result in a calm and stable international environment, and speculation against the dollar continued. The following major events transpired since December 1971: In May of 1972 the original Common Market countries, the United Kingdom, and Denmark jointly agreed to a narrow range of exchange rate flexibility of 1½ percent among themselves while maintaining the 2.25 percent intervention band on either side of the par value vis-a-vis all other currencies. In June, due to turmoil in exchange markets, the United Kingdom and Denmark withdrew from this arrangement and permitted their currencies to float.



creased at a lower rate, while U.S. exports to foreign countries increased at a higher rate than in 1971. In early 1973 the level of U.S. exports exceeded the level of U.S. imports, and a trade balance surplus of \$0.7 billion was realized for the entire year.

### ECONOMIC SETTING IN 1973

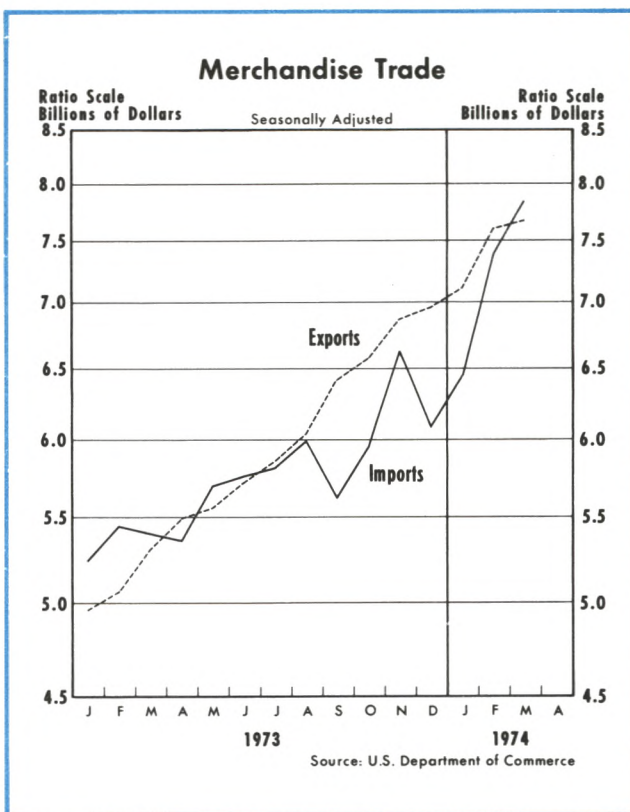
The new set of negotiated exchange rates which had been in effect throughout 1972 apparently did not restore complete confidence in the international financial system. During early 1973 international capital movements increased to such an extent that foreign central banks were either unwilling or unable to support the new exchange rates. First, Italy and Switzerland stopped supporting official exchange rates. This had the effect of accelerating the capital inflows into Japan and Germany.<sup>4</sup>

Finally, on February 9, foreign exchange markets were closed. Following consultations and negotiations among several countries, the United States announced on February 12 its decision to devalue the dollar with respect to gold by an additional 10 percent. The Japanese Government also decided to let the exchange rate for the yen be determined primarily by market forces. When Japanese exchange markets reopened on February 14, the yen-dollar exchange rate rose about 18 percent above the previously fixed rate.

These actions, however, still failed to convince foreign holders of dollars that equilibrium exchange rates had been established, and massive conversion of dollars into foreign currencies continued. On March 2 the official foreign exchange markets were closed again and were not reopened until March 19, 1973. During this period several European countries (Belgium, Denmark, France, Germany, Netherlands, Norway, and Sweden) decided to abandon the fixed exchange rates between their respective currencies and the dollar in favor of floating rates; however, due to the strong trade ties between these countries, they decided to maintain fixed exchange rates relative to each other.

In this environment of flexible exchange rates, the international price of the dollar continued to decline until early July. At this time various central banks, including the Federal Reserve System, indicated their willingness to intervene in foreign exchange markets.

