WHAT SHOULD BE THE AIM of monetary policy in 1974? One answer is the fulfillment of the administration’s forecast for the year. As explained in the President’s Economic Report, the forecast is also the target; according to the Council of Economic Advisers, it is the best feasible path for the economy. I personally do not agree with this policy, nor do I believe it carries out the mandate of the Employment Act of 1946. But accepting it, one can ask what kind of monetary policy is likely to fulfill the forecast.

The expected and approved path appears to be quarter-to-quarter rates of growth of real gross national product in 1974 of roughly $-0.5, 0, 1$, and $1$ percent, with unemployment rising to about $5.6$ percent in the second quarter and remaining there the rest of the year. The rate of price inflation would fall sharply in the second quarter, but rise slightly toward the end of the year.

The target forecast of January does not differ radically from more recent forecasts made by private economists. Table 1 reports George Perry’s latest guesses. (A difference of semantic and political significance, but of no economic import, is that Perry’s trajectory qualifies as a “recession.”)

What monetary policy will achieve this outcome in 1974? The council suggests a year-over-year increase of $8$ percent in $M_2$, about the same as the projected gain of nominal GNP. A unitary income elasticity of demand for $M_2$ is historically consistent with one of about $0.7$ for $M_1$. On this basis, the 1973–74 increase in $M_1$ would be $5.6$ percent. The Economic Report provides few clues to interest rates in 1974. But the council’s monetary tar-
Table 1. Alternative Forecasts for Selected Economic Indicators, 1974, by Quarter
Dollar amounts in billions, seasonally adjusted annual rates; annual rates of change from previous period in percent

<table>
<thead>
<tr>
<th>Year and quarter</th>
<th>Real GNP</th>
<th>GNP deflator</th>
<th>Nominal GNP</th>
<th>CEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount (1958 dollars)</td>
<td>Growth rate</td>
<td>Index (1958 = 100)</td>
<td>Growth rate</td>
</tr>
<tr>
<td>Actual 1973:4</td>
<td>844.6</td>
<td>1.6</td>
<td>158.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Projection 1974:1</td>
<td>838.6</td>
<td>-2.8</td>
<td>161.9</td>
<td>9.1</td>
</tr>
<tr>
<td>2</td>
<td>833.5</td>
<td>-2.4</td>
<td>165.0</td>
<td>7.7</td>
</tr>
<tr>
<td>3</td>
<td>841.8</td>
<td>4.0</td>
<td>166.8</td>
<td>4.4</td>
</tr>
<tr>
<td>4</td>
<td>853.0</td>
<td>5.3</td>
<td>169.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Actual 1973</td>
<td>837.4</td>
<td>...</td>
<td>153.9</td>
<td>...</td>
</tr>
<tr>
<td>1974 Projection</td>
<td>Perry</td>
<td>841.7</td>
<td>0.5</td>
<td>165.7</td>
</tr>
<tr>
<td></td>
<td>CEA</td>
<td>846</td>
<td>1.0</td>
<td>164.5</td>
</tr>
</tbody>
</table>

Table 2. Required Annual Rates of Increase of M$_1$ and Time Deposits to Effect Various Movements in Interest Rates, 1973:4 Actual and Projections for 1974, by Quarter

Percent

<table>
<thead>
<tr>
<th>Interest rate and monetary variable</th>
<th>1973:4 Actual</th>
<th>1974 projection, by quarters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First</td>
</tr>
<tr>
<td>Rate on commercial paper</td>
<td>9.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Growth rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency plus demand deposits, M$_1$</td>
<td>3.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Time deposits</td>
<td>5.3</td>
<td>7.4</td>
</tr>
<tr>
<td>Rate on commercial paper</td>
<td>9.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Growth rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M$_1$</td>
<td>3.9</td>
<td>8.6</td>
</tr>
<tr>
<td>Time deposits</td>
<td>5.3</td>
<td>7.6</td>
</tr>
<tr>
<td>Rate on commercial paper</td>
<td>9.0</td>
<td>8.1</td>
</tr>
<tr>
<td>Growth rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M$_1$</td>
<td>3.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Time deposits</td>
<td>5.3</td>
<td>8.1</td>
</tr>
</tbody>
</table>


get and its judicious balancing of factors raising and lowering rates both suggest that no significant changes are expected or desired. If interest rates remain stable or rise during the current (growth) recession and recovery, this will be a unique episode in business cycle annals.

