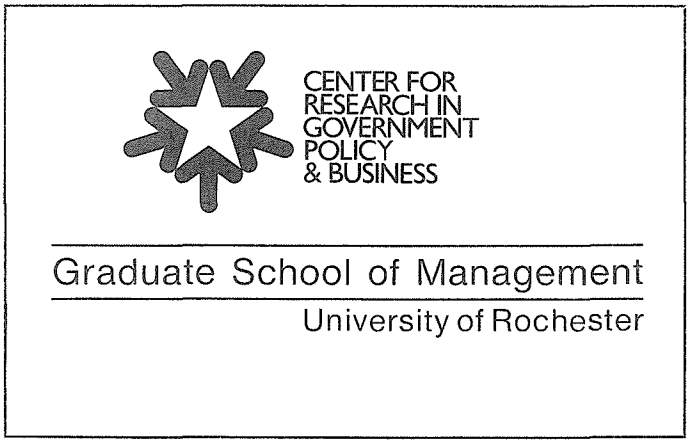
SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

February 3-4, 1980

PPS-80-2



SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

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1. Shadow Open Market Committee Members - February 3, 1980
2. SOMC Policy Statement, February 3, 1980
3. Position Papers prepared for the February 1980 meeting

   FISCAL POLICY Rudolph G. Penner, American Enterprise Institute

   SHADOW OPEN MARKET COMMITTEE POSITION PAPER - Karl Brunner, University of Rochester

   MONEY MULTIPLIER FORECASTS - James M. Johannes and Robert H. Rasche, Michigan State University

   THE GOLDEN OPTION - Wilson E. Schmidt, Virginia Polytechnic Institute

   ECONOMIC PROJECTIONS - Jerry L. Jordan, Pittsburgh National Bank

   ECONOMIC OUTLOOK - Beryl W. Sprinkel, Harris Trust and Savings Bank

SHADOW OPEN MARKET COMMITTEE

The Committee met from 2:00 p.m. to 8:00 p.m. on Sunday, February 3, 1980.

Members:

Professor Karl Brunner, Director of the Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, Rochester, New York

Professor Allan H. Meltzer, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pennsylvania

Mr. H. Erich Heinemann, Vice President, Morgan Stanley & Company, Inc., New York, New York

Dr. Homer Jones, Retired Senior Vice President and Director of Research, Federal Reserve Bank of St. Louis, St. Louis, Missouri

Dr. Jerry Jordan, Senior Vice President and Chief Economist, Pittsburgh National Bank, Pittsburgh, Pennsylvania

Dr. Rudolph Penner, American Enterprise Institute, Washington, DC

Professor Robert Rasche, Department of Economics, Michigan State University, East Lansing, Michigan

Professor Wilson Schmidt, Department of Economics, Virginia Polytechnic Institute, Blacksburg, Virginia

Dr. Beryl Sprinkel, Executive Vice President and Economist, Harris Trust and Savings Bank, Chicago, Illinois

Dr. Anna Schwartz, National Bureau of Economic Research, New York, New York

POLICY STATEMENT

Shadow Open Market Committee

February 4, 1980

Economic performance in the Eighties will be even worse than the deplorable economic performance in the Seventies, unless the Administration, Congress, and the Federal Reserve begin now to slow the growth of government spending and money. There is an urgent need for clearly stated fiscal and monetary policies to reduce the size of the public sector, to reduce real tax burdens, to reduce the crowding out of private capital formulation, and to reduce the rate of money growth.

In the Seventies, higher oil prices, low aftertax returns to capital, large public sector deficits and high inflation contributed to reduced investment, lower growth of labor productivity, and reduced growth of actual and potential output. Recent increases in oil prices and projected increases in government spending threaten to produce the same pattern in the Eighties. Increased spending for defense, if not paired with reductions elsewhere, will result in an increase in the size of the public sector. Higher oil prices and further growth of the public sector depress the growth of the private sector by crowding out private capital and reducing productivity growth.

Fiscal Policy

The major issue regarding the budget is the continued surge in real tax burdens, both current and projected, to 1985. The ratio of total budget receipts to GNP reaches 21.7% in 1981 -- a level that has been exceeded only once before in our history and never in peacetime. To bring the average tax burden down to the level prevailing in 1976 would require an $88 billion cut in taxes.

Taxes are scheduled to increase in 1980-1981 as follows:

* $15 billion owing to Social Security tax increases;
* $20.6 billion owing to the windfall profit tax;
* $11- to $13 billion in personal income taxes owing to the shift of taxpayers to higher brackets;
* The effects of inflation on income from capital;

* Plus other small tax increases resulting from proposed changes in the timing of payments:

These tax increases are but the beginning of the massive rise in taxes required to finance the inordinate growth of the public sector.

One year ago the Administration projected 1984 outlays at $674 billion. Now these 1984 outlays are projected to reach $839 billion -- a rise of $165 billion, nearly 25%, in one calendar year. We believe that the true increase is understated because the Administration has used optimistic assumptions about real growth, the inflation rate, and cyclical developments.

The Administration's spending program is a recipe for low economic growth. Higher government spending will bring higher levels of taxation, more debt, more crowding out of private capital formation, and more inflation.

Monetary Policy

The Administration's budget projections assume the failure of the October 6, 1979, Federal Reserve program of monetary restraint. These projections presuppose a rate of inflation for 1979-85 of 7.7%, as measured by the GNP deflator, and of 8.2% as measured by the CPI.

The October 6 Federal Reserve statement accepted one part of the program that this Committee has recommended for the past six years. We applaud the Fed's move toward monetary control exercised through the control of monetary aggregates.

In the fourth quarter of 1979, the Federal Reserve showed that it was capable of achieving its target rates of monetary growth. However, there is no evidence yet that the Federal Reserve can be relied on to reach announced targets consistently. Current procedures generate avoidable uncertainty and should be improved promptly.

A Program for 1980 and Beyond

1. The Federal Reserve should announce further details about its procedures to reduce the long-run trend of money growth and reestablish its credibility by actually achieving its announced targets. This would be the most effective way to eliminate the entrenched belief that the rate of inflation will continue to rise in the Eighties.
2. The SOMC favors an immediate return to the 6% growth rate for base money that was achieved in the first and second quarters of 1979. A

6% average rate of growth of the base in each quarter of 1980 will continue the policy we advocated at our September 1979 meeting. Base money by the end of the fourth quarter of 1980 will reach $162 billion if our recommendation is followed. The proposed policy is likely to be accompanied by a mild recession in 1980 and a slight reduction in the rate of inflation.

3. Large, permanent reductions in the rate of inflation can be achieved in 1981 and beyond only if there are further reductions in the growth rate of the base. We recommend reductions of one percentage point in 1981 and 1982, so that the level of the base will reach $170 billion at the end of 1981 and $177 billion at the end of 1982.

4. Under a monetary policy consistent with ending inflation, the Federal Reserve will provide smaller and smaller contributions to financing budget deficits. Congress should remove the inconsistency between budget projections and Federal Reserve policy. It should demand that the Administration provide budget projections that are compatible with the Government's commitment to an anti-inflationary policy.

5. We propose that the ratio of government outlays to GNP be reduced steadily. By 1985 the ratio should not exceed 20%.

6. We repeat our recommendation for a tax reduction in 1980. Inflation has increased the real tax burden. We are poorer as a result of the oil price increases. Unless taxes and government spending are reduced, the entire burden of the oil price increase falls on private consumption and investment. We call on the Congress to enact a prompt reduction of $15- to $20 billion in government spending and taxes.

Fiscal Policy
A Report to the Shadow Open Market Committee

Rudolph G. Penner
American Enterprise Institute

The 1981 Budget

Outlays - Given raging inflation and the need to increase defense spending, one would have expected an austere non-defense budget if this were not an election year. Unfortunately, the election intervened and "austerity" is not a word that can be used to describe the 1981 budget.

A year ago, when President Carter presented his 1980 Budget, he could legitimately claim to be a fiscal conservative. With recommended outlays at $531.6 billion, the original 1980 Budget was $12.5 billion below the level necessary to keep all programs functioning at real levels prescribed by 1979 law. Essentially, all of this "cut" came out of non-defense programs. The estimate of 1980 outlays has now been raised to $563.6 billion, an increase of 6 percent over the original estimate as an unexpectedly high inflation rate and new program initiatives (some of which are related to the crisis in Iran and Afghanistan) destroyed the restraint inherent in the original budget.

Instead of cutting from "current policy" levels as did the original 1980 Budget, the new budget adds about $3 billion to the newly inflated current policy levels inherent in the new 1980 estimates. The increase all goes to defense with non-defense held at roughly "current policy" levels. The resulting outlay level of $615.8 is 9.3 percent above 1980 in nominal terms and 0.2 percent higher in real terms.

At first sight, this appears pretty stringent, but the aggregate figures hide a lot. First, there is some artificial shuffling of outlays from 1981 into 1980. On-budget net lending is shown at $5.5 billion in 1980 and $-0.6 billion in 1981. Simply smoothing out this net lending would raise the rate of growth of outlays from 9.3 to 10.4 percent. I do not wish to predict that this will necessarily happen, but only wish to illustrate how sensitive the appearance of restraint is to small timing

differences. Second, there are numerous proposals for cuts that have been rejected often by the Congress in the past. Among them are cuts involving hospital cost containment, impact aid, school lunches, and veteran's educational benefits. I do not criticize the President for making these recommendations, because there is always a small chance that some sacred cows will be slaughtered. But the fact that the budget rises significantly even with such unlikely cuts provides an indication of the President's generosity toward other programs. In fact, there is sufficient generosity that I would not rule out Congressional cuts in a number of Presidential recommendations, even though it is an election year. Revenue sharing for states and targeted fiscal assistance are likely candidates for the ax.

Receipts and Macro Considerations - Though relatively generous on the spending side, the budget contains such massive tax increases that the budget is highly restrictive from either a Keynesian or fiscal supply sider point of view. The actual deficit falls even though forecast unemployment rises as a result of a forecast recession in 1980. On a unified budget basis the high employment surplus swings from $-12 billion in 1979 to $+57 billion in 1981.

The ratio of total receipts to GNP reaches 21.7 percent in 1981 — a level that has been exceeded only once before in our history and that was in fiscal 1944 when the ratio attained 21.9 percent. For most of World War II the overall tax burden was actually lower than the budget recommends for 1981! Putting the matter another way, it would take a tax cut of $88 billion to return the ratio to the 18.5 percent prevailing in 1976 and a $44 billion cut to return it to the 1979 level.

Among the 1981 tax increases are:

1. Social security tax increases - The 1980 increase adds $4.3 billion to 1981 receipts while the 1981 increase adds $10.7 billion;

2. The windfall tax adds $6.2 billion in fiscal 1980 and $14.4 billion in 1981;

3. Growing money incomes will add roughly $11 to $13 billion to the personal tax burden between fiscal 1980 and 1981 because of people being pushed into higher brackets;

4. The interaction between inflation and the taxation of capital income will add an additional significant amount though this is difficult to compute;

5. There are numerous other subtle small tax increases resulting from proposed changes in the timing of payments.

Summary of budget totals

	Fiscal years		
	Actual 1979	Proposed 1980	Proposed 1981
Outlays	493.7	563.6	615.8
Receipts	465.9	523.8	600.0
Unified deficit	27.7	39.8	15.8
Off-budget deficit	12.4	16.8	18.1
Total deficit	40.1	56.6	33.9

Economic assumptions - The actual outcomes for fiscal 1980 and fiscal 1981 will be significantly affected by paths of inflation, unemployment, and interest rates over the next 18 months. The Administration has been quite candid about the dismal outlook and while it is possible to find more pessimistic forecasts, it is quite remarkable to see an Administration forecasting a rise in the unemployment rate to 7.5 percent for the fourth quarter of an election year.

For the relevant calendar years, the Administration's economic assumptions are as follows:

	1979	1980	1981
Real GNP (% change)	2.3	-0.6	1.7
GNP deflator (% change)	8.9	8.9	8.8
Unemployment (average rate)	5.8	7.0	7.4
Interest rate (91 day bills)	10.0	10.5	9.0

Possible changes in the budget totals

I shall accept the Administration's economic assumptions for the purposes of the discussion which follows.

The most likely changes in the President's budget will come on the tax side. It is hard to believe that the 1981 social security tax increase will be allowed to stand. If it does go into effect is is likely to be offset by personal tax reductions or some sort of a tax credit. As already noted that is worth almost $11 billion in fiscal 1981.

There will be strong demands for tax changes providing investment incentives and some less strong demands for general income tax reductions. At the time of

the last SOMC meeting I was virtually certain that such cuts would occur and that they would retroactively affect 1980 liabilities. This seems less likely now though it is still possible. The failure of the recession to arrive on time and heightened concern over the deficit because of inflation has dampened enthusiasm for tax cuts and much will depend on the course of the economy over the next few months. However, any cut will certainly come too late to have much impact on the fiscal 1980 deficit unless we are foolish enough to enact a temporary rebate.