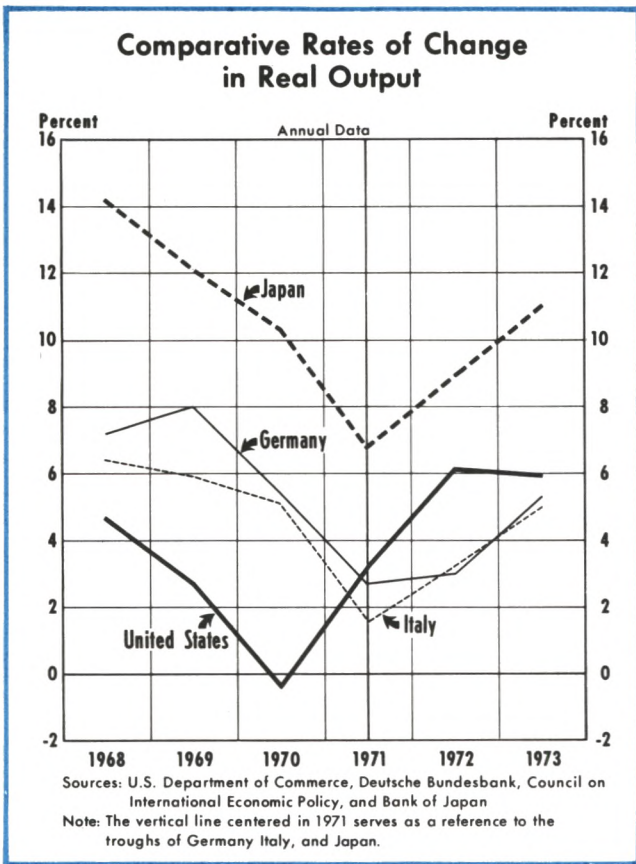
<sup>4</sup>U.S. liabilities to foreign central banks increased by about \$9.0 billion between December 1973 and March 1974. Between February 1 and February 9, the German Central Bank alone bought \$6 billion.



Although the actual intervention was minimal in amount, the international price of the dollar stabilized.

During August the dollar exchange rate began to increase, probably prompted by the trade surplus which had developed during the previous month. Late in October the rate increased sharply, apparently reflecting continued and increasing U.S. trade surpluses as well as anticipations that the Middle-East oil embargo would affect economic conditions more adversely abroad than in the United States. In spite of these increases in the dollar exchange rate during the latter part of 1973, the average international price of the dollar for 1973 was still below that of 1972. As a result, the competitiveness of U.S. goods in world markets continued to improve.

In addition to the dollar's lower international price, there were other influences which contributed to the improved competitive position. During 1973 most major industrial countries were in the upswing phase of a business cycle which began in 1971; however, the U.S. cyclical expansion began a year earlier and the peak was reached in the first quarter of 1973 (see chart entitled "Comparative Rates of Change in Real Output"). Also, the rate of inflation was greater in most European countries and Japan. Both of these factors operated to increase foreign demand for U.S. exports relative to U.S. demand for imports.



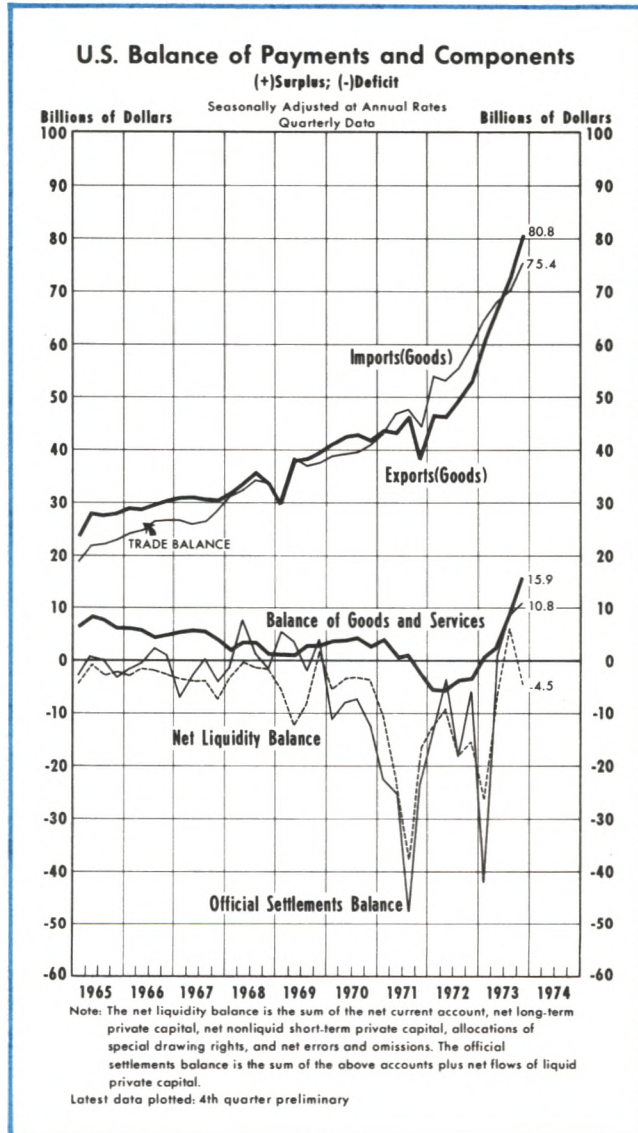
Poor harvests in many parts of the world contributed to a large increase in the demand for U.S. agricultural goods. At the same time, price controls on some farm products tended to restrict agricultural output in the United States. The combination of these two influences contributed to sharply rising prices for agricultural exports. On the import side, however, the quantity of domestically-produced crude oil continued to decline and U.S. oil imports increased in order to make up the difference between domestic production and desired domestic consumption.

