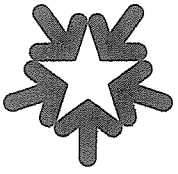
SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

March 14-15, 1982

PPS-82-1



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Graduate School of Management
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SHADOW OPEN MARKET COMMITTEE

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1. Shadow Open Market Committee Members - March 1982
2. SOMC Policy Statement, March 14, 1982
3. Position Papers prepared for the March 1982 meeting:

   The Politics of Uncertainty - Karl Brunner, University of Rochester

   Fiscal Outlook, March 1982 and The 1983 Budget Testimony - Rudolph G. Penner, American Enterprise Institute

   Statement to the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs and Appendix - H. Erich Heinemann, Morgan Stanley & Co., Incorporated.

   The Behavior of the Monetary Aggregates: The Predictability of the Past and Some Prognostications for the Future - James M. Johannes and Robert H. Rasche, Michigan State University

   Sources of Financing for the Government Deficit - Robert H. Rasche, Michigan State University

   Economic Prospects Through 1983 and Business Outlook-Monthly Update - Robert J. Genetski, Harris Trust and Savings Bank

   Economic Projections - Burton Zwick, Prudential Insurance Company of America

SHADOW OPEN MARKET COMMITTEE

The Committee met from 2:00 p.m. to 8:00 p.m. on Sunday, March 14, 1982.

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.

DR. ROBERT J. GENETSKI, Vice President and Chief Economist, Harris Trust and Savings Bank, Chicago, Illinois.

MR. H. ERICH HEINEMANN, Vice President, Morgan Stanley & Co., Incorporated, 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 L. JORDAN, Anderson Schools of Management, University of New Mexico, Albuquerque, New Mexico.*

DR. RUDOLPH G. PENNER, American Enterprise Institute, Washington, D.C.

PROFESSOR ROBERT H. RASCHE, Department of Economics, Michigan State University, East Lansing, Michigan.

DR. ANNA J. SCHWARTZ, National Bureau of Economic Research, New York, New York.

DR. BERYL SPRINKEL, Executive Vice President and Economist, Harris Trust and Savings Bank, Chicago, Illinois.**

DR. BURTON ZWICK, Vice President, Economic Research, Prudential Insurance Company of America, Newark, New Jersey.

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*On leave from the SOMC; currently a member of the Council of Economic Advisers.

**On Leave from the SOMC; currently Under Secretary of the Treasury for Monetary Affairs.

POLICY STATEMENT

Shadow Open Market Committee

March 15, 1982

All the market economies of the world are in the throes of a persistent decline in productivity growth that has produced stagflation everywhere. Now, hesitant and uncertain steps to slow inflation have imposed a mild recession and intensified the underlying problem. The peak-to-trough decline in output for the United States during the current recession is likely to be below the average for postwar recessions, and the recession seems likely to end in the next few months. Yet, discussion of a worldwide depression has become common, and proposals for the reinflation are widespread.

There are two principal reasons for this wide gulf between the facts about the current recession and the rhetoric about a major depression. The first is the position of major industries such as steel, autos, and trucks in all the industrialized countries. The second is the pervasive uncertainty about the future fiscal policy and current and future monetary policy.

High unemployment in autos, steel and related industries, can be found in countries like France with expansionist policies and rising inflation and in countries with declining inflation. All over the world these industries are suffering more from declines in competitiveness than from the effects of cyclical contraction. The problem for many countries is to shift resources from declining to expanding industries. A return to stop and go policies is not a solution.

Continuation of programs to reduce the growth of public spending and to reduce inflation is the only lasting solution. We offer a program to lower rates and reduce uncertainty.

A PROGRAM TO REDUCE INTEREST RATES

Pressures are rising, as in prior recessions, to pump up the money supply in an effort to lower interest rates. Proposals of this sort will fail in 1982 as they

have in all prior business cycles. In fact, a return to rapid money growth would quickly and inevitably lead to higher, not lower, credit costs.

The present level of interest rates does, indeed, represent a severe burden on the economy. Interest rates must be reduced promptly in a non-inflationary manner that sets the foundation for sustained real growth in the economy and a lasting reduction in unemployment. To do so, we propose the following program:

* The rate of increase in Federal expenditures must be cut substantially below the levels proposed by the Administration. To do this, cost-of-living adjustments in Federal entitlement programs must be limited and the growth of national defense purchases cut back.
* Tax increases should be limited to Federal excises and/or a surcharge on imported oil. The principal problem in the Federal budget has been, and continues to be, excessive expenditures, not the reductions in tax rates enacted last year.
* Stable, predictable, and believable reductions in money growth —long promised by the Federal Reserve — must be implemented. Elected officials can contribute to the achievement of this goal by insisting that the Federal Reserve keep the money supply well within the targets that have been announced. Such insistence will lower uncertainty and help to reduce the risk premium in interest rates.
* The Federal Reserve should move promptly to stabilize the growth in money along its preannounced path by implementing the procedural reforms which this committee has long advocated and which are outlined once again in this statement.

The four elements of this program are complementary and will reinforce each other. All four work toward lower interest rates and sustained non-inflationary growth of output. They should be adopted promptly by the Administration, Congress, and the Federal Reserve.

FEDERAL RESERVE POLICY

The main problems with Federal Reserve policy arise because, despite statements full of good intentions and worthy goals, the Federal Reserve does not make any of the changes that would improve monetary control and remove current high risk premiums in interest rates. No one can have any confidence in Federal Reserve statements that reaffirm its commitment to slower money growth and lower inflation. The Federal Reserve misleads the public and the Congress by talking as if its main objective were control of bank reserves and

money. In practice, the Federal Reserve seeks to hold the daily Federal funds rate within a narrow range, and ignores the broad limits it announces.

The Federal Reserve continues to promulgate target growth rates for several monetary aggregates without recognizing that such ranges are not independent of one another. The Federal Reserve should either publish consistent target ranges for the several aggregates or restrict targeting to one aggregate, preferably M-1. There is no evidence that financial innovation, apart from regulatory changes, has rendered the relative behavior of the various monetary aggregates unpredictable. Currently, as in the recent past, a wide gulf separates Federal Reserve statements and Federal Reserve actions.

Table 1 shows the discrepancy between Federal Reserve announcements and achievements for the six years in which it has announced targets for money growth.

TABLE 1

Money Growth 1975-1981

	Percent Growth			
Year Ending in 4th Quarter	Target Announced by Federal Reserve	Target Mid-point	Actual	Error
1976 (M-1)	4.5 - 7.5%	6.0%	5.8%	-0.2%
1977 (M-1)	4.5 - 6.5	5.5	7.9	2.4
1978 (M-1)	4.0 - 6.5	5.2	7.2	1.9
1979 (M-1)	3.0 - 6.0	4.5	5.5	1.0
1980 (M-1B)	4.0 - 6.5	5.2	7.3	2.0
1981 (M-1B)	6.0 - 8.5	7.2	5.0	-2.2
1982 (M-1)	2.5 - 5.5	4.0		

In four of the most recent six years, the Federal Reserve failed to keep money growth within the preannounced target band. Since 1979, the Federal Reserve has claimed to be more concerned about money growth, and has given greater emphasis to money growth in its statements, but monetary control has worsened. Annual errors have been larger, and short-term variability has increased. Better procedures, endorsed by virtually all monetary economists, including Federal Reserve staff, are available, but they have not been adopted.

Recent Federal Reserve policy has been more variable than in the past. Sudden, sharp downswings in monetary growth were a principal cause of the two recessions in 1980 and 1981-82. Wide swings in monetary growth from zero to double-digit annual rates bewilder financial markets. The high variability of annual rates of growth of total reserves, the monetary base, and money also causes frequent revisions of the expected rate of monetary growth and future inflation. These frequent revisions are reflected in interest rates at all maturities. They produce high risk premiums and high rates of interest.

The relationship between the annual rates of growth of total reserves and/or the monetary base and interest rates leaves little doubt that interest rates rise and fall directly with growth in reserves and base money. While the current level of interest rates is influenced by many factors, including the prospect of deficits, recent changes in interest rates appear to be dominated by changes in the growth of monetary aggregates.

The message of Figure 1 seems clear. Interest rates can be reduced and stability of interest rates can be increased. To do so, the Federal Reserve must stabilize the growth of monetary aggregates.

