

## INFLATION, RECESSION - WHAT IS A POLICYMAKER TO DO?

Speech by  
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It is good to have this opportunity to discuss with you some of the problems confronting policymakers during these troubled economic times. Early last year the pace of real growth in the U.S. economy started to slow, and in the first three quarters of 1974 the nation's output of goods and services actually declined. At about the same time that output started to slow, the pace of inflation accelerated.

From the standpoint of a policymaker trying to formulate a strategy for stabilization policy, these two developments appear to be in direct conflict with one another. The slowdown in real growth, carrying with it the threat of rising unemployment, suggests that monetary and fiscal policies should be stimulative. The quickening and persistence of inflation, on the other hand, seems to call for monetary and fiscal restraint. This conjunction of developments, which is called "stagflation" by some, poses a

great dilemma for policymakers -- should our monetary and fiscal policies be directed toward stimulating or restricting total demand?

Today I would like to discuss with you the common belief that inflation and unemployment can, in some sense, be viewed as symmetrical problems. By symmetrical, I mean opposite sides of the policy coin -- when economic policy is too stimulative -- you get inflation; when policy is too restrictive -- increased unemployment.

During the course of my remarks I will point out what I consider to be some major deficiencies underlying the notion of the Phillips curve, that is, the so-called "trade-off" between inflation and unemployment. Recent economic experience along with recent research results suggest that we need to modify our thinking about this relation. In an effort to achieve our nation's economic goals, these recent developments in economic thinking carry important implications for stabilization strategy.

Before turning to these problems of policy formulation I would like to review briefly our recent economic experience. As we are all painfully aware, the U.S. economy is currently undergoing some uncomfortable adjustments. To provide some

perspective on recent developments I would like you to examine with me the first chart among the set that has been distributed to you.

By way of introductory comment, I want to emphasize the importance of keeping our perspective as we attempt to analyze and understand our recent economic experiences. I find charts of this type very useful in this respect -- providing a visual summary of the U.S. economy over the last two decades. I will return to this point later, but I feel that our current state of economic disarray is related in large measure to a lack of perspective in the formulation of economic policy in the past.

Let me begin by reviewing recent trends in the growth of the money stock, which are shown in the top tier of Chart I. Since early 1972, the nation's money stock has increased at a 6.8 percent annual rate. This rate of expansion represents a further step-up from the 6 percent average rate of increase from late 1966 to early 1972. These average rates of money expansion for the last eight years compare with a 3.4 percent average rate of increase during the early 1960s and a 1.8 percent average rate of expansion during most of the decade of the 1950s.

Look now at the second tier in Chart I, which shows the general movement of prices over the last two decades. I feel that the top two tiers of this chart provide support for the proposition that inflation is a monetary phenomenon. The general movement of prices is closely related to the trend rate of monetary expansion.

To better understand the recent acceleration of prices a shaded area has been included representing the period when the wage-price control program was in effect. In retrospect, it appears that controls had the effect of keeping reported prices down in late 1971 and throughout 1972; but it should be clear that such measures have only temporary effects, especially when the rate of monetary expansion is left unchecked. Consequently, I think the very rapid 8.5 percent rate of price advance since late 1972 is in part a catch-up phenomenon following the period of controls.

Examination of trends in real output and unemployment in the third and fourth tiers of Chart I suggests that the economy is very sluggish. Real output remains below the level of early 1973, and since late last year unemployment has been rising. However, if we maintain our perspective, we note that output is still up at a 3.1 percent average rate from the end of the

1969-70 recession, and total civilian employment has increased at a 2.5 percent average rate during the same period. Also, as shown in the chart, unemployment remains below the 6 percent rate that prevailed throughout 1971.

Let me now turn to the question that I posed earlier - are inflation and unemployment symmetrical problems? In discussions of economic policy it is common practice to treat inflation and unemployment as such. Unemployment is considered the result of insufficient total demand, and inflation is the consequence of excessive total demand. Given these considerations, the role of stabilization policy is to attempt to walk a tightrope between these two problems, providing just the right growth of total demand so that neither inflation nor unemployment occurs.