**THE 1973 INTERNATIONAL ACCOUNTS**

As a result of these events, the U.S. trade balance, generally considered an indicator of the U.S. competitive position in international markets, was in surplus by \$0.7 billion in 1973. This followed two years of deficits amounting to \$2.7 billion in 1971 and \$6.9 billion in 1972. On balance, U.S. exports in 1973 increased by 44 percent over 1972. After adjusting for higher prices, exports rose by 23 percent. Imports, on the other hand, increased by only 5 percent in real terms over 1972.<sup>5</sup> The goods and services balance and

<sup>5</sup>These percentages are derived from value and quantity indexes representing export and import totals for 1972 and 1973.

the current account balance in 1973 registered surpluses amounting to \$6.9 billion and \$3 billion, respectively.



The U.S. basic balance (current account plus long-term capital), which is considered an indicator of underlying, or long-term, trends in the U.S. international economic position, was also in surplus by \$1.2 billion. This balance has been persistently in deficit since 1949, reaching \$9.8 billion in 1972.

The deficits in both the net liquidity and the official settlements balances (\$7.8 and \$5.3 billion, respectively), were significantly smaller than in 1971 and 1972 (see the accompanying chart entitled "U.S. Balance of Payments and Components" and Table I). Had it not been for large speculative dollar outflows over the course of a few days in early 1973, even these balances might have been in, or near, surplus.