Stephen Goldfeld recently reported some carefully estimated econometric equations of demand for money.¹ Table 2 shows rates of increase of M$_1$ needed, according to his preferred equation, for three alternative paths of interest rates in 1974. In each case Perry’s forecasts for real GNP and prices from Table 1 were used. These estimates take off from 1973:4, when demand for money was unusually high, in the sense that there was a large positive residual from the systematic part of Goldfeld’s equation.² The


². I am grateful to Professor Goldfeld for these estimates, which are based on the specification in equation (4), ibid., p. 582.
1974 projections carry this residual with gradually diminishing weight. The residual for 1973:4, reflecting a shift of asset preferences toward money, is scarcely surprising. The same uncertainty and failure of confidence have been painfully evident in the stock market.

Goldfeld also has an equation for the time deposits component of $M_2$, but it is not as successful over the sample period as his $M_1$ equation. Using this equation, I calculated annual rates of increase in demand for time deposits for the four quarters of 1974, for the same three hypothetical paths of interest rates. These are also shown in Table 2.

I conclude that the standard forecast—the administration target—will not be met without rates of monetary growth that will (a) exceed the recommendation of the council, and (b) draw screams from monetarists.

I am very skeptical that the standard GNP scenario can be staged without declines in interest rates at least as sharp as those shown in the third panel of Table 2. My skepticism has three sources.

First, one act of the play is a revival of residential construction in the second half of the year. Indeed, February figures suggest that the worst may already be over. But the current interest rate structure does not induce large flows of savings into thrift institutions. Such flows will not occur, the record suggests, until open market rates dip below 7 percent. Meanwhile, during the current slump, mortgage rates have continued a steady rise that has scarcely been interrupted since mid-1971. Although nonmonetary measures—advances from the Federal Home Loan Banks and purchases by the Federal and Government National Mortgage Associations—are billed as remedies to ease the mortgage market, they have not yet lowered rates. Tight credit conditions continue in a housing market weakened by the energy crisis. Prospective home buyers are doubtful about suburban or exurban locations and uncertain about house size and design.

Second, consumer demand looks weaker than the standard forecast assumes. Perry's forecast puts personal saving rates in 1974 below the 7.3 percent of 1973:4—at 6.5, 6.0, 6.1, and 6.4 percent in successive quarters. The most recent University of Michigan survey of consumer attitudes is the most pessimistic ever, by far. Independently of this information, Tom Juster has tried to estimate the influence of expectations and uncertainties about inflation, jobs, and incomes on the personal saving rate. 3 For 1974

his equations predict rates in excess of 8 percent of disposable income. A third factor lowering the propensity to consume is the transfer of income to sellers of food and fuel at home, as well as abroad. A fourth is the decline in auto sales because of the gasoline scare. Given the heavy use of installment finance in auto purchases, most of the money that would normally be spent for cars will be saved rather than spent on other goods.

Finally, optimism about the prospects for recovery later this year depends principally on the strength of nonresidential investment in 1974, as registered in surveys of anticipations. The survey reported in March by the Commerce Department indicates that business anticipates spending 13 percent more for investment in plant and equipment in 1974 than was spent in 1973. Yet there is an underlying weakness in the financial climate for corporate investment, the high cost of capital relative to expected earnings. If this is not corrected, it may retard investment later in 1974 or in 1975. In the plans for this year, three types of investment play an unusually large part: increases in energy-producing capacity; capacity additions in materials and other bottleneck sectors; and defensive investments to adapt to new scarcities and higher costs. These kinds of investment are probably relatively insensitive to interest rates and capital costs, but a sustained and broadly based investment boom will depend upon an improvement in expected earnings relative to costs of finance. I turn to this topic in the next section.

Is the Real Rate of Interest Really Low?

Figure 1 shows the quarterly time series of \( Q \), the ratio of the valuation of corporate physical capital in the stock and bond markets to its estimated cost of reproduction at current prices of goods. The ratio is now below 1, for the first time since 1970:3 and only the third time since 1958. A high value of \( Q \) is favorable to investment, since a corporation can sell paper claims to physical capital for more than the capital costs. A low value of \( Q \), on the other hand, means that the rate of return required in the market by current and potential share- and bondholders is high relative to the marginal productivity of capital. As Keynes has said,

[The] daily revaluations of the Stock Exchange, though they are primarily made to facilitate transfers of old investments between one individual and another, inevitably exert a decisive influence on the rate of current investment. For there is no sense in building up a new enterprise at a cost greater than that at which a similar existing enterprise can be purchased; whilst there is an inducement to spend on a
Figure 1. Estimated Ratio of Market Valuation to Replacement Cost of Corporate Capital Stock, 1951:2 to 1973:4

Source, Derived by John Ciccolo: Federal Reserve Bank of New York, and used with his permission.
new project what may seem an extravagant sum, if it can be floated off on the Stock Exchange at an immediate profit.  