Recent experience is again reminding us, however, that inflation and unemployment can emerge simultaneously, as we have just seen in Chart I. It might appear that one of the goals must be sacrificed in order to achieve the other, or perhaps the policymaker must strive for some sort of compromise between the two. In general, there does not seem to be a "right" amount of total demand that will permit the achievement of both full employment and price stability, at least not in the short run.

As you well know, this cruel dilemma relating to unemployment and inflation is usually described as the Phillips curve. This relation was formulated first as an empirical observation, but has come to be accepted almost as an economic law whereby low rates of unemployment are associated with high rates of inflation, and vice versa. However, when inflation persists in the face of rising unemployment, as it is doing currently, it runs counter to predictions of the Phillips curve. In other words, the Phillips curve provides an inadequate explanation for events as they seem to be evolving now.

Some analysts explain the dilemma by attributing the recent inflation to the operation of special factors -- the oil embargo, the Russian wheat deal, two devaluations of the dollar, and so on. These were very important events which probably have played a minor role in the recent explosion of prices. But any attempt to attribute the major part of our inflation to these special factors I find impossible to swallow. Underlying the development of these special factors were the policies adopted in late 1971 -- the devaluation of the dollar, elimination of the excise tax on automobiles, the introduction of an import surcharge, and the rapid expansion of the money stock and Federal expenditures which followed.

Our current energy problems are not unrelated to the increased demand for energy associated with the rapid pace of economic expansion in 1972 and 1973, with a policy emphasis on stimulating the automobile industry. The supply of domestic energy, on the other hand, was discouraged by the administration of the program of wage and price controls. Furthermore, the worldwide inflation should not be considered a special factor, since it is related to the rapid monetary expansion in the U.S. With a system of fixed exchange rates the rapid monetary expansion in the U.S. resulted in a rapid accumulation of worldwide reserves, which, in turn, led to monetary expansion and inflation in other countries.

I am not willing to accept the special factor theory of inflation because that theory deals mostly with a once and for all increase in the price level and removes the focus from inflation as a monetary phenomenon. By losing that focus I think we are abdicating our responsibilities as policymakers. Pretending that the bulk of our inflation is caused by factors other than excessive monetary expansion would run a very great risk that the rate of monetary expansion would be stepped up further in an attempt to avoid possible reductions in real output growth.

To better understand the nature of the relationship between inflation and unemployment, let us now turn to the rest of the charts that have been distributed to you. Chart 2 is a scatter diagram of the inflation-unemployment experience of the United States from 1953 through 1973. Each dot represents a year in that period. The unemployment rate has ranged from a low of 2.9 percent of the labor force in 1953 to a high of 6.8 percent in 1958, and the average for the entire period was 4.9 percent. The inflation rate (annual rate of change) has varied between minus .5 and 8.4 percent for the 1953-73 period, and averaged 2.6 percent per year. Indications are that 1974 will record about a 5.5 percent average rate of unemployment and almost a 12 percent advance in prices.

If the Phillips curve analysis were valid, we would expect to see an "L-shaped" curve; that is, high rates of inflation would be associated with low unemployment, while low rates of inflation would be associated with high unemployment. Examination of the evidence of the last twenty years in Chart 2 does not clearly demonstrate the presence of any systematic relationship between inflation and unemployment.

What we do observe is the greater tendency for the unemployment rate to cluster about its mean than



does the inflation rate. Association of dates with the dots also indicates that the inflation rate has moved progressively higher since the mid-1960s. For all years since 1966, the inflation rate has been above the average for the 1953-73 period, but the unemployment rate has not remained below the average, as followers of the Phillips curve would lead us to believe.