Table I

**U. S. BALANCE OF PAYMENTS, 1973**  
(In Billions of Dollars)

		Net Balance	Cumulative Net Balance
<b>I. Merchandise Trade:</b>			
1. Exports .....	+ 70.3		
2. Imports .....	- 69.6		
<b>Merchandise Trade Balance .....</b>		+ 0.7	+ 0.7
<b>II. Services:</b>			
1. Military Receipts .....	+ 2.4		
2. Military Payments .....	- 4.5		
3. Income on U. S. Investments Abroad .....	+ 18.6		
4. Payments for Foreign Investments in U. S. ....	- 8.8		
5. Receipts from Travel & Transportation .....	+ 8.7		
6. Payments for Travel & Transportation .....	- 11.0		
7. Other Services (net) .....	+ 1.0		
<b>Balance on Services .....</b>		+ 6.2	
<b>Goods and Services Balance .....</b>			+ 6.9
<b>III. Transfer Payments:</b>			
1. Private .....	- 1.2		
2. Government .....	- 2.6		
<b>Balance on Transfer Payments .....</b>		- 3.9	
<b>Current Account Balance .....</b>			+ 3.0
<b>IV. Long-term Capital:</b>			
1. Direct Investment Receipts .....	+ 2.1		
2. Direct Investment Payments .....	- 4.9		
3. Portfolio Investment Receipts .....	+ 4.1		
4. Portfolio Investment Payments .....	- 0.8		
5. Government Loans (net) .....	- 1.5		
6. Other Long-term (net) .....	- 0.9		
<b>Balance on Long-term Capital .....</b>		- 1.8	
<b>Basic Balance .....</b>			+ 1.2
<b>V. Short-term Private Capital:</b>			
1. Nonliquid Liabilities .....	+ 0.5		
2. Nonliquid Claims .....	- 4.7		
<b>Balance on Short-term Private Capital .....</b>		- 4.2	
<b>VI. Miscellaneous:</b>			
1. Allocation of Special Drawing Rights (SDR) .....	*		
2. Errors and Omissions .....	- 4.8		
<b>Balance on Miscellaneous Items .....</b>		- 4.8	
<b>Net Liquidity Balance .....</b>			- 7.8
<b>VII. Liquid Private Capital:</b>			
1. Liabilities to Foreigners .....	+ 4.4		
2. Claims on Foreigners .....	- 1.9		
<b>Balance on Liquid Private Capital .....</b>		+ 2.5	
<b>Official Settlements Balance .....</b>			- 5.3
<hr/>			
The Official Settlements Balance is Financed by Changes in:			
U. S. Liabilities to Foreign Official Holders:			
1. Liquid Liabilities .....	+ 4.4		
2. Readily Marketable Liabilities .....	+ 1.1		
3. Special Liabilities .....	- 0.5		
<b>Balance on Liabilities to Foreign Official Holders .....</b>		+ 5.1	
U. S. Reserve Assets:			
1. Gold .....	0.0		
2. Special Drawing Rights .....	0.0		
3. Convertible Currencies .....	+ 0.2		
4. IMF Gold Tranche .....	0.0		
<b>Balance on Reserve Assets .....</b>		+ 0.2	
<b>Total Financing of Official Settlements Balance .....</b>			+ 5.3

\*There was no SDR allocation for 1973.

NOTE: Figures may not add because of rounding.

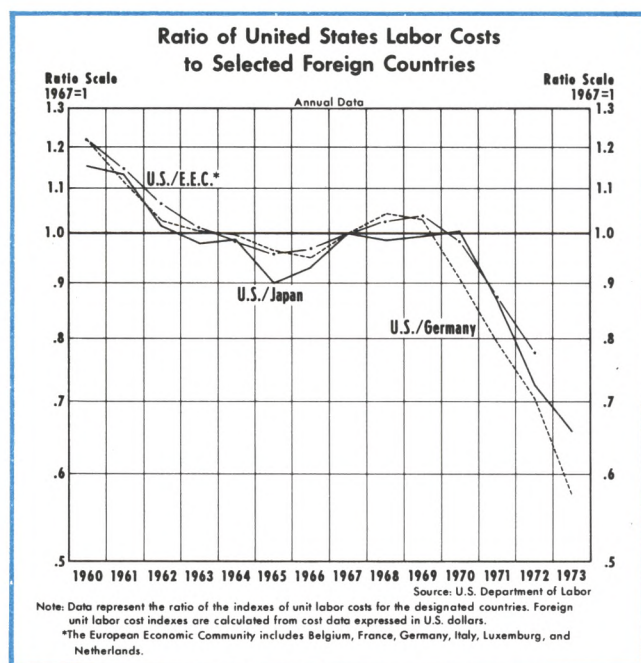
*Long-Term Capital*

Net outflows of long-term capital (portfolio and direct investment) in 1973 amounted to \$1.8 billion. In 1971 and 1972 these outflows amounted to \$6.7 billion and \$1.5 billion, respectively. The small net change over 1972 occurred mainly in private long-term capital transactions. Direct investment expenditures by U.S. corporations abroad resulted in an outflow of \$4.9 billion in 1973, compared to \$3.4 billion in 1972. An outflow of \$2 billion, which occurred during the first quarter, may have been in anticipation of the February dollar devaluation. Direct investment expenditures in the United States on the part of foreign corporations (long-term capital inflows) increased sharply to \$2.1 billion, compared to \$0.2 billion in 1972. While U.S. purchases of foreign securities increased to \$0.8 billion in 1973, compared to \$0.6 billion in 1972, foreign purchases of U.S. securities declined to \$3.2 billion, compared to \$3.7 billion in 1972.