Figure 2 shows $I/K_{-1}$, gross investment as a percentage of the lagged capital stock (both in 1958 dollars), over the same time period. John Ciccolo has also computed a regression of $I/K_{-1}$ on $K_{-1}$ and eight lagged values of $Q$. From this regression can be calculated projections of 1974 nonresidential fixed investment, in 1958 dollars, assuming that $Q$ remains at its 1973:4 value of 0.995.

As I stated above, I have no doubt that special factors will be favorable for investment in 1974, and, of course, it is possible that the stock market will pick up. Table 3 is meant to show that in the absence of special factors or a stock market recovery, investment demand might be weak.

**Table 3. Alternative Forecasts of Nonresidential Fixed Investment, 1974, by Quarter**

<table>
<thead>
<tr>
<th>Year and quarter</th>
<th>&quot;Q&quot; forecast (billions of 1958 dollars)</th>
<th>Perry forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td></td>
</tr>
</tbody>
</table>
| 1973:4           | 94.5                                   | 141.8          | 94.5  
|                  | Projection                             |                |  
| 1974:1           | 93.7                                   | 145.8          | 96.0  
| 2                | 92.6                                   | 147.0          | 95.6  
| 3                | 91.7                                   | 153.5          | 98.6  
| 4                | 91.4                                   | 158.0          | 100.2 |

Sources: The "Q" forecast (explained in the text) was calculated by John Ciccolo. Other data are from Perry, "Economic Outlook for 1974."

a. Assumes investment deflator rises at 5 percent per year.

Further evidence is provided by William Nordhaus' calculations, in his article in this issue, of the internal after-tax rate of return on corporate capital. This rate reached its post-1950 high of 10.0 percent in 1965 and fell to 5.4 percent in 1973. Standardized cyclically to an average unemployment rate of 4.5 percent, the rate was 10.0 percent in 1965 and 5.6 percent in 1973. The profit squeeze is not a myth. In these circumstances, real rates of interest as high as those that prevailed in the 1960s are not an appropriate target for the Federal Reserve.


5. I am indebted to a former student, John Ciccolo, now of the New York Federal Reserve Bank, for the calculations of $Q$ and $I/K_{-1}$.
Figure 2. Ratio of Real Gross Investment to Gross Capital Stock, 1951:2 to 1973:4a

Source: Derived by John Ciccolo.
a. Computed from investment and capital stock in 1958 dollars.
In my opinion, it is a fallacy to conclude that real rates of interest are low simply because current rates of inflation are high compared with nominal market interest rates on dollar-denominated assets. The important thing, as I have argued above, is the comparison of earnings prospects and interest rates. This is the comparison the stock market makes, and it is hard to argue that real rates have declined in any meaningful sense after price-earnings ratios have declined by a third over the year.

The rates of increase of price indexes do not represent operational investment opportunities; it is not possible to acquire and hold for future sale the consumer price index's market basket or a share of gross national product. Anyway, recent increases in price indexes have large one-shot components; rational savers and investors would not extrapolate those rates into the future. Inflation premiums are not immaculately added to interest rates. They are put there by market forces and monetary policy. Inflationary expectations do not force bond rates up unless they induce borrowers to float bonds and investors to shift into other assets. One would expect equities to rise in value. When inflationary news makes both bonds and stocks fall in price, the explanation, I think, is that these markets know that the Federal Open Market Committee reads the papers too and will react by making policy more restrictive.

I have lately been reading how money markets react adversely to news of high rates of growth of the stock of money. Perhaps the market is full of convinced monetarists. More likely, the market, knowing that the Fed sets targets and limits for growth in the money stock and is sensitive to monetarist criticism, anticipates that the FOMC will act restrictively to reverse "excessive" growth of monetary aggregates. This game is an unfortunate consequence of the Fed's adoption of money-stock criteria in making policy and of the market's use of these criteria in interpreting policy. But it does not mean that the Fed is impotent to reduce interest rates if it really aims to do so. Expectational markups of interest rates will not be sustained unless real live borrowers appear to take all the funds available, and this will not happen unless the Fed confirms the expectations by contracting bank reserves and supplies of loanable funds.