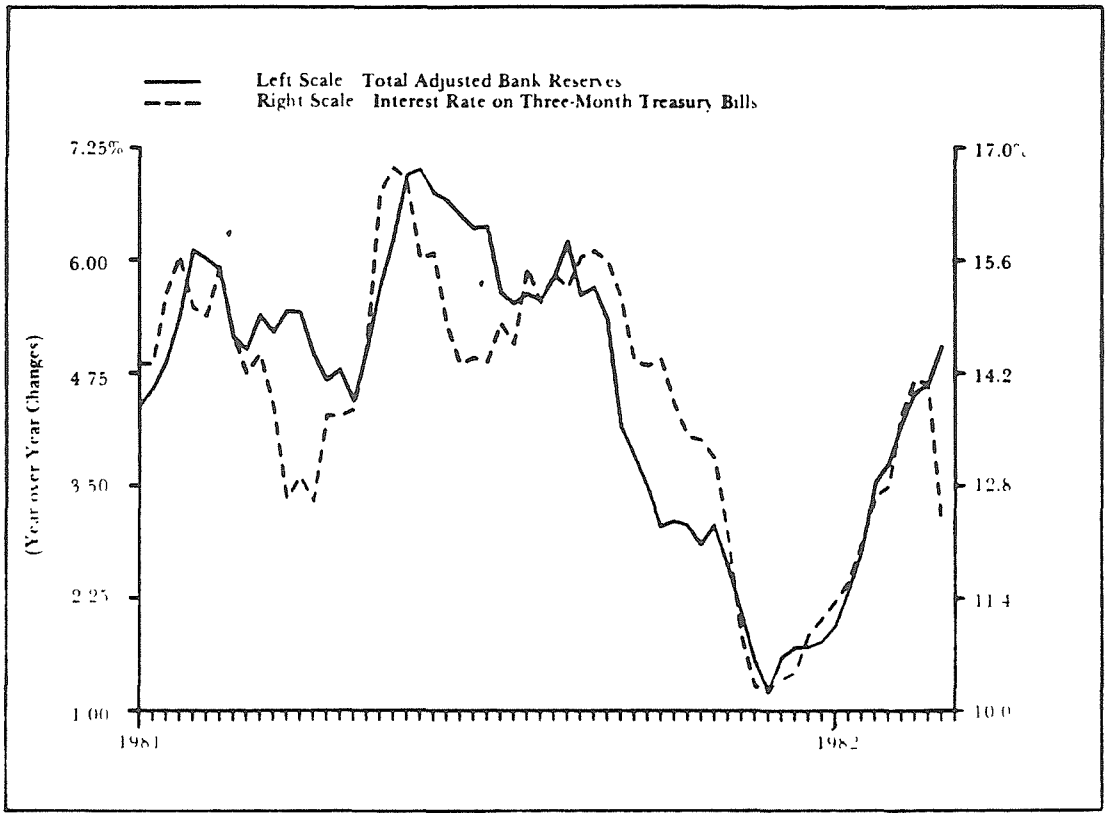
To control either total reserves or the monetary base, the Federal Reserve must control the size of its balance sheet. This is not difficult, but to do so the Federal Reserve must adopt the procedural changes that we and many other economists advocate. These include elimination of seasonal adjustment, an end to interest rate targeting, restoration of contemporaneous reserve accounting, and simplification of the reserve requirement structure. Chairman Volcker's recent statement to the Senate Budget Committee suggests that some of these long delayed changes may finally be adopted.

Federal Reserve spokesmen repeatedly claim that money is difficult to control. Recently the Vice Chairman of the Federal Open Market Committee, in a widely publicized address, claimed that the growth of money substitutes increases the problem of control in 1981. Such statements are without any basis in fact. The problems that the Federal Reserve experienced in 1981 result, mainly, from the use of inefficient and improper methods of control including continued attempts to manage short-term interest rates.

At our September meeting, we urged the Federal Reserve to expand the monetary base at a 5 percent annual rate in 1982 to reach $180-billion by fourth quarter 1982. The annual growth rate of the base fell below our target in the

Figure 1

Bank Reserves and Short-Term Interest Rates



Reserve data are four-week moving averages

Sources: Econalyst Data Base, Morgan Stanley Research

fourth quarter of 1981, but the decline was short-lived. Since last Fall, growth in the base and money has surged well above the levels consistent with disinflation.

Slower growth of the base and money made an important contribution to the reduction in inflation — and in the rate of money wage increases — that is now widely recognized. The task for monetary policy is to keep the gains that have been achieved.

We repeat our recommendation for monetary policy in 1982. The Federal reserve should control the monetary base, return to a sustained 5 percent growth path, and aim for a target of about $180-billion in fourth quarter 1982, as we urged six months ago.

BUDGET POLICY

The Administration's budgets for fiscal 1983 and future years, when combined with currently available guesses or estimates about future economic activity and inflation and fears about future debt monetization, raise doubts about the internal consistency of the fiscal program. These doubts are of two kinds. One concerns the success of the promising effort to restore productivity growth to its historic path and increase personal incentives by reducing current and future tax rates. The other is the increased probability that the budget deficit will rise at a faster rate than output, thereby reducing real capital formation and generating increasing economic instability with rising real rates of interest, falling productivity, and a chain of events that no one can foresee accurately or predict reliably.

While no one can be confident about the effects of continuously increasing deficits, the effects are unlikely to include any of the paths of stable growth and declining inflation used by CBO, OMB, and private forecasters to generate budget data for the next five fiscal years. There is therefore likely to be an inconsistency between the projections for the economy and for future deficits. The result may be deficits larger than forecast, leading to a decline in real income and standards of living and an economic crisis. Or, the economy may continue to limp along the path characterized by low productivity growth, rising real transfer payments and a rising size of government.

If there are no changes in tax rates and spending levels, our projections of possible ranges for total budget and off-budget financing are:

TABLE 2

Fiscal Year	Projected Range On- Plus Off-Budget Deficit
1982	$100 - 150-billion
1983	150 - 200-billion
1984	200 - 250-billion
1985	225 - 275-billion

There is nothing certain about future deficits. We have no prior experience on which to base a reliable judgment because there is no example in which a large economy — the largest economy — has incurred deficits of this relative magnitude for an indefinite period. There is great uncertainty. Prudence requires that this uncertainty be lessened promptly. Everyone knows what needs to be done to reduce the deficit: We must spend less.

We continue to believe that the Administration's strategy is correct. Reducing the growth of government spending, reducing the share of output spent by government, and reducing tax rates is the best way to increase incentives to save, work, and invest. The problem is not in the policy conception or design but in its implementation. The Administration's reductions in spending are too small relative to the projected reductions in tax collections. To achieve the promised gains from tax reduction requires additional cuts in the growth of spending. The principal reason is that current policy does not reduce the share of output spent by government and may, instead, lead to increases in that share.

While the share of output spent by government is a more reliable measure of applicable tax rates than the revenue share, no single measure summarizes the incentive and disincentive effects of government programs. Nevertheless, when the Administration proposed its fiscal reform program, and when the Congress adopted the Humphrey-Hawkins Act in 1978 and subsequently passed the 1981 fiscal program, the intention was to reduce the share of output spent by government to 20 percent of GNP or less. Currently, government spending remains between 23 percent and 24 percent of output.

CONCLUDING COMMENTS

Current fiscal and monetary problems pose a challenge to representative government. The problems are easy to state. Solutions are not hard to find.

None are easy to implement. None are costless. None can be chosen on technical grounds alone. The problem is political; leadership is needed to gain public approval of the changes that must be made.

At issue is the ability of representative government to put an end to the current fiscal crisis and the rising instability brought about by the destabilizing Federal Reserve operations. The alternatives to a change in policy are less attractive. We run the risk of sliding into immobilism and instability or of moving to some other less desirable solution that no one can now forsee.

THE POLITICS OF UNCERTAINTY

Karl Brunner
University of Rochester

I. STRATEGY AND TACTICS DURING THE 1970'S AND THE RECORD OF PERFORMANCE

On October 6, 1979 the Chairman of the Board of Governors of the Federal Reserve System announced a change in tactical procedures. Monetary policy was formulated since the later years of the 1960's in terms of a money demand equation linking money stock (or monetary growth) with the federal funds rate and the projected value of gross national product. This formulation served the Fed for two alternative monetary strategies. It could guide a strategy of interest control but also be exploited, as the Fed maintained, for the purpose of a monetary control strategy. The tactical operations centered in either case on the federal funds rate. The two strategies differed essentially in terms of the role assigned to the federal funds rate. This rate and its expected relation to other interest rates formed the immediate centerpiece of an interest control strategy. A monetary control strategy, in contrast, used the federal funds rate as an instrument producing the desired path of monetary growth.