*Foreign Direct Investment in the United States*

A significant change with respect to long-term capital transactions during 1973 was the increase in foreign direct investments in the United States. It is difficult to determine, however, to what extent this was due to the reduction in the international price of the dollar. In general, one would expect investment decisions to be based on rate-of-return considerations. It seems that these considerations tilted in favor of investing in the United States.

A number of factors, not all mutually exclusive, may have



influenced this investment development: 1) production costs abroad rose faster than in the United States over a number of years (see chart entitled "Ratio of United States Labor Costs to Selected Foreign Countries"); 2) certain countries (Germany, Japan) experienced labor shortages; 3) as foreign corporations grew in size they may have decided to diversify internationally as a hedge against domestic uncertainty and to improve profitability; 4) an increasing U.S. market share of many foreign firms may have made it more profitable for them to service the U.S. market from plants located within this market, rather than by producing abroad and shipping to the United States.

While the above factors were probably important elements in the formation of investment decisions by foreign corporations, it is not likely that these influences materialized suddenly in 1973. It is more probable that the increase in foreign investment expenditures in the United States was triggered by the reduction in the international price of the dollar. This depreciation reduced the probability of further depreciation and the resulting capital losses which could be sustained by foreign investors.

### Short-Term Capital

The net outflow of short-term capital (nonliquid private short-term capital, errors and omissions, and liquid private capital)<sup>6</sup> increased during 1973 to \$6.5

billion, compared to \$0.5 billion in 1972. However, they remained well below the levels of 1970 and 1971. The large 1973 outflows of short-term capital were concentrated in the first quarter and were influenced by anticipations of capital gain by switching out of dollars into foreign currencies under the fixed exchange rate system that existed during this period.

After the first quarter of 1973, the incentives for capital gains in foreign currencies were reduced by decisions of European countries and Japan to stop pegging their exchange rates. During the second quarter, for example, the international price of the dollar was still declining, but short-term private capital outflows ceased and a \$1 billion *inflow* (including errors and emissions) was recorded. During the third quarter there was a short-term capital outflow of \$0.4 billion. Reflecting the uncertainties associated with the oil embargo, there was an inflow of \$2.5 billion in the fourth quarter.

## INTERNATIONAL ECONOMIC POLICIES OF 1973

The most significant international development during 1973 was the decision of many governments to institute flexible exchange rates. The specific reasons for resorting to floating exchange rates differed from country to country, but in each case it was a pragmatic solution motivated by national self-interest.

For example, in the case of Japan and Switzerland, as well as the members of the jointly floating European currency block, floating resulted in an *increase* in the international prices of these currencies. If the central banks of these countries had intervened in exchange markets in order to maintain fixed exchange rates, they would have had to issue domestic currency as they bought foreign currency. This would have tended to expand their domestic money stocks, which in turn, would have intensified their inflationary pressures.

In the case of the United Kingdom and Italy, floating of the pound and the lira resulted in a *reduction* in the international prices of these currencies. If the central banks of these countries had tried to maintain the previously fixed exchange rates, they would have had to sell other currencies and reduce their stocks of international reserves. This would have tended to contract their domestic money stocks resulting in deflationary consequences.

ing and cash items in the process of collection. Errors and omissions is an adjustment entry for statistical discrepancies, and includes largely short-term capital outflows not captured by the regular reporting channels.

<sup>6</sup>Non-liquid short-term private capital refers to capital inflows or outflows (liabilities or claims) with maturities of one year or less that are not readily transferable, such as trade financ-

## CONCLUSION AND PROSPECTS FOR 1974

Throughout 1973 it became increasingly apparent that the international monetary system had evolved away from fixed exchange rates to a new, yet undetermined, payments mechanism. For many countries, however, experience with flexible exchange rates may strongly influence the future international monetary system.