Some action on 1981 liabilities seems virtually inevitable, but that is what I said last time about 1980 liabilities. Nevertheless, it would be foolish to rule out the possibility that the fiscal 1981 deficit could be $20 billion or so larger because of a tax cut enacted for calendar 1981.

Still accepting the Administration's economic assumptions, I find it hard to identify any major changes in the Administration's outlay figures. Many of the President's proposed cuts will be rejected as will some of his increases. Generally, I think it fair to say that the budget is aimed at the middle of the Democratic party because of the nomination battle and is somewhat more liberal than the Congress or the general populace. The Congress may allow many "controllable" programs to erode more with inflation than the President desires and may cut some of the grant programs now designed to get the President the organizational support of governors and mayors in the nomination battle. In addition, the rapid changes in defense policies are conducive to conditions that tend to create a shortfall. On the other side, many of the sacred cows attacked by the President will remain alive and well, and some of his estimates for things like disaster aid and agriculture could turn out to be low. It is not unreasonable to assume that all of these things will largely cancel out. A recession that is more serious than that forecast could, of course, result in significant discretionary and endogenous spending. Some say that defense is likely to be increased significantly, but it must be noted that only hawks are speaking out now and the doves have hunkered down. They may reapper before defense appropriations are passed.

The Long-Run Budget Outlook

We face many severe budget pressures over the 1980s. Over one-half of Federal payments for individuals go to the elderly and that population will grow more than twice as fast as the working population over the next decade. Moreover, current programs promise that rapidly growing population a growing real standard of living. Earlier growth in such programs was largely financed by reducing defense

relative to the GNP and by an upward trend in the deficit. Until recently, increased taxes have played a very minor role. Now it seems quite clear that defense will command a growing share of GNP over the next five years. The significance of this shift for future budget pressures is hard to overemphasize.

These pressures are obscured by the Administration's long-run budget projections which are based on the unrealistic economic assumption that the Humphrey-Hawkins goal of 4 percent unemployment is achieved in 1985. The achievement of the Act's 3 percent inflation goal is postponed to 1988. As a result, the assumed rate of inflation over the 1979-85 period is 7.7 percent, as measured by the GNP deflator, and 8.2 percent, as measured by the CPI. The average assumed rate of real growth is an implausible 3.3 percent.

The combination of high inflation and high real growth results in a strong downward bias in the projection of the outlay-GNP ratio, because there is obvious understatement of spending on programs affected by unemployment while the high inflation erodes the real value of those programs affected by an explicit policy decision to keep them constant in money terms for the 1980-83 period, e.g., general revenue sharing. It should also be emphasized that the projections allow for no new spending initiatives other than those already announced by the Administration, e.g., national health insurance.

Despite all of this, the budget projections do not show a rapid decline of spending relative to GNP.

Before discussing these official projections, it is useful to emphasize the ephemeral nature of budget projections. One year ago, the Administration projected 1984 outlays at $673.7 billion. Changes in the economic assumptions (still unrealistically optimistic) and defense, energy and health initiatives have now raised the 1984 projection to $838.9 billion — a rise of $165.2 billion or almost 25 percent in 12 short months!.

Neither time nor space allow a detailed program-by-program discussion of these projections, but a few simple calculations reveal the nature of the budget pressures likely to be faced in the early 1980s. If we do nothing more than replace the official 3.3 percent annual real GNP growth assumption with a more realistic 2.5 percent growth rate, the projected outlay-GNP ratio rises to 21.6 percent before making any adjustment for higher expenditures on programs affected by employment.

Official Budget Projections
(Dollar amounts in billions)

Function	Actual 1979		Projected 1985	
	Amount	% of GNP	Amount	% of GNP
National defense	117.7	5.1	229.7	5.2
International affairs	6.1	0.3	13.0	0.3
Gen. science, space & technology	5.0	0.2	6.6	0.2
Energy	6.9	0.3	11.8	0.3
Natural resources & environment	12.1	0.5	14.7	0.3
Agriculture	6.2	0.3	5.2	0.1
Commerce & housing credit	2.6	0.1	2.7	0.1
Transportation	17.5	0.8	24.9	0.6
Community and regional development	9.5	0.4	10.3	0.2
Education, training, employment & social services	29.7	1.3	40.6	0.9
Health	49.6	2.1	100.3	2.3
Income security	160.2	6.9	307.9	7.0
(Social security)	(102.6)	(4.4)	(208.3)	(4.7)
Veterans benefits & services	19.9	0.9	26.9	0.6
Administration of justice	4.2	0.2	5.3	0.1
General government	4.2	0.2	5.3	0.1
General purpose fiscal assistance	8.4	0.4	8.9	0.2
Interest	52.6	2.3	70.0	1.6
Allowances	--	--	49.6	1.1
Undistributed offsetting receipts	-18.5	-0.8	-31.1	-0.7
Total	493.7	21.3	902.6	20.6

A highly tentative, but conservative list of adjustments to the outlay estimate follows:

1. Add $12 billion as a modest estimate of the cost of higher unemployment;

2. The projections assume rapid real cuts of 3.5 percent per year on a long list of functions shown in the appendix. Holding the real decline to one percent per year adds $24 billion;

3. Add $3 billion to reflect the failure of the hospital cost containment program. Other Presidential cuts are almost certain to fail, but no adjustment will be made;

4. The Administration assumes that its national health insurance proposal will cost $30 billion in 1985. Assume that it is rejected, but replaced with other health initiatives costing $15 billion. Thus $15 billion is deducted from the total.

The net add-on from this list totals $24 billion and brings total outlays to 22.1 percent of the GNP. The modest nature of this adjustment must be reemphasized. Some would also question the defense projection which assumes real growth of about 3.7 percent per year. I do not, because I would suggest that the Pentagon will be subject to intense scrutiny once the present enthusiasm for defense cools down. This, of course, assumes that the Soviets will not continue to misbehave — perhaps a foolish assumption. The interest projection is perhaps more suspect since it assumes a balanced budget from 1982 onwards.

Even with the modest adjustments made above, a tax increase of about 10 percent above 1979 levels would be required for a balanced budget in 1985. (Of course, present law plus the windfall tax imply much greater increases.)

Whatever the budget pressures of the 1980s, they pale beside the problem to be faced at the beginning of the 21st century when members of the baby boom of the 1940s and 1950s begins to retire. The problem must be confronted very soon to allow ample time for private adjustments to any change in promised public benefits. Adjustments in the retirement age and in the indexing formulae which now promise rapidly growing real benefits should be contemplated. If we do not adjust, the future is bleak. The real danger may not be higher tax burdens or deficits, but an intense budget squeeze which reduces vital spending on defense and other budget functions.

Appendix

The official budget projections assume that total real spending on the following functions declines at about 3 1/2 percent per year between 1979 and 1985:

General science, space and technology (-2.9 percent per year);

Natural resources and environment (-4.2 percent);

Agriculture (-10.0 percent);

Commerce and housing credit (-6.7 percent);

Transportation (-1.7 percent);

Community and regional development (-6.0 percent);

Education, training, employment and social services (-2.3 percent);

Veterans benefits and services (-2.5 percent);

Administration of justice (-3.6 percent);

General government (-3.6 percent);

General purpose fiscal assistance (-6.4 percent).

Items were deflated by the GNP deflator. The decline is somewhat exaggerated since future pay increases are not included in these functions, but are instead put into the "allowances" category.

SHADOW OPEN MARKET COMMITTEE
POSITION PAPER

Karl Brunner

University of Rochester

February 3, 1980

PPS-80-1

Position Paper prepared for the 14th Session of the Shadow Open Market Committee, February 3, 1980.

Shadow Open Market Committee Position Paper

Karl Brunner
University of Rochester

"Our policy, taken in a long perspective, rests on a simple premise - one documented by centuries of experience - that the inflationary process is ultimately related to excessive growth in money and credit."

Paul A. Volcker, January 2, 1980

I. The Political Cycle of Anti-Inflationary Policies

On October 24 and November 1, 1978, President Carter announced a program allegedly designed to protect the domestic and international value of the dollar. My position paper prepared for the meeting of the Shadow Open Market Committee in March 1979 examined the proposals advanced. It was noted at the time that they contained some useful but vague suggestions bearing on our future welfare (real income per capita) but offered otherwise no relevant specific action designed to lower inflation or to provide for a sustained improvement of the dollar's international position. The President revealed no comprehension concerning the nature of the inflation problem. The program submitted to the public's attention offered in particular no useful instructions for the Federal Reserve Authorities. President Carter's view of the world assigns no role to monetary policy as a major component in a program addressed to lower the rate of inflation.

As it happened, the Federal Reserve Authorities lowered over six months (October 1978-April 1979) the growth rate of the monetary base. We observed at the time, so it appeared, another move to control monetary growth. But our monetary authorities failed once more. They reversed the course in April, as so often before, after a short devotion to anti-inflationary exercises. The return to an inflationary policy, expressed by a growth rate of almost 11% p.a. in the monetary base from the middle of April to the middle of October, induced new doubts and uncertainties. The dollar declined again in terms of major currencies.

The international repercussions of the falling dollar alerted the Federal Reserve Authorities, operating with a new chairman, to the failure of the inherited course. Almost one year after President Carter's useless exercise at "leadership' in the fight against inflation Chairman Volcker announced on October 6, 1979, a new policy promising a determined effort to cope with inflation. Chairman Volcker presented a package with three measures: (a) the discount rate confronting member banks was raised by one percentage point; (b) reserve requirements on major categories of bank liabilities were raised and the cost of their supply correspondingly increased; and lastly (c) we were informed that the Fed would proceed with the formulation and execution of monetary policy more directly addressing the control over monetary growth with less concern and attention to short-term interest rates.

The Chairman's general intentions were quite clear. His announcement prepared the public for the sixth attempt in 15 years to hold monetary policy to an anti-inflationary course. The recent intentions were articulated with remarkable forthrightness in numerous interviews or press statements with admirably sensible economic interpretations supplied by the Chairman. No Chairman of the Board of Governors ever elaborated so explicitly and without obfuscation the crucial role of monetary expansion with respect to our experience of inflation and high interest rates.

The sense of the Chairman's general thrust was however blurred by the nature of the announcement and the confusing elaborations added by several Federal Reserve officials. The first two items of the agenda presented by Chairman Volcker can hardly be justified as relevant and separate measures of an anti-inflation program. The increase in reserve requirements lowers both the monetary and the asset multiplier of the banking system. They involve thus a once and for all reduction in the stock of money and the volume of bank credit (banks' total earning assets) relative to the monetary base. Such once and for all reductions in the two aggregate measures, apart from their small magnitude, induce no relevant effects on the ongoing rate of inflation. The latter is dominated over time by the excess of persistent monetary expansion over the non-inflationary benchmark level. And the persistent monetary expansion is not affected by the change in reserve requirements applied in October. This action, however irrelevant in terms of inflation, raised the banks' costs of supplying selected liability categories. This rise in costs expresses the relative decline in bank credit and produces consequently

some minor increase in the real rate on bank loans combined with a minor decline in the real rate offered on the bank liabilities affected. But these shifts in relative interest rates may induce some allocative changes on the credit markets but exert no significant effect on aggregate demand and the rate of inflation. The raise in reserve requirements imposed essentially a new tax on the banks with the revenues acquired by the U.S. Treasury with the Federal Reserve Authorities acting as a collecting agency.

The first item is by itself similarly irrelevant with respect to the ongoing inflation. A negligible fraction of the outstanding base money has been issued via the discount window. A change in the discount rate relative to prevailing market rates contributes by itself alone at most to determine the relative magnitude of base money supplied via the discount window without much effect on the total monetary base driving the monetary aggregates. An increase in the discount rate may have a useful function however in the context of a completely specified and properly executed anti-inflation program. A monetary retardation induces initially a substantial increase of bank borrowing at the Fed. In contrast to some ancient folklore around the Fed and Wall Street this fact does not induce a reduction in bank credit due to some "inherent reluctance of banks to borrow". Extensive bank borrowing actually attenuates somewhat the impact of tightened open market operations. An increase in the discount rate raises under the circumstances the short-run impact of a retardation in open market operations and conveys the full effect more rapidly to the monetary aggregates. But I repeat that raising the discount rate without attention to the crucial aspects of the context is a pointless and futile gesture in terms of our real problem.