The formulation organizing the Fed's policy process was thus consistent with either strategy. It allowed subtle and rapid shifts in strategic emphasis difficult to recognize by outside observers. The conception was moreover well designed to protect the heritage of "discretionary policymaking". It offered an effective defense against increasing pressures for a commitment to a predictable policy of systematic monetary control. The analytic framework provided the appearance of monetary targeting, whenever desired, and still offered an opportunity to pursue the old conceptions and adhere to the accustomed pattern of a "discretionary policy". Lastly, it yielded an important and useful source for the supply of excuses on the political market. The consequences of neglecting a monetary control strategy, or of failures in the actual execution of such a strategy, could always, and usually were, attributed

to unexpected shifts of an essentially unstable money demand. A poorly informed Congress and ignorant media could hardly be expected to cope effectively with such "explanations" advanced by "authority". This policy conception increasingly operated with an inflationary bias in response to the political realities emerging over the postwar period. It produced the record of a rising and erratic inflation accompanied by rising interest rates. This dismal record was "enriched" by repeated declines of the dollar on the foreign exchange markets.

II. THE APPEARANCE OF A CHANGE IN POLICYMAKING

The international response to the failure of the dollar ultimately forced the Federal Reserve Authorities to reexamine its policy in the fall of 1979. The Chairman's statement acknowledged the Federal Reserve's ambivalent strategy over the past decade. It also acknowledged that tactical procedures need be modified in order to assure a more reliable monetary control yielding more success in the battle against inflation. The new procedure claims to use non-borrowed reserves as an instrument directed to the control of monetary growth.

The policy conception corresponding to the new procedure can be described by an analytic framework consisting of two relations. The first is the money demand equation which expressed for years the previous strategic and tactical situation. But this money demand equation was supplemented with a reserve equation, relating the sum of non-borrowed and free reserves with required reserves. The volume of required reserves in any week are predetermined under current arrangements by the money stock prevailing two weeks earlier. The volume of free reserves depends on the other hand on the current federal funds rate, the Fed's discount rate and the institutions governing the "discount window". This dependence of free reserves (or essentially borrowed reserves) coupled with the predetermination of required reserves by the past characterize the crucial features of the Fed's "new" policy conception. They involve a remarkable revival of free reserves in the Fed's thinking. These reserves form according to the new framework a centerpiece in the Fed's conception of the control process.

The steps required under the new operational procedures may be described as follows: First, a monetary target need be set. This in conjunction with the projected value for gross national product determines in the context of the

money demand equation a federal funds rate consistent with the targeted monetary growth. This federal funds rate can be fed subsequently into the reserve relation in order to project the expected volume of free reserves. The Fed may frequently just extrapolate however the most recent value of free reserves for their tactical purposes. This expected value together with the predetermined volume of required reserves determines the required amount of non-borrowed reserves needed to produce in the average the planned monetary target.

The new framework and its associated procedures substantially strengthens the Fed's political defenses. It defines a control process involving, in contrast to the earlier tactical procedure, the possibility of using a reserve magnitude as an instrument for the execution of control. But this possibility need not be exploited. The modified framework still allows the Fed to slip into an interest control strategy or to fall back on the federal funds rate as the actual instrument of monetary control. These options are all subsumed under the new framework. It allows thus in particular shifting combinations of reserve and federal funds targeting. The amended framework introduced after October 1979 thus serves the political purpose of the Fed even better than the prior concentration on the money demand equation. It combines the opportunity to emphasize the possible use of a reserve instrument in the monetary control process with the actual pursuit of the traditional pattern of a "discretionary policy" expressed by ambivalent strategies and shifting tactical combinations. The new framework and the related operational procedure yield thus no clear promise bearing on the course and nature of monetary policy. It emerged as a natural evolution of the Federal Reserve's traditional strategic thinking and tactical executions in response to public critique and the votes of no confidence cast by exchange and financial markets. But the very fact that it appears to offer better and more subtle justifications for the Fed's traditional commitment to undefined "discretionary policies, flexibility and judgment" should warn us that the basic problem posed by our policymakers in the Fed persists to this day.

III. THE FED'S TRADE-OFF THESIS

The framework used by the Fed supplemented by a standard Keynesian analysis implies that a closer control of monetary growth would have "to be purchased" by greater variability of interest rates. The Fed traditionally main-

tained that there occurs a trade-off between the variability of monetary growth and the variability of interest rates. Two major flaws in the Fed's traditional analysis condition this view. The response structure of the system is assumed to be invariant under changes of the policy regime or changes in the behavior patterns characterizing a Central Bank. Moreover, the shocks operating on the economic or financial system are usually treated as transitory events. The implications bearing on a possible trade-off are crucially affected by these assumptions. A different pattern emerges once we recognize the sensitivity of behavior patterns governing financial markets to variations in the policy regime and the operation of shifting mixtures of permanent and transitory shocks. A credible policy of monetary control, effectively executed and thus lowering substantially the variability of monetary growth, will not raise under these circumstances the variability of new interest rates over the maturity spectrum. The remaining variability will be understood to occur as a transitory event and thus hardly affect interest rates beyond the short end of the yield curve. The adjustment of financial behavior to this regime can be expected furthermore to moderate also movements of short rates over periods beyond one or a few days. Lastly, even a larger variability of daily short rates poses no serious economic problem when agents fully understood their transitory character. Recent developments in monetary analysis thus deny the relevance of the Fed's trade-off thesis.

IV. THE RECORD UNDER THE NEW REGIME AND THE POLITICS OF UNCERTAINTY

The experience made under the Fed's new operational procedure offers remarkable clues about the fundamental problem afflicting our policymaking. Two crucial patterns emerged over the past two years contrasting sharply with the trade-off thesis. We note first that <u>both</u> monetary growth and interest rates exhibit a substantially <u>larger</u> variability than in previous periods. Secondly, the correlation between interest rates over the maturity spectrum was significantly higher than in earlier times. The Federal Reserve authorities explained this variability in market rates of interest with the change in tactical procedures. They add that this variability was the cause of the prevailing uncertainty and confusion exhibited by the financial markets. The causation

asserted by the Federal Reserve's view thus runs from the shift in operational procedure over an increased variability of interest rates to more pervasive and larger uncertainty.

V. AN ASSESSMENT OF THE RECORD OF UNCERTAINTY

The explanation offered by the Fed naturally corresponds to its basic positions. It also fits well with the usual political defense of "discretionary, flexible and judgmental policy". It fails however to account for the joint increase in the variability of both monetary growth and interest rates. The line of causation argued is moreover difficult to reconcile with the remarkable correlations between interest rates observed over the whole range of maturities.

The explanation of recent patterns observed on financial markets does indeed involve the element of a pervasive and diffuse uncertainty. This uncertainty is however of a very different nature than suggested by the Federal Reserve Authorities. Our financial markets suffered over the past two years under an increasing uncertainty about the future course of our financial policies. The announcement of October 1979 was difficult to interpret unambiguously. Its meaning remained vague, most particularly when it was considered in the context of supplementary interpretations offered by various Federal Reserve officials. By this time agents on financial markets had also learned since 1965 that all promises of an anti-inflationary policy were usually broken within a short time. Such promises were usually followed over the subsequent one or two years by even more prounced inflationary policies. By late 1979 the credibility of the Fed had already sunk to low levels and the October announcement deepened the confusion on the markets. The response of the bond market to the announcement at the time revealed this state quite clearly.

Subsequent events enlarged the uncertainty and made the markets' expectation even more diffuse. The increased variability of monetary growth raised more questions about the Fed's longer-run policy. We frequently hear that larger accelerations (or decelerations) of the money stock lasting at most six months can be disregarded and impose no problem on the economy. In the absence of credible policymaking larger variability of monetary growth entrenches however the prevalent uncertainty even further. It is this

uncertainty which fosters the overheated attention to weekly data. Under a diffuse uncertainty agents grope for every possible clue and sign yielding some information about the future course of policy. The observed variability in monetary growth contributed thus to sudden and irregular shifts in the distribution of expectations among market agents.

One last element contributed to broaden the prevalent uncertainty. Speeches by Federal Reserve officials made over the past two years on various occasions reflected the persistent commitment to a traditional policy conception attuned to the Fed's political interests. These speeches, most significantly exemplified by President Solomon's speech delivered in early January 1982, signal a strong opposition to an effective strategy of monetary control. The general uncertainty produced by our monetary policymaking as a result of the history of broken promises, larger variability of monetary growth and the often revealed preference for the traditional "discretionary flexibility" dominated the behavior of interest rates over the past two years. The observed levels and variability cannot be explained in terms of the basic real rate on default-risk free securities or the inflation premium. The large real rates emerging in the recent past contain a substantial risk premium which hardly ever entered in the past history of our financial markets. This risk premium reflects the prevailing uncertainty imposed by our policymakers on the U.S. economy. This uncertainty explains both the level and the recent variability of nominal interest rates. Rapidly moving signals and clues watched by market agents induce shifts in expectational patterns expressed by sudden changes in interest rates. An array of signals suggesting adherence to an anti-inflationary policy induces a fall of interest rates over the whole spectrum. A wave of opposite clues produces rising interest rates. This pattern explains the positive association observed between monetary growth and interest rates. The market's behavior essentially denies the assertion that monetary expansions will produce lower interest rates.