To further our understanding of Chart 2, I think it is useful to examine inflation and unemployment relative to the key determinant of growth in total demand -- the rate of monetary expansion. Consider first the relationship between monetary growth and unemployment in Chart 3. As I examine this chart, again I am unable to discern any systematic relationship between the two variables. In other words, the level of unemployment does not appear to bear a directly observable relationship to the trend rate of monetary expansion as measured by a two-year average rate of change. What Chart 3 implies is that over the last twenty years the level of the unemployment rate in the U.S. economy has taken on values quite independently of the rate of monetary growth. Based on this cursory examination of the data, I conclude that the trend rate of monetary expansion over a period as long as two years contributes little to the

explanation of movements in the unemployment rate. I might add that this conclusion does not deny any transitory effects of short-run monetary accelerations and decelerations on employment and unemployment.

Consider now the relationship between inflation and monetary growth in Chart 4. The relationship is closer than that between unemployment and money. Nineteen of the twenty-three observations fall in either the lower left or upper right quadrant. The relatively loose fit does indicate other factors have an influence on the movement of prices in a given year. But when we talk about the "problem of inflation," I think it is safe to say that the fundamental cause is excessive money growth, and the cure is to slow down the rate of money expansion.

After looking at Chart 2 by examining its components in conjunction with monetary growth, I am forced to conclude that a sustainable low level of unemployment cannot be obtained for the "purchase price" of a higher rate of inflation. It should be pointed out, however, that for short periods a relationship between inflation and unemployment may exist, but the experience of the last four or five years has provided evidence casting serious doubt on the validity of the Phillips curve relation over the longer run.

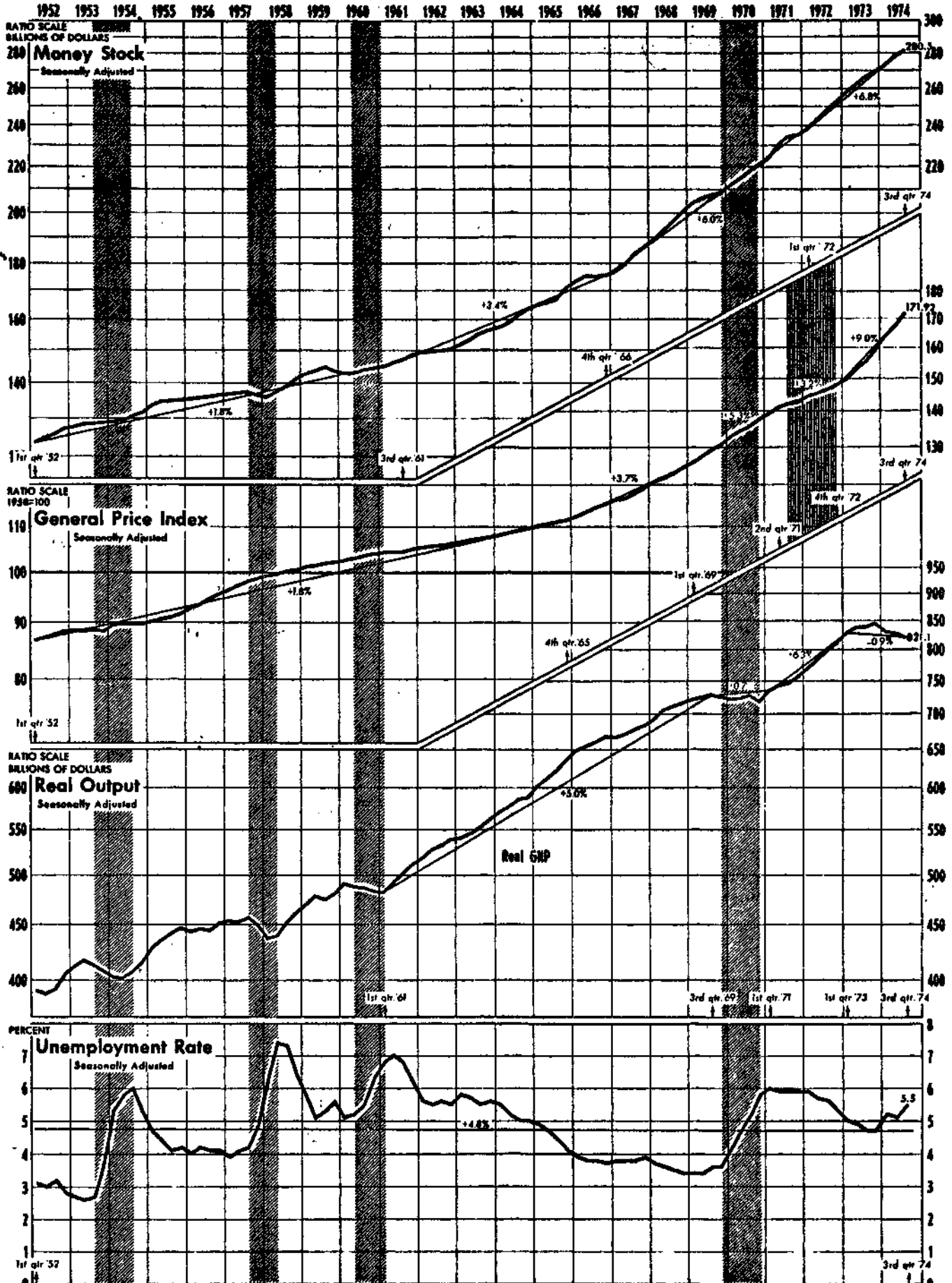
be formulated with a longer-term focus, and that that focus implies that inflation rather than unemployment should serve as the primary guideline for aggregate demand policy. This is not to say that we as policymakers should ignore unemployment, rather, long-term benefits to society will be greater if we hold to a relatively stable path of monetary growth than if we react to every wiggle of the unemployment rate.