So the issue centers on the third strand presented in the agenda. The Chairman committed the Federal Reserve Authorities at this point to a policy more explicitly geared to monetary control. This monetary control should moreover be deliberately adjusted to lower, over time, the rate of inflation. The statement remained however silent with respect to the nature of the implementation. The statements made subsequently by other Federal Reserve officials increased the uncertainty about the meaning of the promised change in policy. Still, we should acknowledge that Chairman Volcker offered the most explicit and clearest recognition ever presented by a high official of the Federal Reserve Board that monetary control is a necessary instrument of an anti-inflationary policy. The program of October 6 thus addresses directly the controllability of monetary growth and the selection of appropriate control techniques.

II. Controllability and the Choice of Control Procedures

1. Controllability of Monetary Growth

Controllability of the money stock or monetary growth has often been denied. Professor Lawrence Klein (University of Pennsylvania) recently argued that the "money supply is hard to control". He notes first that the data contain measurement errors and approximations. The data are moreover subject to regular revisions. This is indeed true and applies of course to all the data used for any rational evaluation of economic policies. But Professor Klein does not evaluate the order of significance of the "noise" built into the measurement of the monetary aggregates. The corrections noted by Klein modified the growth rate of the money stock in general by comparatively small amounts. In particular, these corrections exerted no relevant influence on the rational evaluation of the prevailing state. An error of 1% p.a. at a time of a measured growth rate of 8% p.a. with an accelerating inflation hardly changes the nature of the problem. We know, independently of the measurement error, that monetary policy should lower monetary growth by at least five percentage points (in case of M_1). The discussion of measurement errors presented by Professor Klein neglects the context of the errors and overstates suggestively the practical importances, at this state, of their occurrence and relative magnitude. There is also no recognition that the frequency and magnitude of measurement errors is not pre-ordained nor is it just the result of a process beyond rational attention. The measurement procedures are improvable and useful suggestions have been submitted in the past years to the Federal Reserve Authorities.

Professor Klein challenges moreover the significance of the data and the controllability of the "more significant broader measures". He emphasizes the range of measures reaching from M_1 to M_7. This is of course a favorite game of all those opposed to monetary control. This game motivated most likely the development of this array under Chairman Burns. The fact is that there is hardly any evidence supporting Klein's contention that the "economic significance" of the measures increases with their inclusiveness. The relevant measures are still confined at this stage to M_1 and M_2 and the crucial issue is the Fed's obligation to develop useful measurement procedures designed to encompass all assets held by the domestic public and regularly used for transaction purposes.

The variability of monetary velocity is also introduced in Klein's argument in order to suggest that monetary targets cannot be translated into spending targets.

But variability of a variable is not the relevant aspect for our purposes. Even a highly variable magnitude may be reliably predictable. In particular, velocity exhibits patterns of systematic behavior exploitable by monetary control for purposes of an anti-inflationary policy. The predictability of velocity has been explored by Brunner-Meltzer more than ten years ago. The Shadow Open Market Committee's assessments of expected developments based on Jordan's work and presented in recent years supplies additional evidence in support of the predictability of a variable velocity.

All the objections advanced by Klein centered on measurement errors, shifting significance, poor controllability of monetary aggregates or spending can be safely rejected with the aid of an examination of the monetary base. It may be useful to repeat that this magnitude expresses the total amount of money directly issued by the monetary authorities. It occurs on the liability side of a consolidated balance sheet covering all Federal Reserve Banks and the Treasury's monetary account. Variations in the base thus reflect actions of the authorities concerning the volume of assets or non-money liabilities on this consolidated account. Any action of the authorities affecting assets or non-money liabilities modifies the monetary base by a corresponding amount. The Federal Reserve Authorities control thus via their actions and arrangements completely the behavior of the monetary base. The monetary base is not determined, as Governor Wallich suggests, by the public's demand for currency. Whatever the proportion of currency may be, base money is issued and withdrawn by actions of the Fed changing assets and non-money liabilities of the consolidated balance sheet. Whenever asset purchases are accelerated the monetary base accelerates, and whenever asset purchases are retarded, the monetary base decelerates. The public's behavior does not determine the magnitude of the base; it determines the distribution of the total between currency holdings and bank reserves.

The complete dependence of the monetary base on the Fed's actions should not be so difficult to understand. The second point follows closely. The monetary base can be accurately measured with little delay. It requires only knowledge of the balance sheet, and this knowledge is available with substantial precision. Consider now the relation between the monetary base and total spending expressed by nominal Gross National Product. This relation is formulated in terms of a base-velocity V_o (V_1 indicates the velocity of M_1 and V_2 of M_2). The velocity V_o is of course the product of the monetary multiplier m_1 linking the base with M_1 with the

velocity V_1 (also $V_o = m_2.V_2$). Two important implications follow: first, the measurement problems resulting from financial innovations concerning transaction accounts and time deposit accounts hardly affect the behavior of base velocity V_o. The errors associated with traditional measures of M_1 and M_2 produced by such innovations affect V_1 and m_1 (or V_2 and m_2) in opposite directions. These changes essentially offset each other. This is revealed by the fact that the base velocity V_o neither exhibited any particular acceleration over the period dominated by innovations in transaction accounts nor any noteworthy volatility.

The persistence of behavior patterns exhibited by V_o also concerns the second point to be considered. Trend and cyclic movement of V_o hardly changed during the 1970's when compared to the 1950's. Financial innovations beyond components properly included in M_2 modify the substitution relations of M_1 and M_2 over a widening range of assets. This process operates gradually over time and contributes to the trend rate of growth (2.5% p.a.) observed for V_o. We find moreover that in the absence of any run on the banks raising the currency ratio in the public's money holding, accelerations or decelerations of the base are not offset beyond one or two quarters by movements of V_o in the opposite direction. Beyond two quarters persistent and major changes in the growth rate of the monetary base are transmitted via velocity to the level of total spending. Professor Klein's objection thus fails to conform with relevant observations produced by the world we actually live in.

2. Implementation of Monetary Control and Control Techniques

We still need to consider however the control procedures applicable to the control of monetary growth. This issue has been repeatedly discussed in some detail in previous position papers. The Fed's prevailing method centered on targeting a Federal funds rate on the assumption of a stable relation linking the targeted interest rate with a targeted monetary growth has been examined and criticized on various occasions. The procedure essentially failed to produce an adequate control over monetary growth. This failure resulted from the instability and unreliability of the central relation anchoring the Fed's conception. The announcement of October 6, 1979 suggested that the traditional implementation of monetary policy would be suspended but no information was supplied allowing any useful inferences concerning the nature of the new control procedures. It emerged subsequently that the staff of the Board of Governors appeared to develop a

procedure centered on a targeting of bank reserves. A desired target path of monetary growth is translated into a corresponding path for bank reserves. The account manager would then be instructed to adjust the volume of net open market operations in order to produce the targeted level of bank reserves.

The Shadow Open Market Committee proposed since its beginnings in 1973 that the Fed proceed according to the following program: (a) determine the target rate of monetary growth for one year ahead in accordance with an anti-inflationary policy, (b) use an expected profile of the monetary multiplier in order to translate the targeted monetary growth into a target for the monetary base applicable for the next one or two months; (c) assess the movements in the various source components of the base in order to determine the net volume of open market operations to be executed over the next month by the account manager; (d) with new information accruing every month the FOMC should reexamine steps (b) and (c), with new instructions about net operations to the account manager covering the subsequent month. We may note that the control procedure developed quite independently by the Swiss National Bank coincides with this proposal. Its suspension in the fall of 1978 was not due to any serious technical problems with the procedure or its failure to control monetary growth. It resulted from a political decision influenced by rising pressures to link the Swiss franc with the D-mark. This linking required that open market operations, concentrated in the Swiss case on the exchange market, be governed by the movement of the D-mark rate and not by the goal of a non-inflationary monetary growth.

The change in implementation to a reserve targeting procedure should be welcomed by the Shadow Open Market Committee. but we should express our hope that the staff may not lock itself into a new procedure without systematic exploration of alternative modes of implementing the goal of monetary control. We invite the Board of Governors to instruct the staff to compare their reserve targeting with the control procedure proposed by the Shadow Open Market Committee. The general nature of the examination required for the purpose of assessing alternative procedures has been tentatively explored by Robert Rasche, a member of the Shadow Open Market Committee. His basic statistical work co-authored with James Johannes was published in the July 1979 issue of the Journal of Monetary Economics. The two authors applied their statistical study bearing on the behavior of the monetary multiplier to an investigation of the comparative performance of a reserve targeting and a base targeting procedure. The relative performance of the two procedures depends crucially on the quality of the

respective links with monetary growth expressed by the monetary or base multipliers (linking base with money stock) and a reserve multiplier (linking bank reserves with the money stock). The relative predictability of the course of the two multipliers determines the comparative performance of the alternative procedure. Rasche and Johannes estimated thus the predictive errors of the two multipliers over selected recent periods. The detailed discussion of procedure and results can be found in the authors' contribution to a symposium on Monetary Policy to be published by the Center for Research in Government Policy and Business (University of Rochester).

The most important aspects are summarized for our purpose in the following table. We note quite immediately that the average forecast error measured as a mean or a root mean square is substantially smaller for the multiplier associated with the monetary base. This pattern holds for both multipliers associated with the exclusive and the inclusive measure of the money stock. The results obtained provisionally suggest that a more reliable targeting of monetary growth is achieved by manipulating the monetary base than by controlling a new reserve measure. This issue of adequate control procedures appears to us sufficiently important for the Fed to invest some attention and resources in order to improve its implementation of monetary policy.

One last point need be covered in this context. An inspection of the data emerging since October 6 may suggest that the Fed already abandoned the anti-inflationary policy announced on October 6. The monetary base substantially accelerated again since early December. The reader should be cautioned however not to read too much into the data at this stage. We need to remember that the data published were "corrected" with a seasonal factor looming quite large over this time of the year. But the seasonals in the movement of the money stock, monetary base and bank credit are not the product of nature. They are produced by the prevailing policy regime. The current seasonal factors used to adjust data express a seasonal pattern resulting from a policy designed to smooth out the seasonal movement of interest rates. The underlying seasonal was thus transmitted into a seasonal pattern exhibited by monetary aggregates. It follows therefore that a change in policy regime from Federal funds targeting to a targeting of net reserves radically modifies the seasonal patterns. The inherited seasonal correction factors based on past seasonal movements of monetary aggregates associated with the previous policy regime are inappropriate under the new policy

Forecast Errors of Base and Net Reserve Multiplier
Covering the Period 1/1978-10/1979

A. The base multiplier

	m_1		m_2	
	1	2	1	2
mean error	-.0012	-.0004	-.0026	.0009
root mean square error	.0131	.0168	.0229	.0342

B. The reserve multiplier

	r_1		r_2	
	1	2	1	2
mean error	-.0059	-.0116	-.0101	-.0134
root mean square error	.0877	.1097	.01853	.2262

Note: m_1: base multiplier for M_1; m_2 for M_2

r_1: reserve multiplier for M_1; r_2 for M_2

Column 1 describes one month ahead forecast error and Column 2 a two month ahead forecast error.

regime. In particular they would produce an overestimate of the actual growth rate of monetary base or money stock during January and February under the prevailing circumstances. We suffer at the moment a substantial uncertainty in evaluating the course of the Federal Reserve Authorities. We will need a period sufficiently long to include substantial variations of the inherited seasonal correction factors (probably the first six months of this year) before a reliable judgment about the Federal Reserve Authorities' anti-inflationary policy can be advanced. This problem reveals that a change in policy regime should really be accompanied by a deliberate choice and public announcement of seasonal factors expressing the design of the new regime.

III. Another View at Fashionable Fallacies

The need for control over monetary growth is of course predicated on the assumption that inflation is essentially a "monetary phenomenon". This does not mean that every short-run movement in the price level is systematically caused by corresponding short-run movements in monetary growth. Short-run price movements contain substantial noise and reflect many unsystematic forces unrelated to monetary growth. Persistent increases of the price-level are hardly likely to occur however without a similarly persistent monetary growth. Alternatively, in the absence of persistent and excessive monetary growth we will not experience any persistent inflation. Moreover, any persistent acceleration of the money stock unleashes eventually a rising inflation. On the other side no inflation was ever terminated without lowering monetary growth to the relevant benchmark level. The evidence bearing on these matters is remarkably uniform and strong and covers many different countries and historical episodes.