VI. THE ROLE OF THE BUDGET DEFICIT

Our explanation of observed market behavior disregarded thus far the European's and "Wall Street" favorite villain. It is frequently argued that the behavior of interest rates is dominated by the budget deficit. The prevalent argument asserts such a connection irrespective and independent of monetary

policy. But the argument is fundamentally flawed. The budget deficit, per se, cannot explain the observed behavior of interest rates. One strand of the argument derives the behavior of interest rates directly from an interaction between savings and the government sector's deficit. This view is however inconsistent with the core of economic analysis. Interest rates (or prices) on the bond and money markets emerge minute to minute from the interaction between the existing stock of securities and the private sector's stock demand (i.e. willingness to hold in portfolios). The latter is conditioned by the public's wealth and current or expected market conditions. The assessment of future market conditions substantially influences and frequently controls the shifts in the public's stock demand dominating the rapid changes of interest rates. These expectations are moreover crucially influenced by the public's evaluation of the future course of financial policies.

Budgetary deficits operate on interest rates under the circumstances not via any direct mechanism linking savings, investment and deficits, but via the public's assessment of future market conditions. This means in particular that sustained deficits are expected to raise over time the stock of securities to be absorbed in portfolios. This expectation tends to lower the current price of bonds and consequently raises the current interest rates. Savings on the other side raise wealth and expand over time the stock demand for securities. This tends to raise their expected price and will be discounted partly in the current price of bonds.

The correction of the prevalent argument bearing on the mechanism determining interest rates also affects the relevant order of magnitudes. We need to recognize first that savings and deficits modify the nominal rate of interest along the lines traced above by changing the real rate of interest. This elementary fact should warn us about the fallacy involved in the standard argument. The latter essentially discounts the inflation premium which dominated over the past years the average level of interest rates.

We also note that neither the magnitude of last year's deficit nor the existing real volume of Federal (marketed) debt can explain the observed nominal rates of interest. The deficit is comparatively smaller (relative to gross national product) than in 1975 and the real debt outstanding absorbed in private portfolios is still smaller than in the 1950's. These facts cannot be reconciled with the contention of a dominant deficit effect expressed by

interest rates over the past two years. There is however still the potentially large deficit of an intractable budget accumulating over the next four to six years. Suppose that the real Federal debt in the context of a really bad scenario increases by 70 percent per unit of output over the next three years. How much would the basic real rate on default-risk free securities be raised as a result? Such estimates must be advanced with great caution and reservation. The empirical examinations accumulated over the past decades yield however no support for assertions claiming increases of the basic real rate by more than three percentage points. This figure seems already an improbably large upper bound on the relevant responses. An increasing volume of research suggests that the response to the government's financial decisions, given the magnitude of the budget and the expenditure programs, is substantially smaller. It follows that the removal of the inflation premium, achieved by a credible and sustained anti-inflationary policy, would dominate the increase in real rates due to budget deficits persisting over the next five years. The decisive strand in the future movements of interest rates is thus the monetary policy pursued by the Fed.

This does not quite exhaust our story bearing on budget deficits. The increasing uncertainty about the budget contributed and reenforced the uncertainty produced by monetary policy. The financial markets became increasingly apprehensive over the past two years about the future course of our budgetary policies. We do not know at the moment how much expenditures will be curtailed or what taxes will be raised. We do not know to which extent "the inflation tax" will be reinstated as large budget deficits persist. Neither do we know what combination of other taxes will be favored by Congress. But different combinations of taxes affect asset prices on capital markets very differently. The inflation tax raises the inflation premium and a variety of other taxes affect the gross real rate of interest. A diffuse and shifting uncertainty about the budget thus contributes directly to the uncertainty about monetary policy and reenforces the effect of this uncertainty on interest rates.

VII. THE CRUCIAL POLICY ISSUE: THE INSTITUTIONALIZATION OF UNCERTAINTY

The assessment of the problems confronting us in the recent past and at the moment directs our attention to the crucial policy issue. We know at this stage that the Federal Reserve actually has, in the average over the past two

years, pursued an anti-inflationary course. We never knew it during these past months, neither did most of the agents operating on financial markets. Nor do we know at this point in time with any sense of certainty that the Fed will effectively deliver an anti-inflationary policy. If a large segment knew this with any sense of conviction interest rates would behave very differently indeed. Their behavior is after all the best indicator of the prevalent uncertainty. So far, the Federal Reserve Authorities made no clear and unambiguous commitment to a strategy of monetary control coupled with an effective tactical procedure. Our progress remains under the circumstances, at the very best, slow and erratic. The transition to a non-inflationary state of the economy will therefore be associated with comparatively high social costs. the most important contribution to be made by the Federal Reserve Authorities at this point in time is a convincing and generally understood commitment to an effective tactical procedure for the execution of a strategy of monetary control. This would be the most useful political measure to remove the burden of uncertainty on financial markets. It does not require any Congressional actions with the uncertainties facing the battle about the budget. The Federal Reserve Authorities can initiate an institutionalization of monetary control by their own initiative and political decision.

The Shadow has urged such a policy for almost nine years. If our monetary authorities had accepted our proposal in 1975/1976 or followed the recommendations repeatedly advanced by Congress or Congressional Committees, inflation in the past two years would have been low indeed with interest rates substantially below 10 percent. But the Federal Reserve disregarded all these urgent proposals and persisted with a policy producing both inflation and increasing uncertainty about its course. There is really no excuse for such a policy. We have formulated our tactical procedure on previous occasions and the Federal Reserve Authorities know our proposal. The proposal has moreover been tested over several years by James Johannes and Robert Rasche. The results of these tests have been published and were also included every six months in the minutes of the Shadow Open Market Committee. The record is very clear. It shows that monetary control over one year with a tolerance band not more than plus or minus one percentage point is technically quite feasible. This tolerance band is really quite small relative to the order of magnitude of the problem inherited from past years of monetary mismanagement. Even within the year an improvement over past performance seems feasible.

The tactics proposed would require that the Fed set a target path for M-1B (or M2) lowering monetary growth to a non-inflationary benchmark level (about 2 percent p.a.) over the next three years. This target path is maintained by suitable adjustments in the monetary base in the light of the expected profile for the monetary multiplier linking base and money stock. The studies prepared by the Federal Reserve Board's own staff establish that monetary control with an adequate tolerance level relative to the size of the problem is technically feasible. These studies thus confirmed the Shadow's argument and proposal. Axilrod, among others, recognizes moreover in the last issue of the Federal Reserve Bulletin that the monetary base is fully controllable by the monetary authorities. Any change in the base reflects dollar for dollar actions of the Fed changing its total assets or modifying its non-money liabilities. Its control over its balance sheet determines the Fed's potential control over the monetary base. the frequent allusion to the proportion of currency in base money outstanding is thus quite irrelevant in this context.

Beyond the record of the statistical tests presented by the Shadow lies a mass of evidence from "disinflationary policies" produced by various countries on different occasions. They all involved in one form or another a radical change in the regime governing the behavior of the monetary base. Such changes in regime are quite accessible to the policymakers, if they so desire. The central issue becomes thus the political will and the political interest of the Central Bank. But the political market offers unfortunately little appeal to reveal this interest so directly. The protection of inherited positions and interests (i.e. discretionary policies) is more effectively assured by a supply of judicious sounding reservations about monetary control and our proposal in particular. None of these reservations or objections survives any closer examination. My position paper cannot address however the whole array of imaginative objections advanced. A few major arguments need to suffice for our purposes.

Federal Reserve officials maintained on repeated occasions that our procedure anchored by the monetary base involves substantially more slippage than their tactical procedure developed since October 1979 and centered with non-borrowed reserves. This statement is particularly remarkable, as it is not supported by the Board's empirical examination of this issue. The empirical results produced by Johannes-Rasche established furthermore that the

instrumental use of the monetary base for purposes of monetary control yields more reliable results and a smaller tolerance level than the instrumental use of non-borrowed reserves. We understand of course that our tactical proposal involves a radical break with the Fed's traditional strategic conception. We noted above that the tactical arrangements made in recent years should be understood as a political adaptation to existing pressures with corresponding adjustments in rhetoric without sacrificing an opportunity for the exercise of discretionary policies.