With inflation serving as the primary focus of monetary policy, inflation is controllable over the longer term. At the same time problems of employment should be dealt with by government actions directed toward the removal of impediments to the efficient operation of labor markets. The chief contribution that aggregate demand policies can make to our employment goals is the avoidance of sharp shifts in policy. The mistakes of aggregate demand policy in the past are all too familiar.

A clear resolve on the part of the monetary authority to gradually reduce the rate of monetary growth will not bring an instant solution to the problems of high interest rates, financial disintermediation, rising unemployment, and inflation. However, a policy of gradual reduction will pave the way to faster solutions to these problems than short-sighted policies of trying to deal with each of these problems

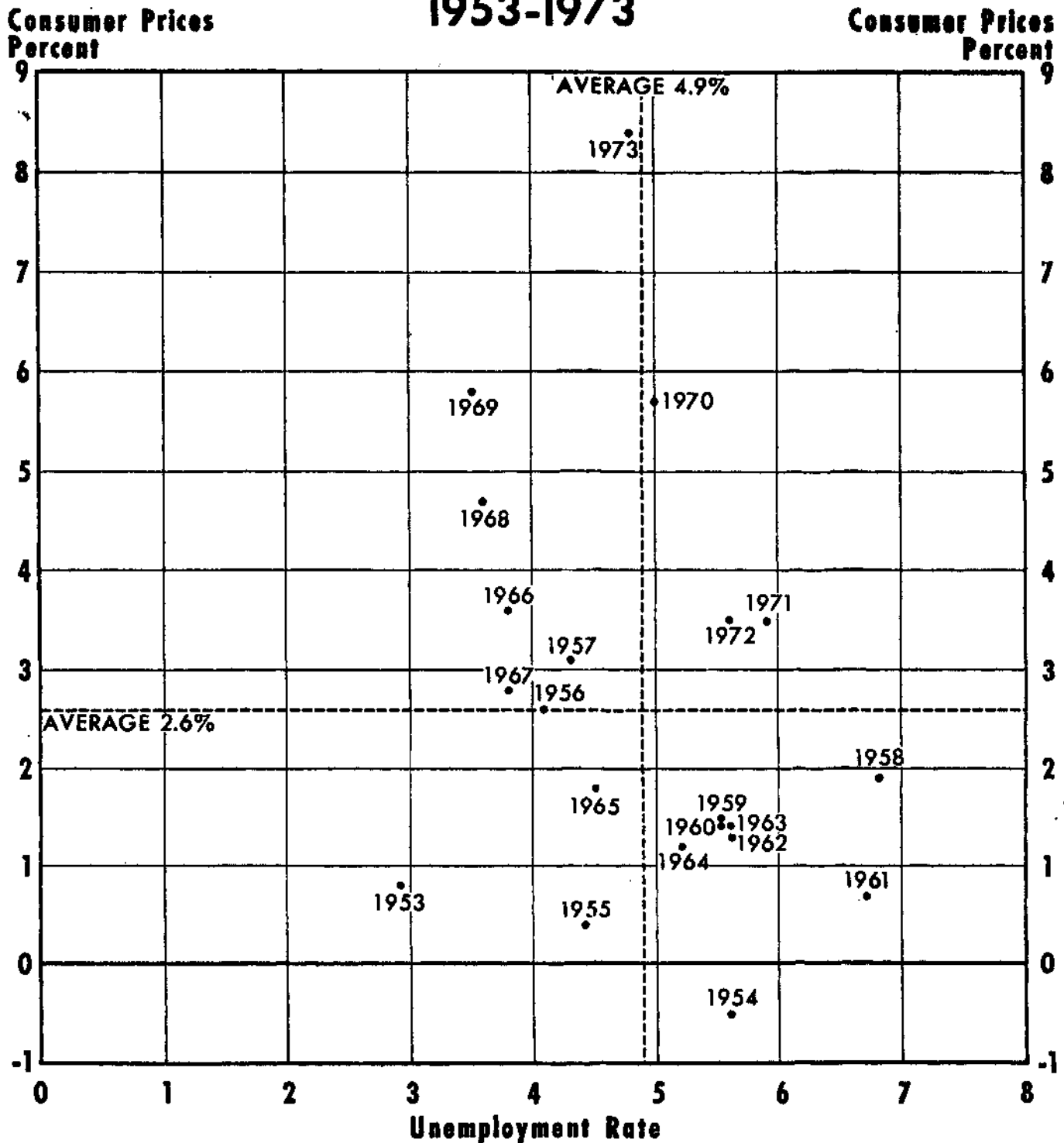
as if they all could be corrected by monetary and fiscal actions.  
This is the message of aggregate demand policies over the  
last ten years.

# Chart 1 Influence of Money on Prices, Output, and Unemployment



The first four shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research.  
 The last shaded area represents Phase I and II of the price-wage control program.  
 Latest date plotted: 3rd quarter