The Recommendations of the "Shadow Open Market Committee"

The press recently reported that the "Shadow Open Market Committee" advises the Fed to set the growth of $M_1$ at a constant rate of 5 to 5½ per-
cent per year.\textsuperscript{6} Just as Milton Friedman did in his letter of February 20, 1974, to Senator William Proxmire, the shadow committee blamed the Fed for the major part of current inflation. Friedman likewise urged the Fed to slow down monetary growth. Advocates of this position rarely tell the public the costs of the policy they espouse. Friedman does say "... there is literally no way to end inflation that will not involve a temporary, though perhaps fairly protracted, period of low economic growth and relatively high unemployment."\textsuperscript{7}

In one sense the Fed can be held responsible for all inflation that occurs. If the Fed were willing to starve the economy for liquidity, regardless of the consequences for real output and employment, presumably price indexes could be held down even when unit labor costs are rising or even when special factors raise the prices of internationally traded goods like oil and grain. But the Fed is not responsible for the structural features of modern industrial economies that give them an inflationary bias even at reasonable rates of utilization. Nor can the Fed be blamed for unwillingness to accept the "temporary, though perhaps fairly protracted" costs of trying to cure structural inflationary bias by deflation of aggregate demand.

We already know that these temporary costs can be fairly protracted. In 1970 Andersen and Carlson simulated their St. Louis monetarist model for steady rates of monetary growth in the period 1970–80.\textsuperscript{8} With 6 percent monetary growth, unemployment stayed above 5 percent until 1976 and above its natural rate of 4 percent until 1978. With 4 percent monetary growth, consistent with long-run price stability, unemployment was above 6 percent in 1971–75 and above 5 percent until 1978, and it had not reached 4 percent by 1980.

In a monetarist spirit I have made some similar calculations for the present context. I assume that the shadow committee’s proposal for $M_1$ means an 8 percent annual rate of growth of nominal GNP. I also assume that the normal rate of growth of potential output is 4 percent per year and, for the sake of argument, that the natural rate of unemployment is 5 percent.

\textsuperscript{6} The Shadow Open Market Committee is a private group of economists who meet occasionally to recommend monetary policies to the Federal Reserve.


The rate of increase of the GNP deflator each quarter is the sum of two components. One is a weighted average of the eight preceding quarterly increases, the weights summing to one. The other is a correction depending on \( \U_{-1} \), the unemployment rate for the previous quarter: the correction is positive if \( \U_{-1} \) is less than 5 percent; negative if it exceeds 5 percent.

The specific form of the second component is \((b/\U_{-1}) - (b/5)\). I have used two vastly different values for \( b \). The first is 13.32, which comes from the Phillips curve of the old Fed-MIT-Penn model as reported by de Menil and Enzler in 1970.\(^9\) This is an optimistic view of the efficacy of unemployment in slowing down inflation, for it implies that the difference between 6 percent and 5 percent unemployment is a reduction of 0.4 percentage point each quarter in the annual percentage rate of inflation. This is surely overoptimistic for the purpose, since the de Menil-Enzler Phillips curve has no natural rate and attributes variations in wage inflation predominantly to variations of unemployment. The second value of \( b \) is 4.0, from an Eckstein-Brinner wage equation (reestimated by Gordon),\(^10\) in which full feedback of past price changes accounts for the lion’s share of explained variance of wage inflation. On this basis, unemployment of 6 percent cuts down the annual rate of inflation only by 0.13 percentage point each quarter.

The simulations, displayed in Figure 3, assume that the Perry forecasts are realized in 1974 and that the monetarist recommendation takes hold in 1975:1. From then on, nominal GNP grows at an annual rate of 8 percent. In the optimistic version, unemployment rises to 6.9 percent in 1978:2 and finally gets down to 5 percent in 1982:4. In 1978:2 the rate of price inflation crosses its long-run equilibrium value of 4 percent. That is why unemployment begins to decline. But by 1982:4 the rate of price inflation is only 2 percent, so unemployment overshoots and continues to decline. Eventually the rate of inflation accelerates again, and so on. I stopped the cycle at the end of 1985, assuming that the Shadow Open Market Committee might have had another meeting by that time.

The second version is even worse, as might be expected in view of the weak effect of high unemployment on wage inflation. Unemployment rises steadily for eight years.