Financial innovations including claims about an increasingly unstable or unpredictable money demand are abundantly cited in arguments opposing monetary control. Financial innovations seem to make monetary control either impossible, irrelevant or both. My tentative survey of all these arguments found little, if any, analytic or empirical support for these contentions. Moreover, these contentions are usually advanced without any reference to the literature which has actually explored this issue, and apparently without any knowledge of these scholarly investigations. All the contentions in question can be expressed in one way or another as statements about the behavior of the monetary multiplier (i.e. link between monetary base and money stock) or velocity (i.e. link between money stock and gross national product). They assert in particular that financial innovations substantially modified the pattern exhibited by either multiplier, velocity or both. Such conjectures are fortunately assessable in terms of the observed data. The reports regularly prepared by Robert Rasche for the Shadow, included in all the minutes made publicly available, present evidence thoroughly disconfirming any assertions claiming changes in multiplier patterns. This result supports in particular our view that the Fed's emphasis on money demand shocks is misleading and false. Whatever money demand has done, there is no evidence in the multiplier patterns observed until this year that they eroded monetary control. There is also no evidence supporting President Solomon's (Federal Reserve Bank of New York) allegations that the relative movements of M-1B and M-2 observed in 1981 describe "actually a unique situation". Robert Rasche shows in his statement prepared for our current session that the new observations are quite consistent with the patterns observed over previous years. The last observations introduce no problem for monetary control. The same multiplier patterns also demonstrate that many other contentions invoking the Euro-dollar market or addressing other phenomena to claim erosion of monetary controllability are similarly unfounded.

Consider lastly the range of assertions claiming radical changes in velocity behavior. A preliminary investigation based on time series analysis offers so far no support for the contention of an increasing "looseness" of the link between money stock and national income. The stochastic term in the velocity process, i.e. the so-called innovation, exhibits for M-2 velocity an increase of 10 percent in its standard devision in the 1970's compared to the 1950's. The velocity associated with M-1B shows in contrast a decline of about 30 percent in the standard deviation of its innovation over this period. Lastly, the standard deviation of the innovation of base velocity declined over the same period by about 10 percent.

An investigation of the years 1979-1981 usefully supplements our evaluation. We can compute the probabilities associated with the most recent observations beyond the sample used to infer the properties of a velocity process. Very low probabilities under the maintained hypotheses would suggest that we accept the conjecture of a shift in velocity patterns. We find that the recent observations of base velocity should be expected one out of ten times under a maintained hypothesis. The corresponding results are slightly more than four out of ten times for M-1B velocity and also for M-2 velocity. These probabilities offer no support for the dramatic assertion about the changes in velocity behavior. These results do not deny the occurrence of financial innovations, but their effects on various aspects of the velocity process may hardly justify the reservations and objections voiced without much supportive evidence. The tentative and preliminary evidence suggests no problems for monetary control beyond the range of our experience. There is, once again, no substantive reason for the continued refusal of our monetary authorities to commit their policy to a predictable and effective strategy of monetary control. We have experienced the consequences of their game for the past decade and the most recent two years. The American public surely deserves better service.

FISCAL OUTLOOK, MARCH 1982

Rudolph G. Penner
American Enterprise Institute

In place of my usual report I am attaching my testimony before the Senate Budget Committee. The CBO estimates, discussed there, use economic assumptions that are only slightly more optimistic than those that will be used by the SOMC.

The attached testimony, of course, discusses what should be done and does not attempt to guess what will actually be done. This year's politics are as volatile as the economics.

While there may be a small chance of putting a majority coalition together behind a Domenici-Hollings type proposal, it would be necessary to do that quickly to save much money in fiscal 1983. For example, any change in the social security cost of living adjustment must be decided by the end of April to allow time to reprogram the computers for the July check. Accomplishing that will be quite a trick without Presidential support. Indeed, accomplishing anything will be quite a trick without Presidential support. Therefore, I assume a do-nothing policy for the following estimates while feverently hoping that I am wrong.

A do-nothing policy plus the SOMC economic assumptions provides something like:

	FISCAL YEARS		
	1981 actual	1982	1983
Outlays	660	745	816
Receipts	603	625	645
Unified deficit	58	120	171
Off-budget deficit	21	20	19
Total deficit	79	140	180

THE 1983 BUDGET
TESTIMONY
before the
SENATE BUDGET COMMITTEE
March 5, 1982

I would like to thank the Committee for this opportunity to testify. The views expressed in this testimony are my own and do not necessarily reflect the views of the staff, advisory panels, officers or trustees of the American Enterprise Institute.

I shall base my analysis of the 1983 budget on Congressional Budget Office (CBO) documents which are more realistic in their economic assumptions than is the Administration and in their estimates of spending rates and program costs for any given economic outlook.

ADJUSTED BASELINE DEFICIT

The CBO begins the analysis by projecting spending commitments and the tax laws as they existed at the end of 1981. Their analysis assumes that all programs are adjusted for inflation, including those that are not explicitly indexed.

To view the problem as it must be viewed by the Congress, I shall make three adjustments to CBO figures. First, the President's recommended defense program will be added to the outlay figures. Second, inflation-adjustments to non-indexed non-defense programs will be subtracted. I do not believe that the Congress has ever presumed that such programs must be held constant in real terms. After these two adjustments the budget projections through fiscal 1985 are as follows:

FISCAL YEARS
(billions of dollars)

	1981 actual	1982	1983	1984	1985
Outlays	600	740	806	885	972
Receipts	603	631	952	701	763
Unified deficit	58	109	154	184	209
Off-budget deficit	21	20	19	18	18
Total deficit	79	129	173	202	227

While the CBO economic assumptions are more reasonable than the administration's, they do assume a rather high rate of nominal income growth if the Federal Reserve System carries out its enunciated monetary policy and gradually slows the rate of growth of the money aggregates. For example, if the top end of the Fed's target range for M-1 growth of 5.5 percent for 1982 is lowered by one-half of one percentage point per year and if the amount of economic activity that can be financed by a given money supply continues to grow at the same rate experienced since 1970, the nominal GNP in 1985 would have to be lowered by slightly over 5 percent. If all of that reduction was the result of lower inflation, the 1985 deficit would have to be increased by about $15 billion. To the extent that real growth is also slower than assumed by CBO, the deficit increase would be larger.

I shall not attempt to make a precise adjustment for the relatively small change in economic assumptions suggested by the above analysis, but will instead use the following ranges for the horrendous on-plus off-budget deficit problem faced by the Congress.

FISCAL YEAR	ON PLUS OFF-BUDGET DEFICIT RANGE
1982	$100 - $150 billion
1983	150 - 200 billion
1984	200 - 250 billion
1985	225 - 275 billion

It should be re-emphasized that these estimates depend crucially on the assumptions regarding monetary policy. Monetary policy and fiscal policy are intimately entwined. Inflation can be used to raise tax burdens and to reduce deficits. That will be true even if personal tax brackets are indexed after 1984, but, of course, much less true than it is today.

OPTIONS FOR CUTTING OUTLAYS

The size of the future deficit problems suggests that the Congress will have to alter the old saw, "tax, tax, tax, and spend, spend, spend," to "tax, tax, tax, and cut, cut, cut."

This short paper cannot explore all of the possible options for taxing and cutting, but will have to confine itself to discussing a few main points and basic principles. When confronting the spending side of the budget, it is necessary to begin with the unpleasant fact that defense, social security (OASDI), and net interest outlays will comprise almost 60 percent of the 1982 budget. Without some reduction in defense and social security growth, prospects for controlling total spending in the long-run look bleak. Unfortunately, in both cases, large immediate reductions would be either unwise or unfair. But the emphasis must be on the long-run because the deficit is now a long-run problem.

With regard to defense, it is necessary to be cautious about compromising the readiness of our forces. Savings should be focused on long-run weapons procurement and military retirement pay. The CBO has suggested eleven options for defense cuts, all of which appear reasonable. For example, the B-1 program would be scrapped in favor of the advance technology bomber. Naval forces would be deployed somewhat differently than envisioned by the Administration and production runs of the M-1 tank would be limited in favor of the much less expensive M60A3. Retirement pay would be restructured in a number of ways to compensate for overindexing in the past. Admittedly, the savings from the CBO options are negligible in 1983 and 1984 but rise to $10 billion in 1985 and $15 billion by 1987. Perhaps more dramatic cuts could be found, but the modesty of the CBO suggestions is, at least, interesting in an area where many believe that cuts could resolve a high proportion of the deficit problem.