These patterns are however disregarded and denied by President Carter and Professor Klein. Both maintain that our inflation is at least partly, if not mostly, the result of our energy problem. But this assertion violates the best established part of economic analysis and is also contradicted by a host of crucial observations mentioned in the previous paragraph. Other observations may be adduced which cannot be reconciled with an explantion of inflation in terms of OPEC pricing policies and an energy crisis. Inflation accelerated in this country since 1965 in the context of a cheap and massive supply of energy. Inflation accelerated during 1973 in the U.S.A. many months before the first OPEC shock admitted to the world economy in the fall of 1973. Most revealing however is a comparison of price

movements observed in various countries beyond 1972. Inspite of a total dependence on imported oil West Germany and Switzerland experienced in contrast to the U.S.A. throughout 1973-1975 a decline in the rate of inflation. According to the Carter-Klein hypothesis they should have experienced substantially more inflation than the U.S.A. But this implication of the Carter-Klein hypothesis was thoroughly falsified by events. The crucial difference must be recognized in different monetary policies pursued in the various countries. Switzerland moved in February 1973 to a hard control over monetary growth at a low level and West Germany held to a comparatively modest course of monetary growth (relative to the relevant benchmark level). It is occasionally contended that special factors prevented the inflationary impact of the energy problem in the two countries mentioned. The "virtuous cycle" affecting the international position of the Swiss franc and D-mark is occasionally emphasized in this context. But "virtuous" and "vicious" cycles are neither blessings of heaven nor gifts of hell. They are consequences of the monetary policies pursued in different countries. Most attempts to invoke "special factors" reveal however the classic gesture of protecting a falsified hypothesis and to immunize it against critical observations. But such attitudes and evasive exercises essentially abandoned science and forfeit the claim to relevant analysis.

One more aspect need be considered in this context. Much of the public appeal of an explanation of inflation in terms of the energy problem follows from the widespread confusion between <u>once and for all price level effects</u> and <u>persistent inflation effects</u>. Large increases in the oil price lowered normal output of all countries outside OPEC. Associated with this reduction in normal output, measuring probably 5%-7% in the U.S.A. is a corresponding increase in the price level as of any prevailing money stock. This once and for all increase appears of course as a <u>temporary</u> bulge in the rate of price movements. Inflation on the other hand operates as a <u>persistent</u> increase in the price-level expressing continuous adjustments in the price-level imposed by a persistent rate of excessive monetary growth. Suppose that OPEC miraculously decides to lower the price of oil to the marginal cost of producing oil. Normal output would increase in the U.S.A. and the price-level fall by a corresponding amount with a given money stock. Whatever the ongoing rate of inflation produced by a persistent rate of excessive monetary growth may be, the reduction in the price-level would appear as a <u>temporary</u> decline in the rate of price change below the maintained underlying rate of inflation.

We may usefully explore another example of pervasive misconceptions. On January 19, 1979 Walter W. Heller presented an explanation of inflation in essentially sociological terms unrelated to persistent patterns of monetary evolutions. He accuses the monetarists that "they fail to explain... (a) how it can be that three years of slack in the economy from early 1975 to early 1978...failed to dent the underlying rate of inflation; (b) how it is in the face of careful studies that it takes a $200 billion loss of GNP to knock one percentage point off the inflation rate, that Spartan policies of tight money that they advocate could subdue inflation without a deep, deep recession or years of economic slack; and (c) how it is that Germany...could achieve much lower inflation rates than the United States with both a faster growth in its money supply in the past four years and bigger deficits...".

It is indeed remarkable to note that these issues have been dealt with in recent monetary analysis on a variety of occasions by diverse groups of researchers. They were also dealt with in recent years by the Shadow Open Market Committee and the Shadow European Economic Policy Committee. Walter Heller reveals on this occasion a noteworthy ignorance of the literature and the relevant discussions in the field of monetary analysis.

The first point covers a standard argument of explanations more or less implictly abandoning economic analysis. It expresses astonishment about the negligible impact of "gaps and slacks" on the rate of inflation. This observation offers a serious challenge to their understanding of economic processes which they promptly attribute to their intellectual adversaries. Heller argues as if the fall in actual output observed over the period 1973 to 1975 occurred relative to an unchanged normal output. We already noted however that the actual decline in output consisted of two components. One component measures the decline in normal output and the other, smaller component, measures the decline in actual output relative to normal output. The second component expresses the magnitude of the recession and the gap. Heller disregards the first component and systematically overestimates thus the magnitude of the "gap and slack".

This overestimate involves one aspect of the fallacy embedded in Heller's point (a). The other aspect bears on a faulty analysis of the significance of "gaps and slacks". We are told that properly functioning markets should convert a gap into falling prices or at least a falling rate of inflation. This view misses however crucial aspects of price-wage setting behavior in the context of market

mechanisms. Price-wage setting does not evolve in passive response to past evolutions. It responds to the best assessments on the basis of all available information bearing on the dominant policy regime to be expected over the future horizon. A monetary retardation generally deemed to be quite temporary hardly induces substantial revisions in prevailing price-wage setting patterns. A gap emerges under the circumstances with little consequence for price behavior. Price-wage setting remains geared to the more permanent patterns of monetary growth and disregards the transitory variations. A well established feedback which induces a monetary acceleration in response to any evolving slack actually encourages price-wage setters to disregard the current gap in view of accelerating demand in the near future. Neither gaps nor slacks operate per se with any particular force lowering the rate of inflation. Such lowering depends not on the gaps, it depends on prevalent beliefs that the monetary authorities are fully and unwaveringly determined to curb excessive monetary growth. This does not require any major or long lasting "gap and slack". A dominant conviction by market participants that the Federal Reserve Authorities truly, unwaveringly and persistently lower monetary growth produces a decline in the rate of inflation with comparatively small and rapidly eroding gap. Emergence and magnitude of a gap in the context of an anti-inflationary policy depends foremost on the credibility of the policy. A low level of credibility with a diffuse uncertainty produces a large gap with a lasting slack. But this circumstance is not the unavoidable consequence of anti-inflationary monetary policy. It is the result of the low credibility attached to an anti-inflationary policy after a long period of activist expansionism of the kind advocated by Walter Heller. This issue is closely connected with a prevalent faulty perception expressed by the assertion that in order to lower the rate of inflation we need (unavoidably to produce a recession. This characterization distorts the crucial issues. Lower inflation does not require a recession, it requires a lower rate of monetary growth. Whether or not a gap emerges is essentially determined under the circumstances by the agents' assessment of the permanent or transitory nature of the announced policy or of the observed movements.

This discusison already covered Heller's assertion in the second point about a "deep, deep recession" following from an anti-inflationary monetary policy. Some additional considerations need be added however. The credibility of an anti-inflationary policy determines to a large extent the speed at which monetary deceleration should proceed. A large deceleration against the background of a low

credibility on the basis of accumulated experience produces indeed a large and protracted gap. In order to minimize the social cost of transition to a stable price-level monetary growth should be lowered gradually over a number of years according to a pre-announced plan. A long inflationary experience creates in the economy a contractual structure which reflects to a major part the inflationary trend. This holds in particular for price-wage setting patterns. The inherited contractual structure will be modified in response to an anti-inflationary monetary policy provided economic agents become sufficiently convinced that the anti-inflationary stance involves a permanent shift and not just a transitory deviation from a long-run inflationary course. Such conviction is not easily created against the background of broken promises, empty rhetoric or demogagic distortions responsbile for the current low level of credibility. It will require substantial information beyond a few quarters that the Fed is really determined to hold on to its anti-inflationary course.

Heller also refers to "careful studies" showing the huge social cost associated with an anti-inflationary monetary policy. These studies, mostly executed around the Brookings Institution, may indeed be carefully done. The crucial issue is however what the studies were carefully done about. They inform us essentially about price-wage-price (or wage-price-wage) processes in the context of rising inflationary trends and increasing inflationary expectations. This important context affects the structure of these processes. An application of these estimated relations to evaluate the loss in output and employment associated with any given anti-inflationary regime yields indeed an answer, but it is an answer to an irrelevant question. The careful studies inform us about the social loss of an anti-inflationary policy in a world composed of agents unable to learn and unwilling to assess competitively new information. In other words agents proceed with the belief of total incredibility about the anti-inflationary regime even in the face of expanding information raising the rational level of credibility. The implicit description of man in these studies seems more nearly to fit biologically pre-programmed organisms than conscious and inherently problem solving agents.

Lastly, Heller finds the simultaneous occurrence in West Germany of a larger monetary growth, larger deficit and lower rate of inflation than in the U.S.A. an unsolvable puzzle for monetary analysis. The puzzle has been resolved a long time ago, one component even by Keynesian analysis. The latter implies quite clearly that the level of deficits, large and small, exert per se (i.e. irrespective from the

feedback via money creation) no effect on the rate of inflation. They affect the price-level. This is good Keynesian analysis confirmed by monetary analysis. There remains thus only to note that the non-inflationary benchmark level of monetary growth differs between countries. This benchmark level depends on the trend in velocity and the rate of growth of normal output. Countries with normal growth rate larger and velocity trends smaller than the U.S.A. exhibit a substantially higher benchmark level of monetary growth. Both conditions held for West Germany over many years. It is of course an interesting question to explore the underlying determinants of the differences. This task has not been neglected by economic analysis, but the answer leads us beyond a position paper for the Shadow.

Money Multiplier Forecasts

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For the third time, we are prepared to put our models of the multiplier components on record with forecasts of various multipliers. The models that we are using are the same as we have used during the past year; that is the sample period ends in March of 1978, and the only adjustment that has been performed in the post-sample period is a one time shift for the introduction of ATS accounts, imposed consistently across equations in January, 1979 and held constant ever since. The data base for these forecasts is the period through December, 1979, and includes the revisions to account for the call report benchmarks of December, 1978, and March, 1979, that were released by the Board of Governors within the past month.

Our extensive analysis of the forecasting performance of the models, (some of which is documented in the enclosed paper that we prepared for the AEA meetings in Atlanta), suggests that over the 78-79 period the forecasts from the models were unbiased over at least a six month horizon, and that the root-mean-squared forecast error cumulates very gradually as the forecasting horizon is lengthened. We still do not have enough experience to determine the maximum horizon over which the forecasts hold up reasonably well.

Forecasts of these multipliers at the present time may be something of an exercise in futility, since we are not sure exactly what measures of the money stock will be featured in policy discussions in the near future. It seems likely that whatever measures are introduced, the corresponding multipliers will contain components for which we do not presently have working models. Assuming that a reasonable history is made available for all the components of these new concepts, we foresee no difficulty in extending our modeling techniques to the components of the appropriately defined multipliers.

Table 1 contains forecasts over the next eight months for the M_1 through M_5 adjusted monetary base multipliers on a not seasonally adjusted basis. These are

the actual output of our component models. We have also tabulated forecasts of the seasonally adjusted multipliers using the non seasonally adjusted components and the seasonal factors for the money stock components published in the February, 1979 Federal Reserve Bulletin. These seasonals are subject to revision in the near future, so these latter forecasts could prove erroneous because of an inappropriate seasonal, even though the component models might prove accurate. It should be noted that the published seasonal factors are the product of X-11, and may not be consistent with the seasonals implicit in our time series estimates. We are presently investigating this issue. In Table 2, the forecasts of the adjusted net (of member bank borrowing) monetary base multipliers are presented for the same money stock measures.

We would interpret these forecasts as suggesting that there will be no distinct trend in the M_1 multiplier (seasonally adjusted) over the period until the next meeting of this committee. In contrast, the M_2 multiplier (seasonally adjusted) is forecast to drift upward by 1/3 to 1/2 percent over the eight month period. (1/2 - 3/4 percent at annual rates.) This contrasts with our previous forecasting experiments where the multipliers were correctly forecast to drift slowly downward.

Table 1

Money Multiplier Forecasts
Gross Monetary Base Basis

	Not Seasonally Adjusted					Seasonally Adjusted	
	M_1	M_2	M_3	M_4	M_5	M_1	M_2
Jan. 80	2.50450	6.15184	10.45170	6.77661	11.07647	2.49503	6.18984
Feb.	2.46150	6.21846	10.61435	6.82658	11.22247	2.47345	6.17042
Mar.	2.46939	6.24707	10.66206	6.84551	11.26050	2.47811	6.18826
Apr.	2.52297	6.27622	10.65777	6.87471	11.25627	2.48909	6.19393
May	2.45264	6.20677	10.55588	6.77763	11.12674	2.48174	6.19490
June	2.48355	6.22452	10.56163	6.78949	11.12659	2.48616	6.20480
July	2.48523	6.19478	10.49538	6.75654	11.05713	2.48742	6.20807
Aug.	2.46484	6.20535	10.50833	6.76633	11.06932	2.47993	6.22419

Table 2

Money Multiplier Forecasts
Net Monetary Base Basis

	Not Seasonally Adjusted					Seasonally Adjusted	
	M_1	M_2	M_3	M_4	M_5	M_1	M_2
Jan. 80	2.52823	6.21013	10.55072	6.84081	11.18141	2.51867	6.24848
Feb.	2.48490	6.27758	10.71526	6.89149	11.32916	2.49696	6.22909
Mar.	2.49290	6.30656	10.76359	6.91070	11.36773	2.50171	6.24719
Apr.	2.54710	6.33625	10.75971	6.94047	11.36393	2.51289	6.25317
May	2.47575	6.26524	10.65532	6.84148	11.23156	2.50512	6.25326
June	2.50706	6.28344	10.66159	6.85374	11.23190	2.50969	6.26352
July	2.50860	6.25304	10.59408	6.82008	11.16111	2.51081	6.26645
Aug.	2.48799	6.26364	10.60704	6.82989	11.17329	2.50322	6.28266

The Golden Option

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If American resources are strained in the near future by rising government expenditures, will foreigners add to our available real resources and in particular will they help finance a rising Federal budget deficit?