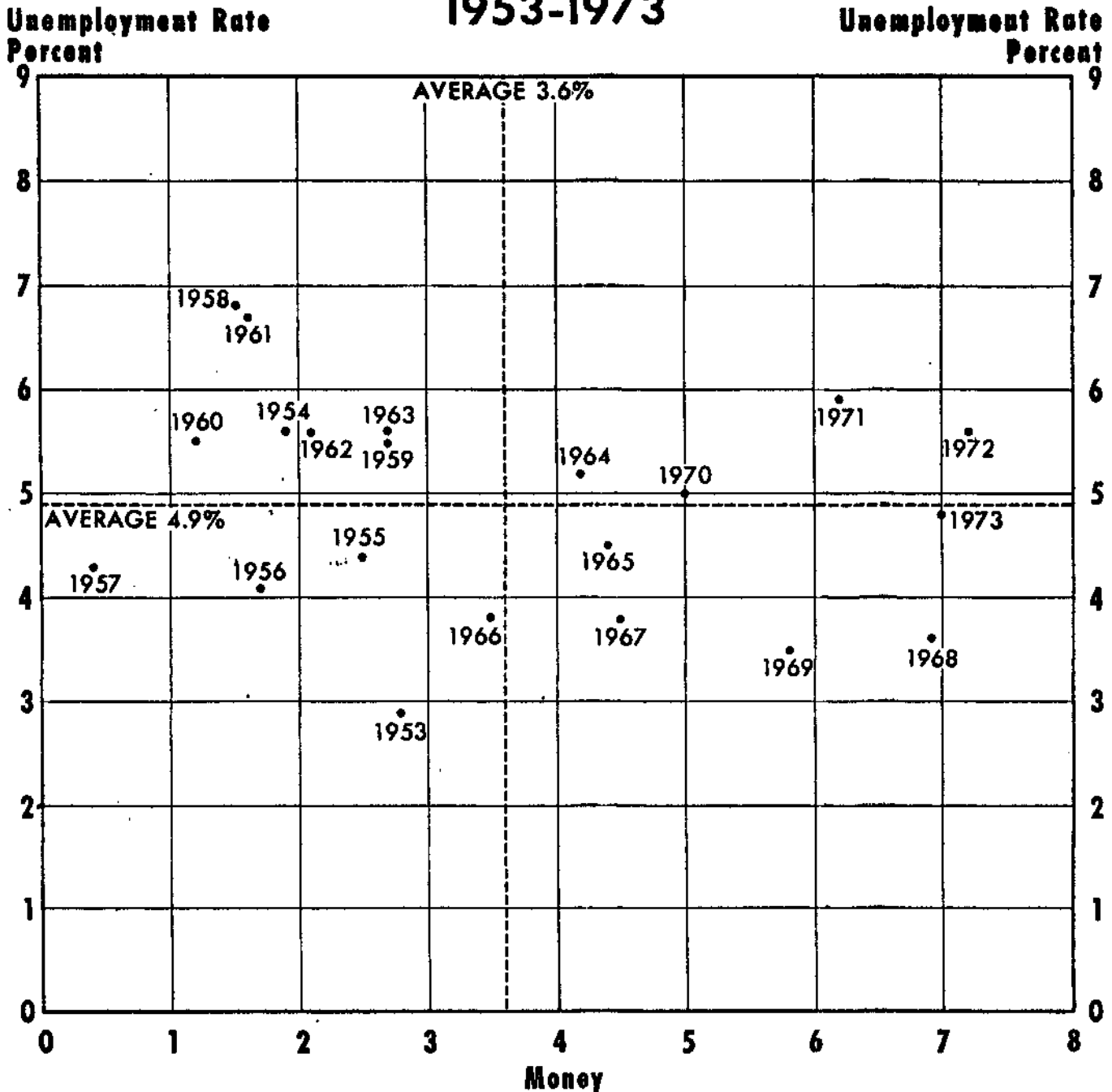
Chart 2  
**Prices and Unemployment**  
**1953-1973**



Source: U.S. Department of Labor  
 Unemployment rate is the average for the year indicated. Rates of change for prices are computed for the year ending in fourth quarter of year indicated.