Social Security presents an enormous challenge to our political system. It is an extremely popular program and the smallest change in the benefit structure is perceived to be a threat to the entire system by the program's multitude of constituents. Yet, because of the system's huge size, even small reductions in its growth rate would save massive amounts in the long-run. Moreover, it is hard to justify holding social security benefits sacrosanct when the recipients have recently been faring better than the average worker and we have been significantly cutting other less affluent recipients of government transfers.

One change which may be saleable politically would be to index benefits to the lower of wage or price increases. I do not believe that the population thinks it fair for social security recipients to do better than wage earners. It could be understood that if this technique caused a significant shrinkage in real benefits over the long run, there would be periodic upward discretionary adjustments in benefits. If the same principle were applied to the indexing of the formula determining future benefits (the formula is now linked to wage growth), large amounts could be saved in the long-run. Again, it must be emphasized that it is the long-run which counts. It is not short-run deficits which are scaring financial markets. It is the fear that they will continue to rise for the forseeable future that is so troublesome. If some signal could be given that social security, the most important component of the non-defense outlay growth problem, was being controlled, it would, in my view, have a significant impact on expectations.

The precise savings implied by the above options depends on the relationship between wages and prices which has been erratic in the recent past. If the system had been in effect between 1975 and 1981, the savings in the latter year would have been $10 billion, largely because of a significant fall in real wages in 1980.

Other indexing options have been suggested and are reasonable given that recent cost-of-living adjustments have been excessive due to upward biases in the CPI. Martin Feldstein has suggested that cost-of-living adjustments compensate for only that inflation in excess of 2 percent per year. Given CBO inflation assumptions this option would save $10 to $15 billion in 1985. Others have suggested delaying the cost-of-living adjustment to September 1. That would save over $3 billion in 1985. The savings would expand significantly if the same options were used in all the other indexed programs of the government.

The suggestions made above imply that relatively minor changes in social security indexing might save $15 billion or more by 1985. To provide some notion of the enormous size of social security relative to other transfer programs, it can be noted that $15 billion in 1985 will be sufficient to finance the entire food stamp program.

The CBO has outlined options for over $25 billion in cuts of non-defense, non-social security programs. All deserve serious consideration. The Administration has suggested further efficiencies in medicare and medicaid which are also worthy of note because without some economizing these two programs will

grow by about 14 percent per year between 1981 and 1985. The Administration has also suggested numerous reasonable options for cutting housing assistance and other programs. It would be a shame if the admittedly serious estimating problems within the President's budget prevented any of it from being taken seriously.

There is, however, one category of Administration cuts which should be rejected. The Reconciliation Act of 1981 concentrated its welfare cuts on the working poor. Many of the Administration's 1983 proposals in the welfare programs would go further in this direction by increasing the rate at which benefits fall as earnings rise. The end result is little incentive for one to work oneself off welfare. The Administration would substitute regulations requiring work for economic incentives. Such regulations have not been effective in the past, and it can be noted that in all other areas of policy the Administration has emphasized increased economic incentives and reduced regulation.

While there is no shortage of options for cutting defense, social security, and other spending, it is difficult, given political and time restraints, to imagine cutting more than $50 billion from 1985 outlays by examining the options one at a time. It would take an effort comparable to that enacted in the Reconciliation Act of last year, and that seems implausible two years in a row.

Because a $50 billion cut would leave a 1985 deficit in the range of $200 billion given my economic assumptions, more extreme action is desirable. Such extreme action generally involves a set of arbitrary cutting rules.

Senators Domenici, Hollings, and others have suggested various combinations of generalized rules and freezes which have considerable appeal. While it must be admitted that any general rule is bound to create numerous inequities and inefficiencies, a generalized approach may be the only practical way to make a severe dent in the strong upward trend in spending which was barely affected by the strong measures of last year.

If all that is possible on the outlay side is $50 billion or less in cuts, it is my judgment that about $100 billion in receipts increases are required to start bringing the deficit down to tolerable levles by 1985. By tolerable levels, I mean something in the range of $100 billion. Obviously, even this is nothing to brag about and a lower deficit would be preferable, but unless some action on the outlay side more dramatic than anything undertaken in past history occurs, I see no way of getting there from here which does not involve extremely disruptive tax increases.

Again, all of this assumes that the Fed adheres to its targets. While inflation can be used both as an implicit tax and as a means of raising explicit taxes, most observers would agree that inflation is the worst possible approach to deficit reduction.

OPTIONS FOR INCREASING RECEIPTS

If we are embarking on a path involving $100 billion in extra revenue, it would be desirable, in the ideal, to follow certain basic principles in raising that much money. First, if it can be avoided, there should be no tax increase in calendar 1982. the economy is in a tenuous position and significant tax increases this year increase the risk that the recession will deepen and that the initial stages of the recovery will be sluggish.

Second, increases in the tax burden should take the form of broadening the tax base instead of raising marginal tax rates. Moreover, base broadening measures should be aimed at enhancing economic efficiency. Some examples of such base broadening efficient measures are as follows: Tax employer paid health insurance to reduce the incentive to buy inefficient insurance (raises $6 billion in 1985). Eliminate the interest deduction on consumer loans other than mortgages ($8 billion in 1985). Tax workman's compensation and unemployment insurance to reduce the work disincentives inherent in those programs ($6 billion in 1985). Other examples can be found in the CBO report on Reducing the Deficit.

Third, base broadening measures should avoid increasing the tax on capital income. There is one important exception to this rule. The depreciation law passed last year becomes very much more generous in two steps scheduled for 1985 and 1986. Given the inflation and interest rate assumptions inherent in this analysis, the tax burden on new equipment investments will become negative, i.e., the tax system will provide outright subsidies for investing. This goes too far. Those two steps should be eliminated unless inflation and interest rates rise above current levels. That would raise about $2 billion in fiscal 1985, $10 billion in fiscal 1986, and $20 billion in fiscal 1987.

Fourth, there are good, long-term national security reasons for increasing the taxation of the consumption of energy in this country. In particular, recent weaknesses in the price of oil may dampen our conservation efforts and should be countered. This could be accomplished with a tax on imported oil which

aimed at eliminating reductions in the real price of oil. If nominal prices remain constant, a tariff of about $5 per barrel could be justified in 1985. This would bring in about $17 billion including its impact on windfall profit tax receipts. Alternatively, raising the gasoline tax to 10 cents per gallon would raise about $5 billion by 1985.

Fifth, whenever practical, user fees should be charged to the beneficiaries of government goods and services. CBO suggests options which would raise $6 billion by 1985.

Although the principles suggested above could be used to raise large amounts of revenue by 1985, the step-by-step approach on the tax side faces the same practical problems as the step-by-step approach on the spending side. A score of legislative changes would be required and each would involve an enormous political battle over a few billion. Since there is a pressing need for more receipts and quick action is required, it may be necessary to eliminate the 10 percent tax cut in personal income taxes scheduled for July 1, 1983 and to delay indexing one year. This violates my second principle that marginal rate increases be avoided. But only one political battle would be required and if successful, it would raise $52 billion by 1985.

It may be time to begin a debate on a brand new tax such as a value added tax or a national sales tax. Every rate point would raise $10 to $15 billion if the base was kept fairly broad.

I would prefer to avoid such a tax, since once implemented, it would be too easy to increase. However, absent a drastic reduction in the deficit following the outlay cutting and receipts raising approaches discussed above, a new broad based tax may be essential.

THE IMPACT OF DEFICITS

Why is it so important to reduce the deficit? Even if deficits approach $250 billion in 1985, that will only amount to about 6 percent of the GNP and other countries have continued to grow and have controlled inflation while running such deficits.

In my view a deficit of that size has four negative impacts. First, there is the traditional crowding out effect. Usually, it is discussed as though the only important crowding out involves business capital investment. It is said further that that will be mitigated by increased personal savings inspired by the tax cut

and by an inflow of foreign saving. However, things are not quite that simple. First, the prospective deficits are very large relative to personal saving. Personal saving was only $100 billion in fiscal 1981. It may be increased greatly by the tax cut, but it will also be increased by the deficit itself as higher interest rates crowd out consumption, especially spending on interest-sensitive durables such as autos.

In other words, crowding out is a widespread phenomenon and does not only affect capital formation.

For example, inflows of foreign saving will require the development of a current account deficit since the balance of payments has to balance. This will be accomplished by bidding up the value of the dollar which will crowd out export and import competing industries. Again autos get clobbered. Housing is also very sensitive to crowding out and the recovery of that sick industry will also be delayed by larger deficits.

In any case, it will be a close race to see whether personal saving catches up with the deficit. If they remain approximately equal, it means that all capital formation must be financed using business saving which, while increased by the tax cut, is being hurt by low profits during the recession; state and local saving, which will be hurt by the recession and major cuts in grants; and foreign saving which has the negative impacts discussed before.