In the recent past, foreigners have been of considerable help. In 1977 and 1978, we ran annual current account deficits -- the balance on exports of goods and services less imports and grants -- of about $15 billion which added to the real resources available to us. These deficits were more than financed by foreign official purchases of U.S. Government securities. In fact, foreigners bought about three quarters of the increase in the publicly-held U.S. public debt.

It seems that this favorable experience is not likely to be repeated soon. We probably were in current account balance in 1979 and the most recent Treasury forecast for 1980 suggests little change from that outcome. The deterioration in our terms of trade, or the decline in the amount of U.S. imports that American exports will buy, knocked perhaps one percentage point off our real income in 1979. The partial suspension of grain exports suggests further deterioration in our terms of trade.

Foreigners sold off U.S. public debt in 1979. Definitive data through October show a decline in foreign holdings of $13 billion, and foreign official holdings through mid-January of both marketable and non-marketable government securities have been stable since then. If correct, this will be the first, year-long decline in foreign holdings of U.S. public debt in the 1970's. One might hope for substantial OPEC purchases of U.S. Government securities in 1980 because of the enormous surpluses they will enjoy, but, as these have not increased foreign official holdings of government securities since September, the situation is not reassuring. If foreign official institutions are reluctant to hold more dollars, an incipient worsening of our current account as a reuslt of pressures at home may not be financed; instead the dollar will depreciate, denying us the extra resources, as the current account balance is maintained.

The U.S. Treasury has an inventory of a potential export product of considerable value. As of the end of November, it held 263 million ounces of gold, and these are larger now because of the restitution of the International Monetary Fund's gold to its members in January. This hoard is worth, at the recent high of $850 per ounce, about $225 billion, roughly equal to a year's worth of U.S. exports of goods and services. (At the pre-hostage price, it is worth somewhat more than $100 billion.) If we sold that gold to foreigners, it would permit larger imports or reduced exports of other goods, raising the goods and services available at home. By raising Treasury cash balances, it would reduce the need for tax increases or government debt issues, increasing the resources available to the private sector.[1)]

In 1978, the Treasury auctioned about 4 million ounces of gold and another 12 million ounces in 1979. But in December of last year it quit, and recently the Secretary of the Treasury indicated uncertainty over the renewal of the sales. No explanation was offered except a vague reference to volatility of the market.

Public discussion has suggested that there is no need for such sales because the dollar has been stable. This is true, for the effective rate of the dollar has been barely changed since we last met in September. But this puts exchange rate stability before our resource requirements, which is an odd selection of priorities. Furthermore, the economics is fairly clear. We have a new comparative advantage: for the first half of 1977, the price of gold was relatively stable in terms of dollars and then, until the Fall of 1978, it rose with the dollar price of strong foreign currencies, changing little in their terms; thereafter it achieved a life of its own, rising in terms of both dollar and foreign currencies (except sterling). This new comparative advantage is an opportunity to raise our gains from trade. Furthermore, an appreciation of the dollar has been seen in Washington as a restraint on measured inflation.

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1) Curiously, Treasury sales are likely to worsen the measured U.S. trade balance. Gold exports are included in merchandise exports only if they are sales of non-monetary gold and the method of determining whether or not gold is non-monetary provides no assurance that such sales will be included. Despite this statistical fluke, gold sales improve the balance of payments and thus strengthen the dollar which in turn is likely to weaken the measured trade balance to the extent that it excludes the gold exports. Hence, the surprising statement at the outset. Should Treasury expand its sales, the proponents should not be necessarily upset if the trade balance does not improve. For the domestic monetary effects, see St. Louis Federal Reserve Review, January, 1975.

The economics of the international politics is also fairly clear (and should not be forgotten in these difficult times): a rising dollar adds respect to the United States Government abroad; it opens markets to foreigners who become more dependent upon us; it facilitates appropriations for foreign aid with which to persuade foreign governments. When the United States ruled the world after the Second World War, the dollar shortage was one of the reasons.

The obvious question is how much the Treasury should sell, and for this there is no neat answer. One public view is that central bank sales would raise the price by adding to speculative fever; if correct without limit, the Treasury should sell it all for the value of its assets and sales would rise until it ran out. Another view believes that the dollar price of gold might fall sharply. Obviously, a greater supply has this effect in principle. But experience suggests that in the face of a bull market this effect need not be great. For example, official sales from the gold pool in 1967-1968 did not restrain prices. In 1979, the total supply of gold was undoubtedly significantly larger than in the previous year, but the near tripling of Treasury sales did not prevent the price from rising.

It seems difficult to reconcile the Treasury's uncertainty over selling gold with its push for the creation of a substitution account which would permit foreign central banks to exchange dollars for SDRs in large amounts. Gold sales would also absorb dollars and need not wait on the outcome of extended negotiations. Seemingly, gold sales would not enhance the role of the SDR as a reserve settlement asset as the substitution account would. But gold sales reduce the role of the dollar relative to SDRs to the extent that they directly or indirectly take dollars out of the hands of central banks, and they reduce the role of gold relative to SDRs in the international financial system to the extent bought by the private sector. Thus, gold sales serve Treasury's larger purpose.

It is also difficult to reconcile the Treasury's apparent posture on gold sales with its sales of U.S. Government securities to private holders abroad denominated in foreign currencies, e.g., the two recent bond sales in the Federal Republic of Germany. Not only do we have to pay interest to foreigners, but we take the exchange rate risk as well. The sale of gold for Deutschemarks would avoid the interest charge and reverse the exchange rate risk we take.

Clearly, the Treasury has a major asset which it should exploit, unless, of course, it thinks the price of gold is going higher still.

Economic Projections

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Tables I and II show the projections for 1979 as of the September 1979 meeting and the actual resutls for 1979.

TABLE I
(percent change)

Projections for 1979 as of September 16, 1979 meeting

	GNP	Output	Deflator	M^1	V^1	M^2	V^2	MB	VB
Q4/78-Q4/79	9.1	-0.3	9.4	5.1	3.8	7.6	1.4	7.2	1.8
1978-1979	11.0	1.8	9.1	4.8	5.9	7.3	3.5	7.9	2.9

TABLE II
(percent change)

Actual 1979 Preliminary Results

	GNP	Output	Deflator	M^1	V^1	M^2	V^2	MB	VB
Q4/78-Q4/79	9.9	+0.8	9.0	5.5	4.2	8.3	1.4	8.2	1.6
1978-1979	11.3	2.3	8.9	5.5	5.9	7.9	3.2	8.2	2.9

On an annual average basis growth of nominal income and real output were slightly greater than expected at our last meeting while inflation was slightly less than projected. On a fourth quarter to fourth quarter basis the actual results for the growth of nominal income and output were even larger compared to projections

and the actual of the deflator was smaller than projected. This is primarily the result of a larger increase in spending and output in the fourth quarter of last year, as currently indicated by the preliminary data, and a smaller rise in the deflator than had been expected. The growth of M1, M2 and the Monetary Base were all greater last year than was projected at the September meeting, which is also a result of the failure of the aggregates to decelerate as much as has been expected during the fourth quarter of last year.

In reviewing the developments for 1979, it is important to emphasize the sharp acceleration of the growth of the monetary aggregates in the second and third quarters of 1979 as illustrated in the tables and charts at the end of this memo. The annual average and year-over-year growth rates shown in Tables I and II mask the roller coaster pattern of monetary growth that occurred during the last year. Yet these accelerations and decelerations of monetary growth do have some impact on economic activity. At the previous meeting it was generally agreed that the sharp acceleration of monetary growth that had occurred in the second and third quarters could not be expected to continue. The pressures on the U.S. dollar on foreign exchange markets and rising expectations about the trend rate of inflation would cause the Federal Reserve to tolerate sharp increases in short-term interest rates in order to slow the growth of bank reserves, monetary base, the money supply and bank credit. Shortly after the last meeting the Federal Reserve announced a program designed to strengthen the currencies on foreign markets while also sharply restricting the growth of the monetary aggregates. The key announcement in the Federal Reserve's new program was the deemphasis of the use of the Federal funds rate as an operating target and the increased emphasis on reserve aggregates, although the specific nature of the Federal Reserve policy change could not have been anticipated. Our assumption of a shift to a more restrictive stance by the Federal Reserve was validated shortly after our last meeting. It was expected that at the end of 1979 housing starts would be down about 25 percent from the end of 1979 and that new residential construction activity would contract further during the first half of 1980. Our assumptions about various industries and sectors such as automobiles, as well as housing and non-residential construction, have been reinforced by subsequent events.

Table III shows projections for 1980 as of the September meeting, and Table IV shows current projections for 1980.

TABLE III
(percent changes)

Projections for 1980 as of September 16, 1979 meeting

	GNP	Output	Deflator	M^1	V^1	M^2	V^2	MB	VB
Q4/79-Q4/80	8.0	-0.4	8.4	4.0	3.9	7.0	0.9	6.2	1.7
1979-1980	8.1	-0.8	8.9	4.9	3.1	7.6	0.4	6.5	1.5

TABLE IV
(percent changes)

Projections for 1980 as of February 3, 1980 meeting

	GNP	Output	Deflator	M^1	V^1	M^2	V^2	MB	VB
Q4/79-Q4/80	7.4	-1.1	8.6	4.4	2.9	7.2	0.1	6.0	1.3
1979-1980	7.9	-0.8	8.9	5.2	2.3	8.1	-0.2	7.3	0.6

On an annual average basis the decline of output and rise of prices is unchanged from the earlier projections while on a fourth quarter to fourth quarter basis a larger decline in output and a somewhat greater rise in prices is now projected. The primary reason for this difference is the higher level of output and somewhat lower level of the price indexes at the end of 1979 than had been projected at the meeting last September. On balance it is not expected that the level of economic activity nor the ongoing rate of inflation at the end of this year will be substantially different than what was projected at our last meeting. However, the current projections in Table IV show a somewhat greater procyclical decline of velocity growth than had previously been assumed, coupled with somewhat greater growth of M1 and M2 than have been projected earlier. The growth of the monetary base continued to be very high at a 9.8 percent annual rate in the fourth quarter of last year, while the growth rates of M1 and M2 decelerated sharply compared with the second and third quarters. The available data on the monetary base show a growth of only 6 percent annual rate for the first and second

quarters of 1979 followed by an average growth of over 10 percent in the third and fourth quarters. The difference in the growth patterns for M1 and M2, compared to the monetary base, may be nothing more than the reflection of differences in the seasonal adjustment procedures used for the money supply measures and the monetary base. The growth of the monetary base is projected to be 6 percent from the fourth quarter of 1979 to the fourth quarter of 1980, however the year over year percentage change will still be 7 percent in the third quarter of 1980 as a result of the sharp acceleration in base growth in the third and fourth quarters of 1979. On an annual average basis, the projections reflect a 1 percentage point decline in the growth of the monetary base, but very little decline in the growth rates of M1 and a slight increase in the growth rate of M2. On a fourth quarter to fourth quarter basis the growth rates of M1 and M2 decelerate by 1 percentage point, while the growth rate of the monetary base declines by 2 percentage points. Most of the decline of real output in the economy is expected to occur during the first half of 1980 and it is expected that the level of economic activity in the fourth quarter of this year will be below the level at the end of 1979, although it will be beginning to improve somewhat. The rate of inflation, as measured by the GNP price deflator, is expected to be somewhat higher in the first half of 1980 than in the second half of 1979, and then decelerate to about an 8 percent annual rate in the second half of this year. The unemployment rate is expected to rise about 2 full percentage points by year-end and would continue to rise somewhat further during the first half of 1981. It is expected that most regions and sectors of the economy will be effected by the decline of economic activity and no explicit assumptions have been made for 1980 as a result of the prospects for increased expenditures by the government for military purposes. It is assumed that other than increased outlays for research and development, and some shorting of delivery schedules of previously ordered defense goods, there will be little effect on aggregate economic activity during this calendar year.