\(^9\) George de Menil and Jared J. Enzler, “Prices and Wages in the FR-MIT-Penn Econometric Model,” in ibid., pp. 277–308.

Figure 3. Simulations of Inflation and Unemployment with Constant 8 Percent per Year Growth of Nominal GNP, Alternative Wage Responses to Unemployment, 1975:1 to 1985:4

Rate of price increase (percent per year)

Rate of unemployment (percent)

Source: Derived by author. See text discussion.
The Old Dilemma Once More

The recommendations of the shadow committee and of Friedman raise once again the big and terribly uncomfortable issues of macroeconomic policy. So, for that matter, does the CEA at the beginning of its 1974 Report:

. . . while continued rapid inflation is not inevitable, the course of unwinding it will be long and difficult . . . to hope that we can "wring the inflation out of the system" by the end of some short period is to assure disappointment. Whoever undertakes now to fight inflation must be prepared to stay the long course. We think it is necessary to do this, and also to recognize why we must do it. Experience extending over almost a decade teaches us that if we do not fight inflation effectively it will accelerate. . . .

[The facts of our prosperity over the past eight years] do not relieve us of the need to bring inflation under control, and to accept the cost of doing so for the sake of avoiding the greater costs of an accelerating inflation.11

This statement makes me wonder what macroeconomic scenario the administration has in mind for 1975 and subsequent years.

In the fight against inflation, the urgent matter in 1974 is to keep the fuel-food bulge in prices from escalating the rate of wage inflation. From the record so far, one can be moderately hopeful, and there are reasons why one would not expect rising commodity prices to pull wages all the way up after them. These price increases do not improve the bargaining power of most employees. They do not inflate the profits of employers or the value of labor to them; in many instances the opposite is true. They do not distort the pattern of relative wages and provoke another round of wage-wage spiral. Still, with George Meany talking 12 percent, no one would underrate the problem.

But I doubt that the wage outcome this year will depend appreciably on whether the unemployment rate is 6 percent or 5.5 percent or 5 percent. As I have already noted, wage equations that assign high coefficients to past price experience do not assign a strong influence to unemployment. The short-run Phillips curve is flat at high rates of unemployment. Since it is steep at low rates, a much longer time is required to unwind an inflation than to generate one.

In the circumstances, neither monetary policy nor aggregate-demand

policy in general is a useful tool. As Arthur Okun has observed, if there really is a danger that a one-shot bulge in particular prices will be permanently incorporated in general wage and price inflation, and if the damage of such acceleration is as great as the CEA suggests, then all kinds of preventive measures—controls, subsidies, rollbacks—would be justified, in spite of their temporary allocational costs.

Should not a real effort to negotiate a social treaty with George Meany and other labor representatives be the first order of business? I suspect that American consumers, wage earners, union leaders, and businessmen are quite capable of understanding that scarcities of food and fuel make it impossible for their real incomes to grow at the accustomed pace. Workers might accept wage guideposts for 1974 and 1975 that recognize this fact of life. But they would have to regain confidence that the sacrifices will be equitably shared. Indeed, wage guideposts might be more acceptable if workers were assured that the burdens of layoffs and short time were not piled on top of the inescapable burdens of commodity scarcities.

The abiding problem will be with us whatever happens in 1974. My views and values respecting unemployment and inflation are not shared by all economists. I do not agree that inflation, or even acceleration of inflation, is *ipso facto* evidence of excess aggregate demand. I do not agree that all unemployment up to the "natural" rate compatible with zero or steady inflation is *ipso facto* voluntary. Anyone who does agree to those propositions would have no qualms in aiming monetary and fiscal policy at the single target of zero inflation.

For the rest of us, the tormenting difficulty is that the economy shows inflationary bias even when there is significant *involuntary* unemployment. The bias is in some sense a structural defect of the economy and society, perhaps a failure to find and to respect orderly political and social mechanisms for reconciling inconsistent claims to real income. Chronic and accelerating inflation is then a symptom of a deeper social disorder, of which involuntary unemployment is an alternative symptom. Political economists may differ about whether it is better to face the social conflicts squarely or to let inflation obscure them and muddle through. I can understand why anyone who prefers the first alternative would be working for structural reform, for a new social contract. I cannot understand why he would believe that the job can be done by monetary policy. Within limits, the Federal Reserve can shift from one symptom to the other. But it cannot cure the disease.