The second negative effect of the deficit involves inflationary expectations. Deficits are not inflationary unless the Federal Reserve System buys Treasury bonds by creating new money. This is called monetizing the debt. There is no technical need to monetize, but the political pressures to do so are enormous as people complain about the high interest rates caused by the deficits. In fact, several empirical studies suggest that money creation has tended to accelerate in the past whenever deficits rise. Even if investors believe that there is only a small chance of that happening in the near future, the results of monetization would be so devastating that investors increase the risk premium demanded on loans. Thus real interest rates may be raised by more than the amount which would result from the crowding out effect working alone.

Third, there are adjustment problems involved in suddenly adjusting to a high deficit strategy. In part, we shall suffer some costs because we have been a relatively low deficit country in the past. Suddenly, investors must be

persuaded to increase their holdings of government debt at a much higher rate than was experienced in the past. Investor habits and perhaps some institutions will have to be changed. For example, imagine that we can hold debt creation to the $150 billion per year level in the period 1983 through 1985. The Fed would have to buy about $8 billion per year to implement their targets. Debt in the hands of private investors would have to rise at 16 percent per year or about 8 1/2 percent in real terms given CBO inflation assumptions. Nothing approaching this rate of increase has occurred since World War II. The previous high occurred in the '72-'76 period when the nominal debt rose at 11 percent per year or about 4 percent in real terms. Persuading investors to begin absorbing this much debt suddenly may take a larger rise in interest rates than if they had been absorbing it at such levels over a long period.

The last impact of the deficit involves the interest bill itself. With high deficits it becomes a driving force on the outlay side of the budget. Net interest will already constitute 12 percent to 13 percent of outlays in 1983 compared to about 7 percent ten years earlier. The increase in the interest bill between 1981 and 1983 will far exceed all of the budget cuts occuring in 1981. Interest payments may not have the same negative impact on the economy as other government spending but they do have to be financed and they can be expected to keep growing.

CONCLUSION

We face an extraordinarily difficult situation. The long-run tax cuts of last summer mortgaged our future because they were not countered by sufficient budget cuts. The prospect of huge deficits is causing much uncertainty which, in my view, is delaying recovery from the current recession. It is important quickly to show some resolve in reducing the deficit. At this point, we should not waste much time debating the fine points about exactly the right kind of spending cut or tax increases. Speed is important because there is a considerable risk of entering a British type recession if interest rates are not brought down quickly. The recent substantial fall in long rates is reassuring. A more sensible fiscal policy would help greatly to maintain and extend that decline thus increasing the chances of a healthy economic recovery beginning before mid-year. If we wait to see more economic data before taking unpleasant actions that data itself may be very unpleasant.

STATEMENT TO THE SUBCOMMITTEE ON DOMESTIC MONETARY POLICY OF THE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS, UNITED STATES HOUSE OF REPRESENTATIVES

March 4, 1982

H. Erich Heinemann
Morgan Stanley & Company, Incorporated

Mr. Chairman, members of this distinguished Subcommittee: I am pleased to have the opportunity to present my personal views on the conduct of monetary policy. The Subcommittee is to be congratulated on its line of inquiry. The way in which we as a nation deal with the issues you have raised, while they are admittedly technical, will have an important effect on our quality of life. The definition of the money supply, the manner in which bank reserve requirements are established, the impact of changes in the financial system must all be dealt with in our quest to eliminate inflation and to reestablish sustainable real growth. At the same time, they should also be seen within a larger public policy context. Most critical, we must recognize that fiscal policy is now, as always, inextricably intertwined with the conduct of monetary affairs. However, taxes and spending are not the subject of these hearings; therefore, to the best of my ability I will resist temptation and not dwell on such matters.

In my judgment, analysis of the issues concerning monetary control that are to be considered in these hearings should include the following points:

* The Congress and the Administration have no practical alternative other than to support the efforts of the Federal Reserve system to achieve a credible, stable, and predictable deceleration in the long-run rate of monetary expansion. Indeed, elected officials can make a great contribution to economic stabilization and lower interest rates by insisting that the monetary authorities actually implement their announced anti-inflationary goals. This process has not been, will not

be, cannot be, cost free. But the costs will be far lower — in terms of lost output and the potential threat to the workings of a democratic society — than would be the case should the adjustment be delayed. Any sustained or systematic effort to push interest rates down by pumping up the money supply would quickly and inevitably backfire. Anticipated and, eventually, actual rates of inflation would soon rise, thus confirming the worst fears of participants in the financial markets. Interest rates would rocket far higher than at present, and a major crisis would be threatened. As it is, the cost of credit today represents a severe disequilibrium both for the domestic and the world economy. Tight money, and only tight money, will bring interest rates down to establish the foundation for stable expansion in the real economy.

* Financial innovations — which Chairman Fauntroy in his very kind letter of invitation indicated are to be the primary concern of these hearings — are in my opinion simply a normal and expected market response. They reflect the interaction of high inflation, high nominal interest rates, and counterproductive governmental controls on deposit interest rates.

  If, as, and when inflation and interest rates are reduced, and the controls are eliminated, the dominant role played by these innovative practices will quickly diminish. Financial innovation, which is an ongoing process, will not cease, but its pace and importance should be attenuated. In the meantime, money market mutual funds, NOW accounts, the all-savers certificate, IRA accounts, and the like appear to have had little or no effect on the basic monetary process. However great the difficulties these changes may have posed for the statisticians who must measure the money supply, the underlying linkages have not been seriously disturbed. Sustained movements in the monetary base, which is the only aggregate the Federal Reserve can control directly, continue to be reflected in the money supply (measured as M-1) and, after a lag, in the behavior of total spending and prices. The level of short-term interest rates, by contrast, has proven to be unreliable as a guide for Federal Reserve policy actions.

* This Subcommittee should take the lead in reexamining the basic premises on which the present scheme for the maintenance of bank reserves has been founded. Ultimately, Congress should consider a simplified, uniform reserve requirement applied equally to all liabilities of all financial institutions. The Depository Institutions Deregulation and Monetary Control Act of 1980 established new ground rules governing the way in which financial organizations hold reserves against their deposits. Reserve requirements, of course, lie at the very core of the monetary control process. The specific form in which this legislation was adopted has been little debated — either before or after its passage. The present procedures may in fact prove to be a retrogressive step that could ultimately weaken the basic linkage between Federal Reserve actions, the money supply, and the economy. My own preference, which I will outline in my testimony today, would be for an approach to bank reserve requirements that would emphasize the twin principles of uniformity and simplicity -- neither of which are characteristic of the legislation that is now being gradually placed into effect.

* Short-run variance in reported rates of monetary growth represents a significant problem with which the Federal Reserve ought to deal. But the nature of the concern is almost certainly different from the popular impression. Significant and unpredictable changes in the money supply have, of course, been commonplace. As a case in point, the reported level of M-1 declined slightly between April and October last year but rose at an annual rate of roughly 18 percent between November and January. All this occurred within the context of a policy "committed to restraining growth in money and credit to exert continuing downward pressure on the rate of inflation." Market participants have learned from bitter experience that unstable monetary policy can lead to wide swings in inflationary expectations, big changes in both short- and long-term interest rates, shifts in the pace of real economic activity, and large social costs. To be sure, in theory short-run changes in monetary growth should be ignored by the marketplace and should have no impact on the economy. The problem lies in the fact that the volatile pattern in the money stock has been

far from random, but rather has had a systematic inflationary bias. Thus, when the money supply took a big jump in the first week of this year, market participants quickly extrapolated this change into a long-term trend.

It is for this reason that I have long advocated — along with the other members of the Shadow Open Market Committee — reforms that would tighten the Federal Reserve's short-run control over monetary movements. The principal elements in this program include adoption of contemporaneous reserve accounting, market-oriented discount rate, and explicit targeting of the monetary base. But it is important to understand the nature of these proposals — what they would do, and what they would not do. They would not eliminate short-run volatility in the money supply. In fact, it is probably not desirable to do so — even assuming that such were possible (which is doubtful). What such reforms would accomplish is a sharp reduction in both the actual and the perceived risk that week-to-week blips in the money supply may be translated into very systematic — and highly inflationary — accelerations in monetary expansion.

To repeat, random and temporary fluctuations in money growth are, in the first instance, inevitable, and, in the second, not a problem so long as they do not become part of a longer run pattern. The Federal Reserve should take the initiative to tighten its short-run control over the money supply —not to prevent week-to-week changes, but to assure that random fluctuations remain just that. Actions of this sort should help lower the risk premium that is now embedded in the interest rate structure. At the same time, interest rates — except on very short-term obligations of, say, no more than a few days' duration — should also be more stable.