Two-Quarter Compounded Annual Rates of Change

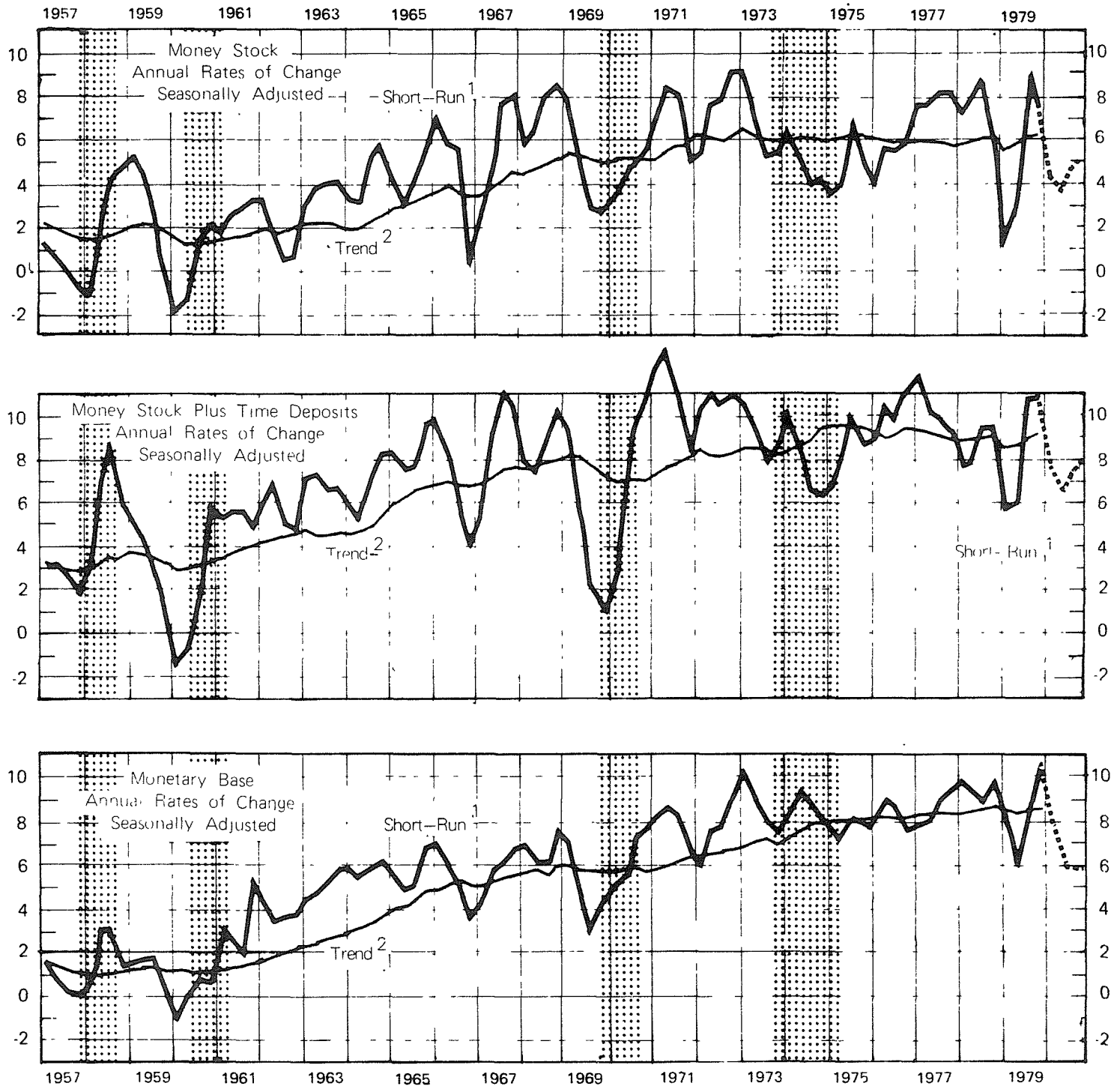
	M1	M2	Monetary Base
Q2/73-Q4/73	5.4	8.6	7.4
Q3/73-Q1/74	6.5	10.0	8.1
Q4/73-Q2/74	5.9	8.9	9.5
Q1/74-Q3/74	4.1	6.7	8.8
Q2/74-Q4/74	4.3	6.5	8.5
Q3/74-Q1/75	3.3	6.7	7.7
Q4/74-Q2/75	4.0	8.2	7.1
Q1/75-Q3/75	6.7	10.1	8.3
Q2/75-Q4/75	5.2	8.7	8.2
Q3/75-Q1/76	3.8	8.9	7.8
Q4/75-Q2/76	5.6	10.6	9.2
Q1/76-Q3/76	5.4	9.7	8.7
Q2/76-Q4/76	5.9	11.1	7.7
Q3/76-Q1/77	7.6	12.3	7.9
Q4/76-Q2/77	7.6	10.4	8.1
Q1/77-Q3/77	8.3	9.9	9.2
Q2/77-Q4/77	8.2	9.3	9.5
Q3/77-Q1/78	7.2	7.7	9.8
Q4/77-Q2/78	8.2	7.9	9.3
Q1/78-Q3/78	8.8	9.4	9.0
Q2/78-Q4/78	6.2	9.0	9.9
Q3/78-Q1/79	1.5	5.8	7.9
Q4/78-Q2/79	3.4	5.9	6.0
Q1/79-Q3/79	9.2	10.8	8.4
Q2/79-Q4/79	7.6	10.8	10.4
Q3/79-Q1/80	4.1*	7.6*	7.9*
Q4/79-Q2/80	3.7*	6.5*	6.0*

*Projected by Pittsburgh National Bank

Money Growth Rates
(% Change from Previous Year)

From:	To:	M1	M2	Monetary Base
1972/Q4	1973/Q4	6.2	8.8	8.1
1973/Q1	1974/Q1	5.9	9.0	8.1
Q2	Q2	5.6	8.8	8.4
Q3	Q3	5.3	8.3	8.4
Q4	Q4	5.1	7.7	9.0
1974/Q1	1975/Q1	3.7	6.7	8.2
Q2	Q2	4.2	7.3	7.8
Q3	Q3	5.0	8.4	8.0
Q4	Q4	4.6	8.4	7.6
1975/Q1	1976/Q1	5.3	9.5	8.0
Q2	Q2	5.4	9.6	8.7
Q3	Q3	4.6	9.3	8.3
Q4	Q4	5.8	10.9	8.4
1976/Q1	1977/Q1	6.5	11.0	8.3
Q2	Q2	6.8	10.8	7.9
Q3	Q3	8.0	11.1	8.5
Q4	Q4	7.9	9.8	8.8
1977/Q1	1978/Q1	7.7	8.8	9.5
Q2	Q2	8.2	8.6	9.4
Q3	Q3	8.0	8.5	9.4
Q4	Q4	7.2	8.7	9.6
1978/Q1	1979/Q1	5.1	7.6	8.4
Q2	Q2	4.8	7.7	7.9
Q3	Q3	5.3	8.2	8.2
1978/Q4	1979/Q4	5.5	8.3	8.2

TRENDS AND FLUCTUATIONS OF MONEY GROWTH



The shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research.