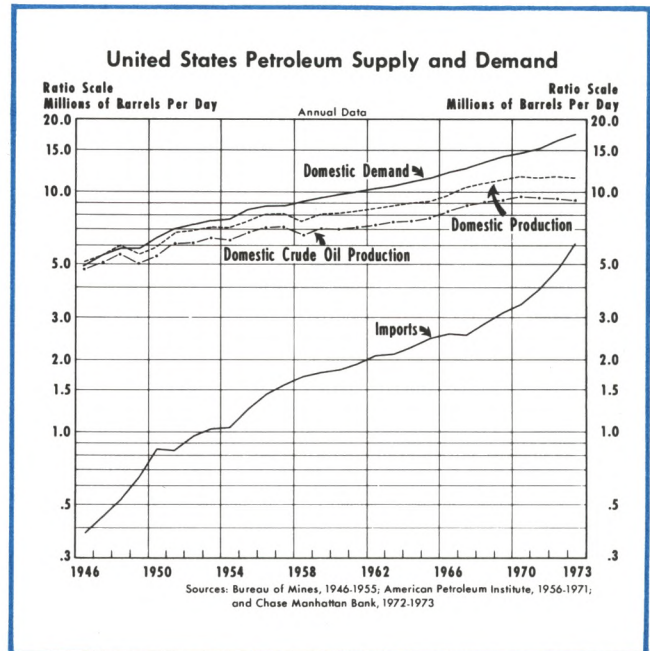
At one time, fixed exchange rates were deemed an absolute necessity for a smoothly functioning international monetary system. However, as demonstrated last year, many countries would rather permit the international prices of their currencies to adjust to market forces than to force the necessary adjustment onto the domestic sector of their economies. As far as the United States is concerned, the new floating exchange rate environment resulted in a depreciation of the dollar against major foreign currencies in 1973.

There is no doubt that international trade between the United States and the rest of the world was influenced by these new price relationships. However, it is difficult to say with certainty whether the 1973 swing from deficit to surplus resulted mainly from the reduction in the international price of the dollar. It is likely that a combination of other influences were instrumental in determining this turnaround in the trade balance.

Even though the U.S. economy had been in upswing for the three years through first quarter 1973, the rate of increase of U.S. imports declined in mid-1972. Imports of manufactured goods during 1973 increased only 2 percent in volume, compared to 13.5 percent in 1972 and 6.5 percent in 1971.<sup>7</sup> This suggests that the dollar devaluation, which simultaneously reduced the foreign currency cost of U.S. exports and increased the dollar cost of imports, had a very strong effect in reducing U.S. demand for imports.<sup>8</sup>

The U.S. balance of payments for 1974 will be affected by many events. Since about 1966 U.S. domes-

tic production of petroleum has leveled off while U.S. consumption has increased at a rapid rate (see chart entitled "United States Petroleum Supply and Demand"). The difference between domestic production and consumption has been made up by increased imports. In 1973, for example, U.S. consumption of petroleum was 17.3 million barrels per day (MBD) and imports amounted to 6.2 MBD, 35.8 percent of consumption.



At the same time, prices of imported oil increased sharply. For example, the average price per barrel of imported oil was \$2.75 in January 1973 and climbed to \$11 in March 1974. U.S. expenditures for imports of petroleum and petroleum products climbed from \$4.6 billion in 1972 to \$8 billion in 1973.<sup>9</sup> Many projections for 1974 indicate that U.S. expenditures for oil imports will rise to about \$25 billion.<sup>10</sup> This would imply a trade deficit for the United States in 1974, and indeed, preliminary first quarter trade data lend support to this conjecture.

Moreover, sharply increased expenditures for oil imports are projected for other industrial countries. The oil-exporting countries will therefore gain increased revenues, and these revenues will have to be disposed of one way or another. That is, they must either import more goods and services or invest their oil earnings in foreign assets.

<sup>9</sup>See *Survey of Current Business* (March 1974), p. 38.

<sup>10</sup>See, for example, the *International Economic Report of the President* (March 1974), p. 107.

<sup>7</sup>Council on International Economic Policy, *International Economic Report of the President*, 1974, p. 32, and U.S. Department of Commerce, *Overseas Business Reports*.

<sup>8</sup>In an analysis of U.S. trade performance in 1972, William Fellner suggested that in a period of cyclical upswing the ratio of the U.S. import growth rate to the export growth rate should increase in comparison to a previous time period (1964-1971). Since such an increase in the ratio was not observed, Fellner reasons that the reduction in the international price of the dollar exerted a strong influence during 1972. See William Fellner, "Controlled Floating and the Confused Issue of Money Illusion," *American Enterprise Institute* (February 1974).



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