Prepared by Federal Reserve Bank of St. Louis

Chart 3  
**Unemployment and Money**  
**1953-1973**

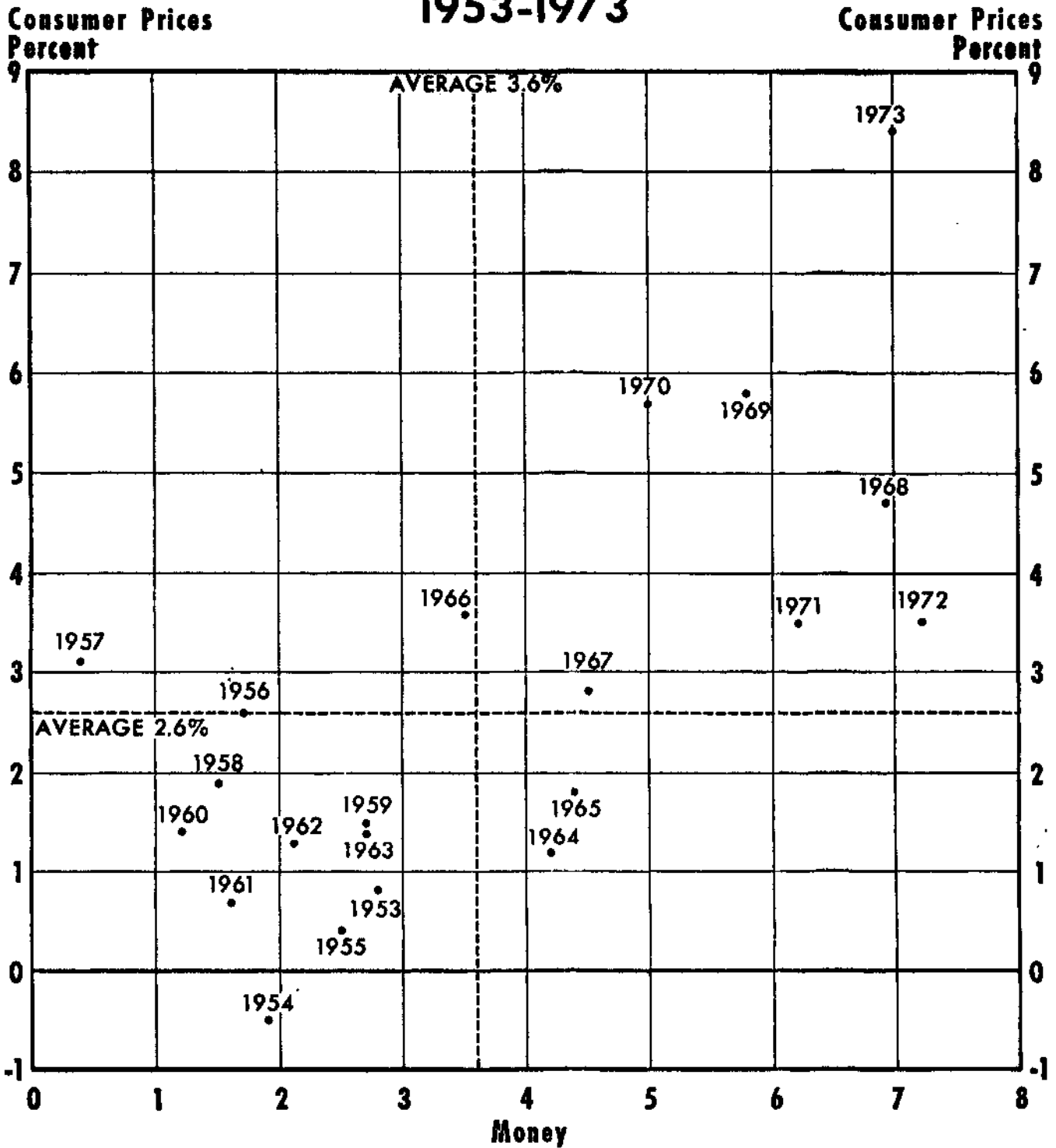


Sources: Board of Governors of the Federal Reserve System  
 and U.S. Department of Labor

Unemployment Rate is the average for the year indicated. Rates of change for money are for the two year period ending in the fourth quarter of the year indicated. Money is defined as currency and demand deposits held by the non-bank public.

Prepared by Federal Reserve Bank of St. Louis

Chart 4  
**Prices and Money**  
**1953-1973**



Sources: Board of Governors of the Federal Reserve System  
 and U.S. Department of Labor

Rates of change for prices are computed for the year ending in fourth quarter of the year indicated. Rates of change for money are for the two year period ending in the fourth quarter of the year indicated. Money is defined as currency and demand deposits held by the non-bank public.

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