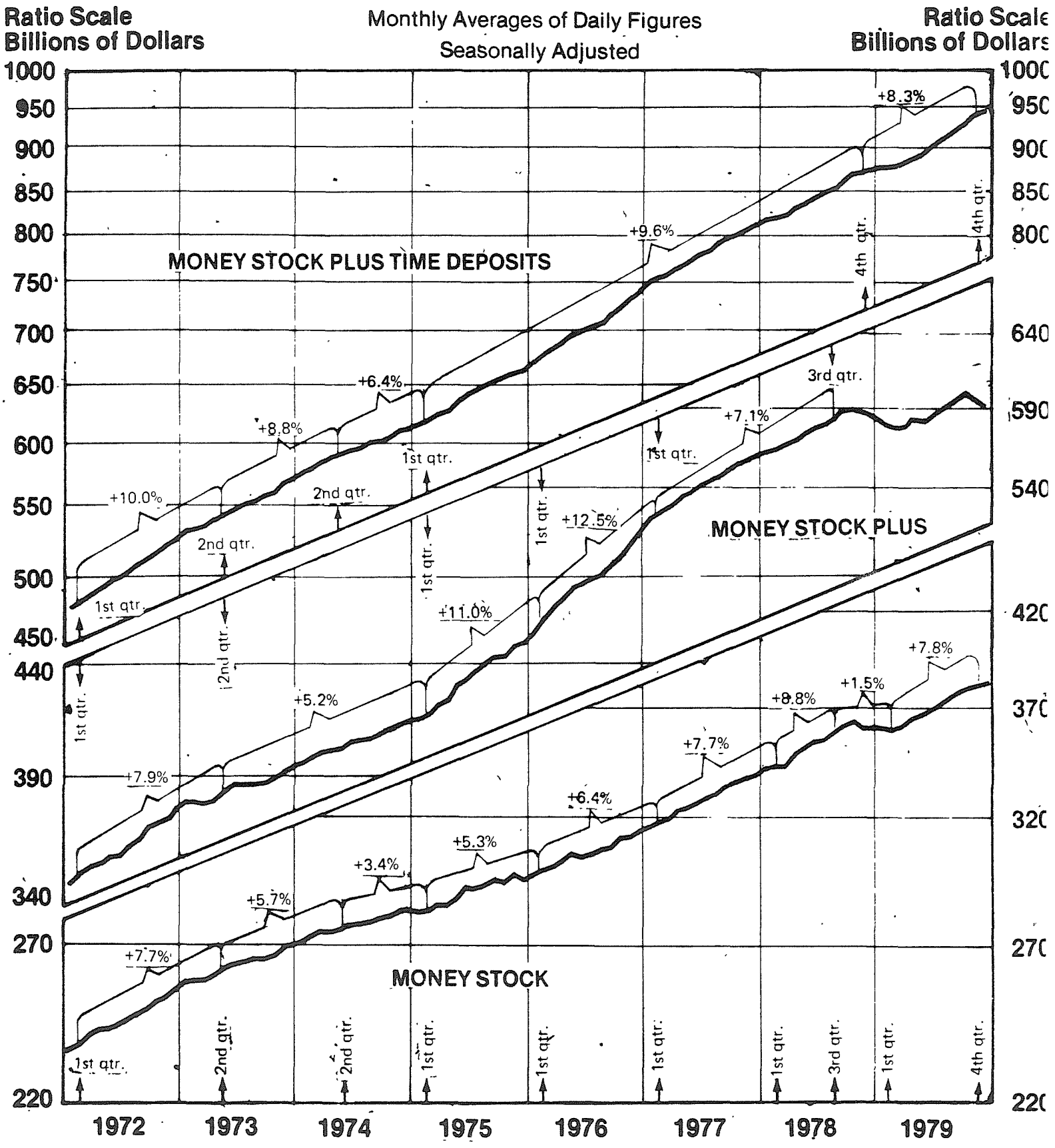
Latest data plotted: 4th Quarter

1. Short-Run: Two-quarter rates of change.
2. Trend: Twenty-quarter rates of change.

..... Projected by Pittsburgh National Bank

PITTSBURGH NATIONAL BANK

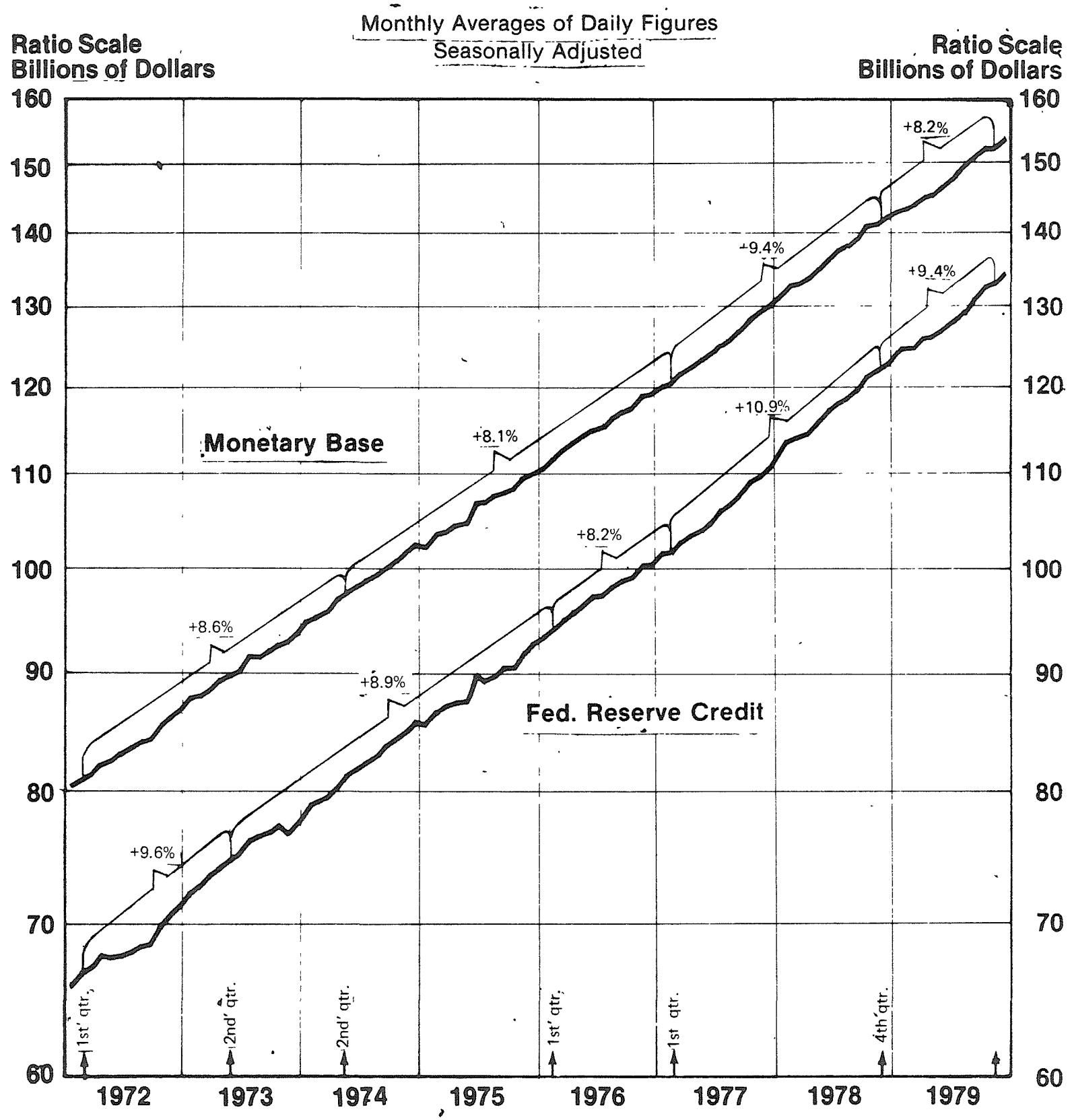
Money Stock



Percentages are annual rates of change for periods indicated.

Latest date plotted: December

Monetary Base and Fed. Reserve Credit

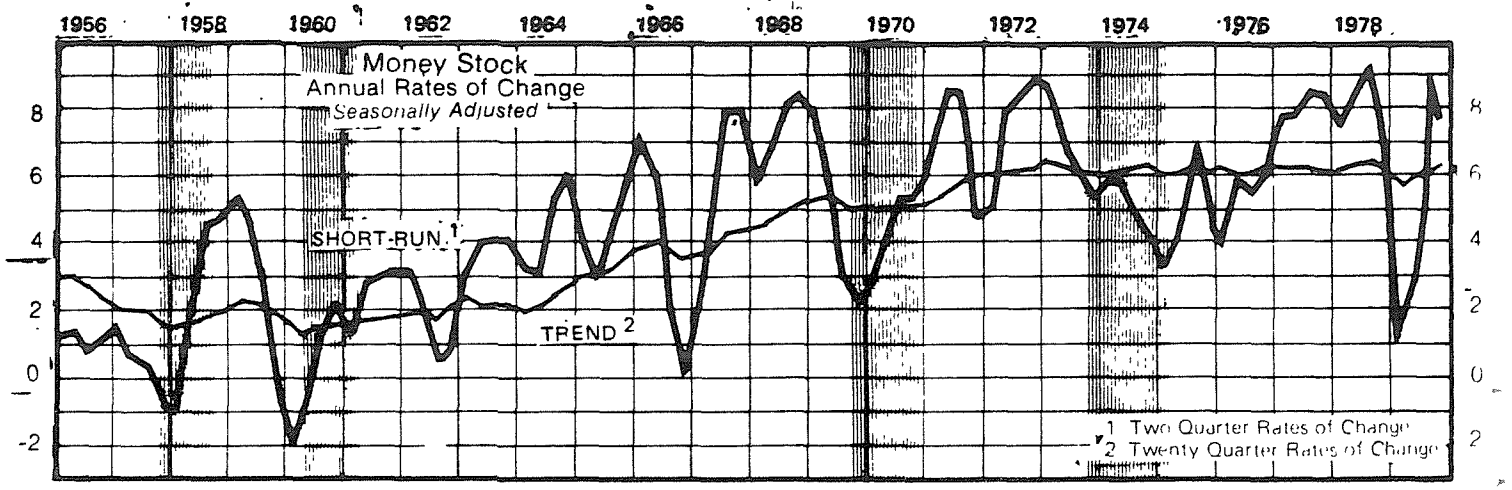


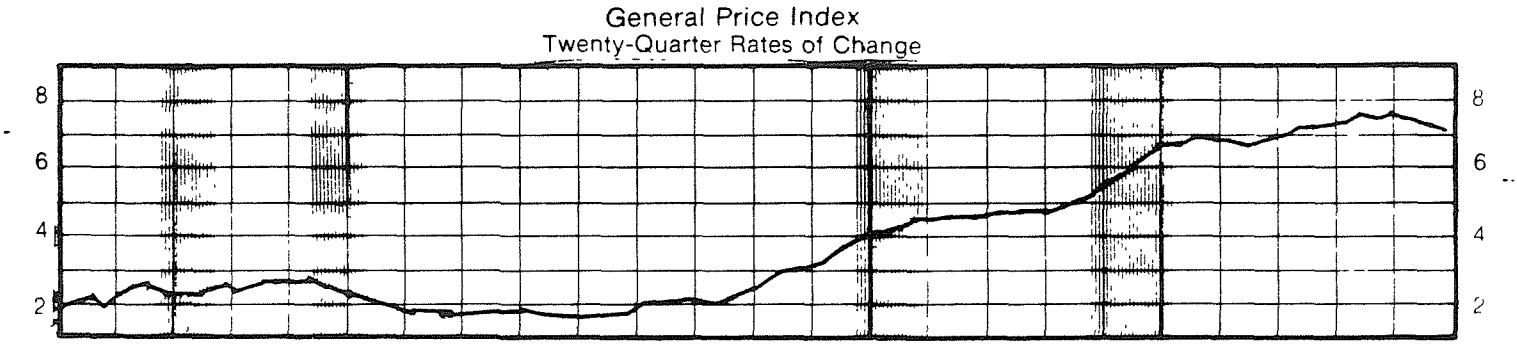
1. Uses of the monetary base are member bank reserves and currency held by the public and nonmember banks. Adjustments are made for reserve requirement changes and shifts in deposits among classes of banks.

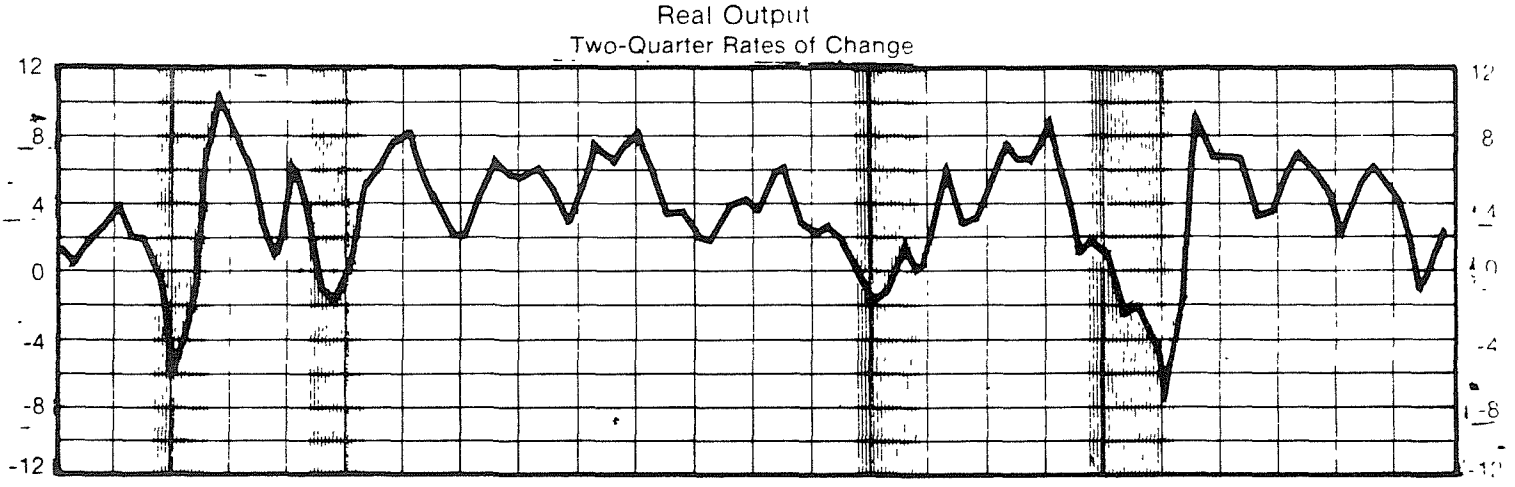
Latest data plotted: December

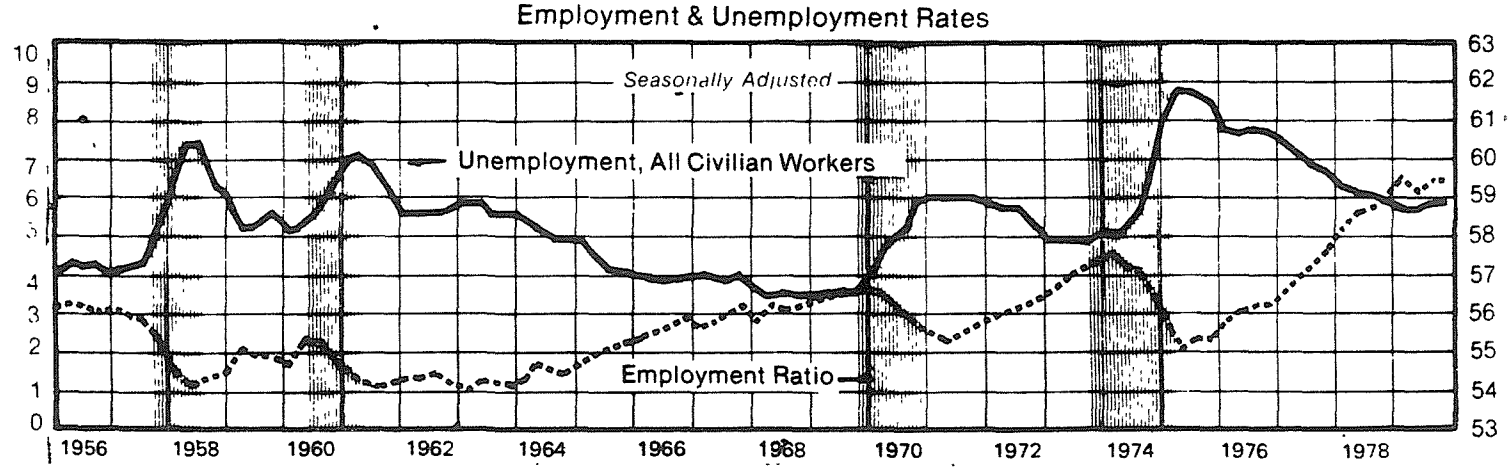
PITTSBURGH NATIONAL BANK

Trends and Fluctuations of Money, Prices, Output, and Unemployment.





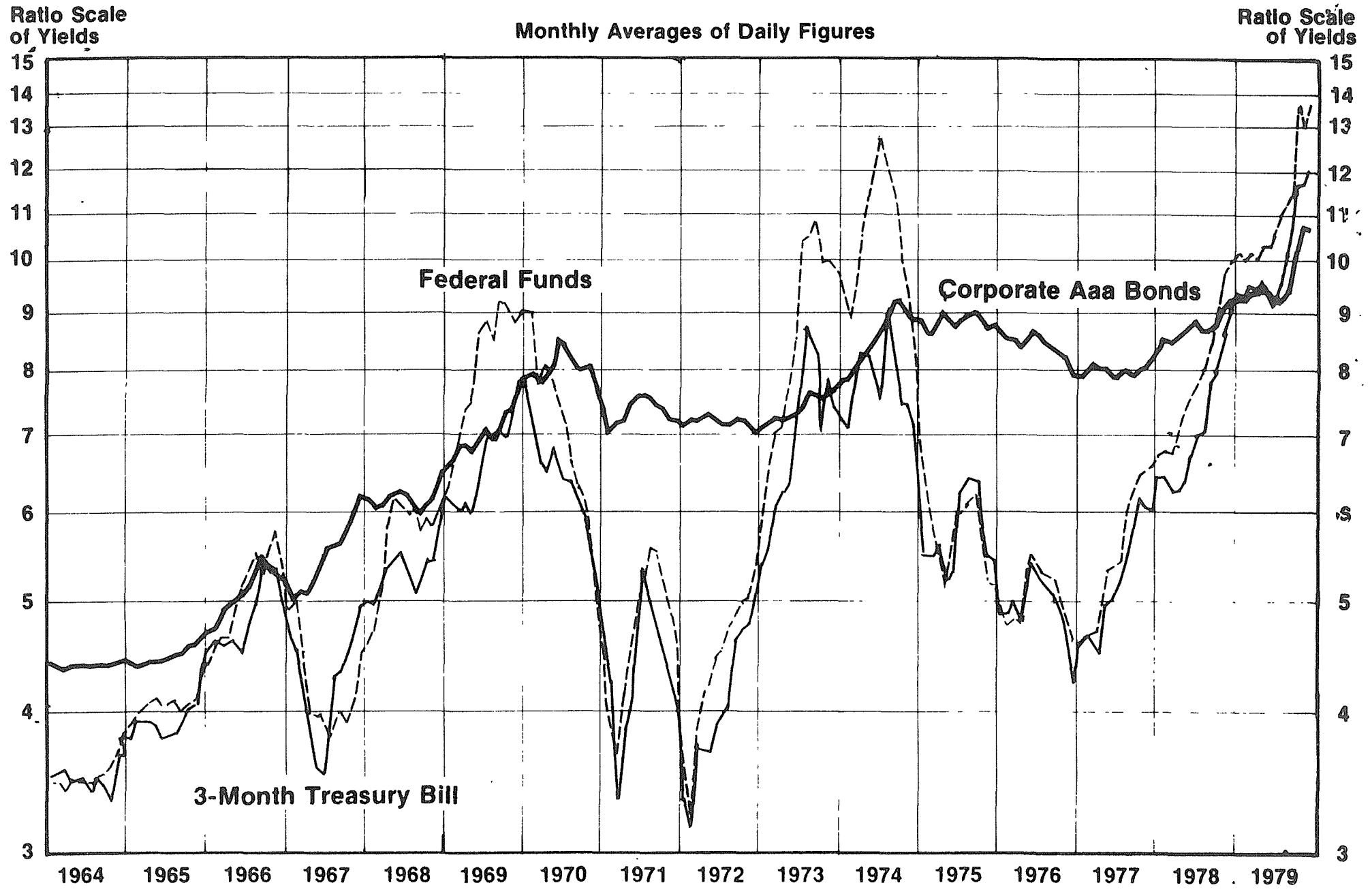




The shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research.

Latest data plotted: 4th Quarter

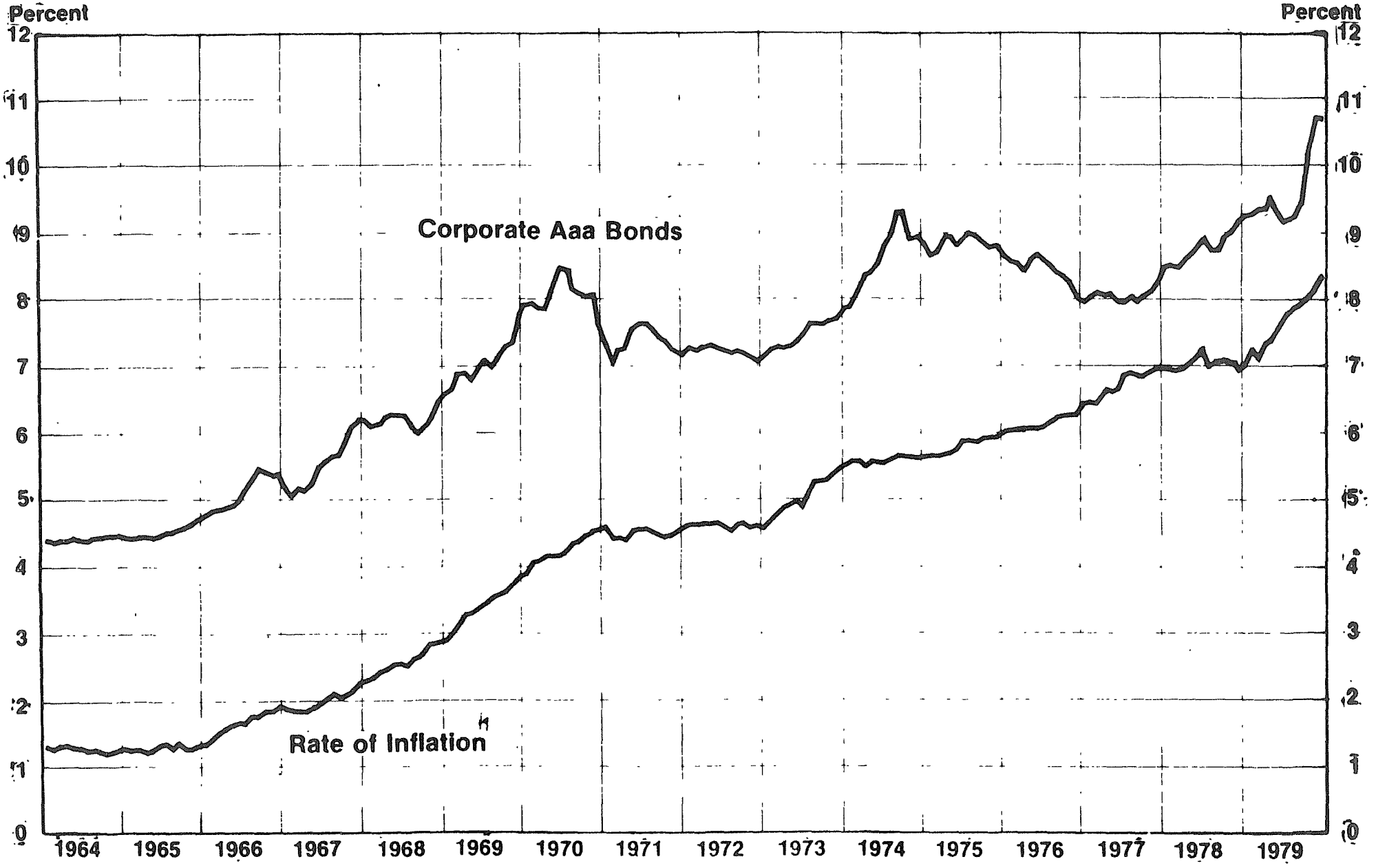
Selected Interest Rates



Latest data plotted: December

PITTSBURGH NATIONAL BANK

Inflation and Interest Rates

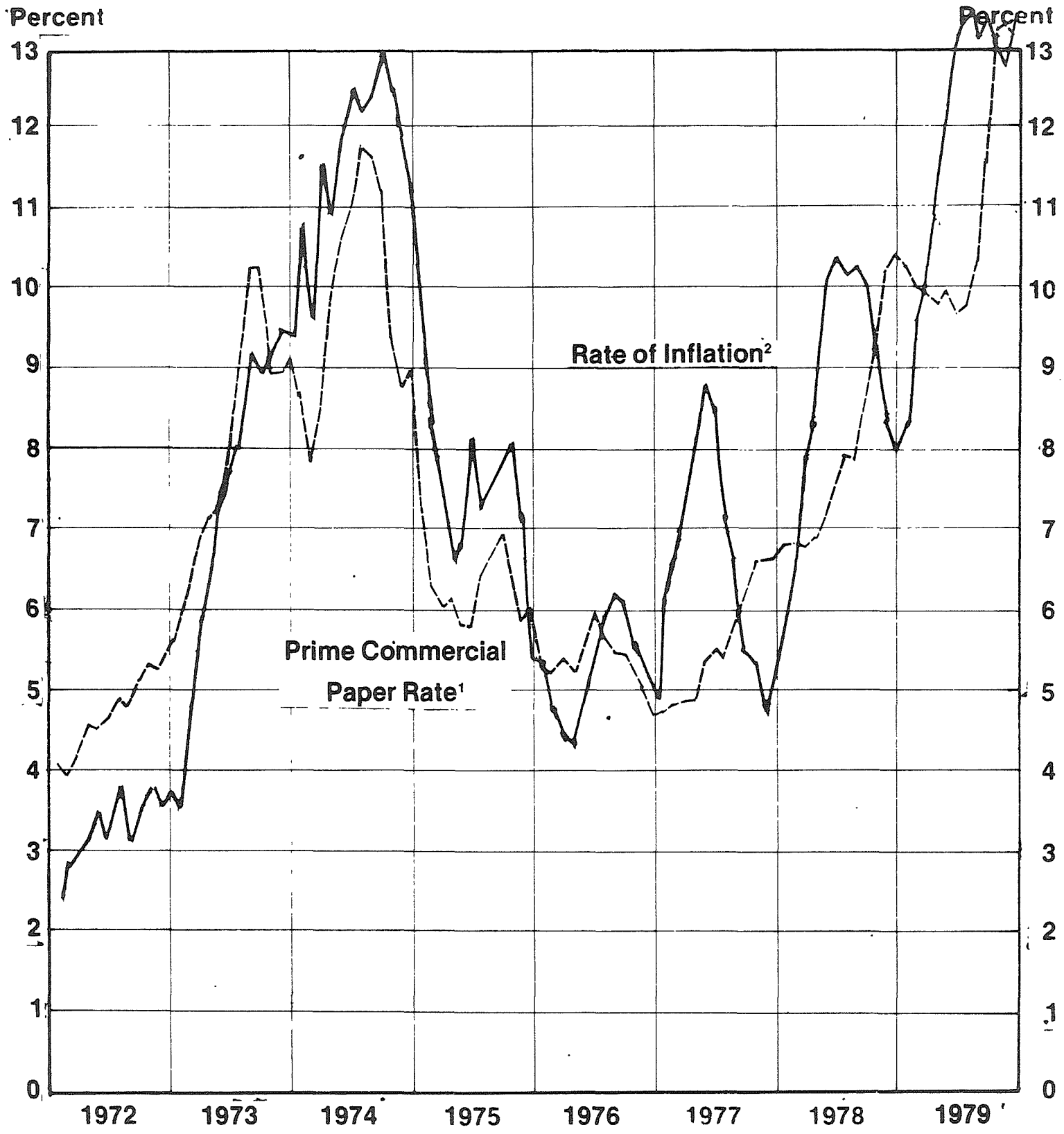


1. Rate of change of Consumer Price Index over five-year periods.
   CPI for 1974 was adjusted for estimated effect of the oil price increase.

Latest date plotted: Aaa- December

PITTSBURGH NATIONAL BANK

Inflation and Short-Term Interest Rates



1. Yields on 4- to 6-Month Prime Commercial Paper.
2. Rates of change in Consumer Prices over the previous six months.

Latest date plotted: CP Rate- December
Inflation- December

PITTSBURGH NATIONAL BANK

Shadow Open Market Committee

Beryl W. Sprinkel
Harris Trust and Savings Bank

Economic Outlook
(Annual Rates of Change)

	Quarters									Years		
	79:4[A]	80:1	80:2	80:3	80:4	81:1	81:2	81:3	81:4	79	80	81
Gross National Product	2455.8	2508.2	2550.6	2589.2	2628.4	2677.3	2736.8	2798.4	2860.4	2368.6	2569.1	2768.2
% Change	10.3	8.8	6.9	6.2	6.2	7.7	9.2	9.3	9.2	11.3	8.5	7.7
Constant Dollar GNP (72$)	1438.4	1437.7	1430.1	1421.4	1413.9	1412.1	1416.0	1420.6	1425.9	1431.2	1425.8	1418.7
%Change	1.4	-0.2	-2.1	-2.4	-2.1	-0.5	1.1	1.3	1.5	2.3	-0.4	-0.5
Price Deflator	1.7074	1.7446	1.7835	1.8216	1.8590	1.8960	1.9328	1.9699	2.006	1.6549	1.8022	1.9512
% Change	8.7	9.0	9.2	8.8	8.5	8.2	8.0	7.9	7.5	8.9	8.9	8.3
CPI-All Urban	2.277	2.345	2.407	2.462	2.516	2.568	2.619	2.670	2.721	2.175	2.433	2.645
% Change	13.2	12.5	11.0	9.5	9.1	8.5	8.2	8.0	7.9	11.3	11.9	8.7
Unemployment Rate (%)	5.9	6.1	6.6	7.1	7.5	8.0	8.3	8.6	8.9	5.8	6.8	8.5
Money	380.9	384.6	387.9	391.7	397.0	402.8	408.7	413.7	418.8	371.0	390.3	411.0
% Change	5.2	4.0	3.5	4.0	5.5	6.0	6.0	5.0	5.0	5.2	5.2	5.3
Money-2	948.1	963.1	977.2	992.7	1012.0	1032.9	1054.2	1073.4	1093.0	914.4	986.3	1063.4
% Change	9.2	6.5	6.0	6.5	8.0	8.5	8.5	7.5	7.5	8.0	7.9	7.8

[A]Actual