BACKGROUND TO CRISIS

In a very real sense, the fact that these hearings are being held here today is symptomatic of the turmoil with which participants in the financial markets are now confronted. Roughly two decades of accelerating inflation and rising transfer payments have produced deep distortions in the economy. Governmental policies which (1) reward present rather than future consumption, (2) favor the non-producer at the expense of the producer, and (3) emphasize the redistribution and not the expansion of income and wealth lie behind the long-

term trends of inflation and lower real growth. To an observer sitting in the capital markets, it would appear that there is now a national consensus that this deterioration must end. But it is certainly not surprising that there is little agreement on the manner in which a change of this sort ought to be effected.

This is very plain in the debate over fiscal policy. I like to use a simple political model to illustrate the diversity of interests involved in the governmental spending process, and their relationship to monetary policy and the financial markets. There are, obviously, three major constituencies to be considered:

* First, there are beneficiaries of governmental programs, who will seek to obtain as much as possible. This is a very populous group that consists of individuals who believe they have a compelling need to spend income earned by someone else — whether in the form of a transfer payment, a defense contract, or any other purchase of goods and services by the Government.
* Second, there are taxpayers, mainly the broad middle class, who will seek to pay as little as possible. This second group is in practice clearly not mutually exclusive from the first, but its self interest is sharply divergent.
* Third, and finally, there are savers who must make voluntary decisions whether, and at what price, to purchase Government securities to bridge the gap between what the former group wants and what the latter group is willing to pay.

It is natural that public attention should have focused primarily on the obvious clash between beneficiaries and taxpayers who are numerous and whose conflicting desires are translated quickly into votes. The savers' position in the governmental process may be less evident, but it is no less vital. The impact of the unlegislated tax on savings which inflation represents comes in a stream of individually small but cumulatively large negative effects that stretch indefinitely into the future. In part because most fixed-income investments -- which are particularly vulnerable to the inflation tax and which comprise the bulk of individual wealth in the United States — are held indirectly through banks, thrift institutions, insurance companies, and pension plans, the nature of this erosion in value is not well perceived. Nonetheless, savers vote, not so much at the polls (though they do that, too) as every day in the capital market.

Today, after 20 years of irregular increases in the unlegislated inflation tax, savers are demanding a "risk premium" before they will play in the Treasury's game. Indeed, the premium is now so high that the rest of the economy is finding it difficult to live with the resulting rise in real interest rates.

In my judgment, it is against this background that we must examine the appropriate course for monetary policy. The figures that have been presented with this testimony (and in particular Figure 1, which traces the course of the monetary base and bank reserves) make clear that the underlying pattern of federal Reserve actions has already shifted decisively toward restraint. This means that the ball has now moved largely to the fiscal policy court, even as the monetary authorities work to achieve further reductions in the rate of growth in the money stock. Any other course would quickly and inevitably exacerbate the tensions now evident in financial markets.

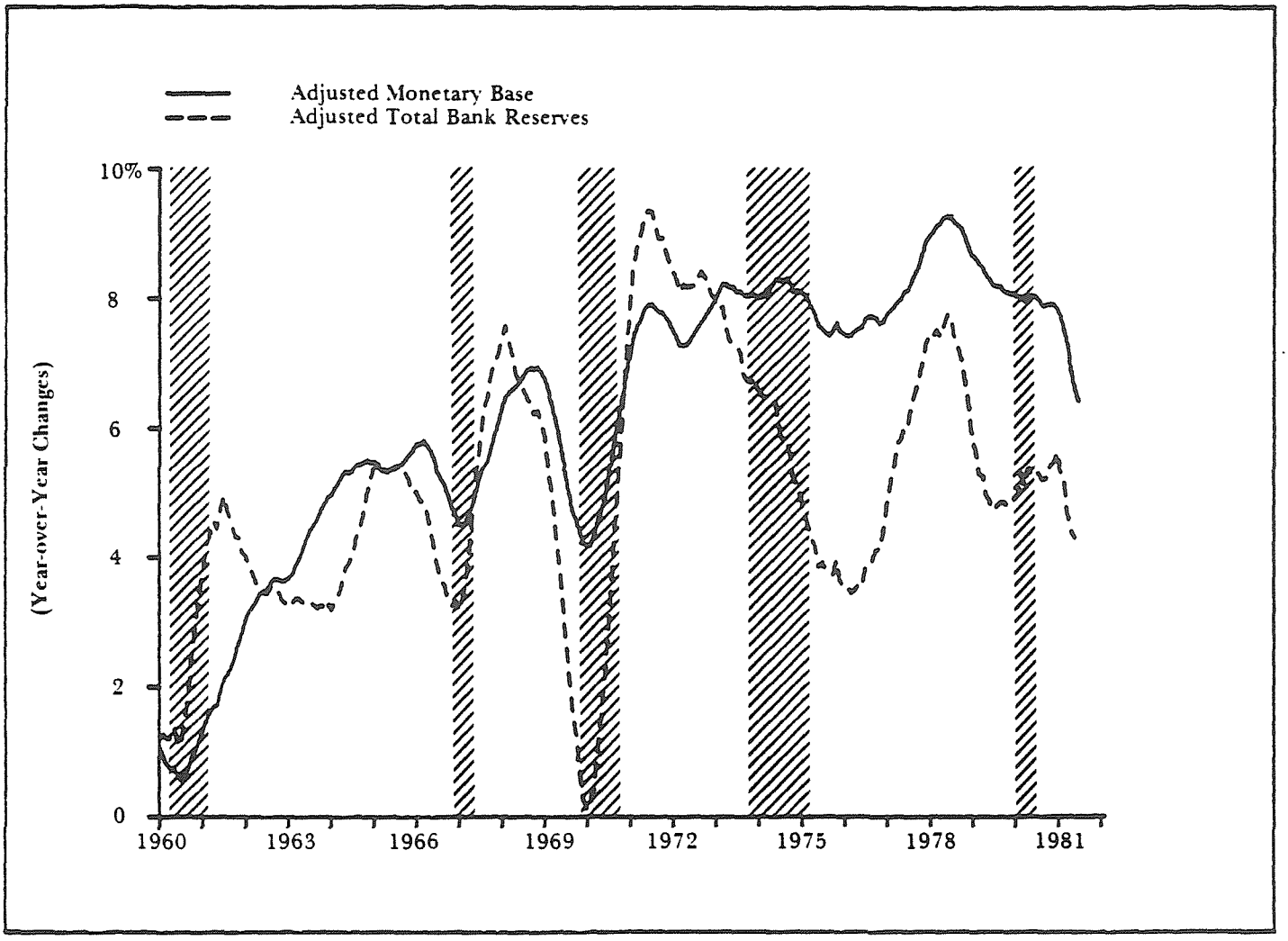
THE MORE THINGS CHANGE . . .

I have been active as a chronicler and analyst of this nation's financial structure for almost a quarter of a century. It is fair to say, I think, that over this span there has been a tale no more enduring than that of the distortions produced by, and the breakdown of, the limits placed by Congress during the Depression on the payment of interest on bank deposits. With the innovation of the negotiable certificate of deposit and premium rates on Federal funds approximately 20 years ago, it was plain that this regulatory structure was beginning to disintegrate.

At the same time, the continued existence of a tattered regulatory umbrella encouraged thrift institutions — which are designated in the law as the principal source of home financing — to maintain portfolios of long-term, fixed-rate assets and short-term, much more market sensitive liabilities. The severe mismatch that resulted of course led to recurring "crises" when deposits flowed out of savings organizations coincident with cyclical peaks in interest rates. there is little doubt in my mind that Government's desire in each cycle to "do something" to alleviate the plight of the housing industry has played an important role in the progressive acceleration in monetary growth, the continuing increases in inflation, as well as the successively higher peaks in interest rates and lower rates of real growth.

Figure 1

Monetary Policy Has Tightened



Data are 12-month moving averages centered on the sixth month.

Shaded areas, except for the mini-recession of 1966-1967, represent periods of recession as designated by the National Bureau of Economic Research.

Sources: Federal Reserve Bank of St. Louis; Econalyst Data Base; Morgan Stanley Research

The rationale for controls on interest rates is often cited as a desire to limit the cost of credit. But to the extent that the controls have encouraged a distorted structure among thrift institutions and recurring Federal Reserve attempts to "help" in difficult circumstance, this has not been the result. Thus, as so often happens in such cases, governmental intervention in the market process designed to force feed the supply of funds for housing and keep the cost of mortgage finance down has in practice had the opposite consequence.

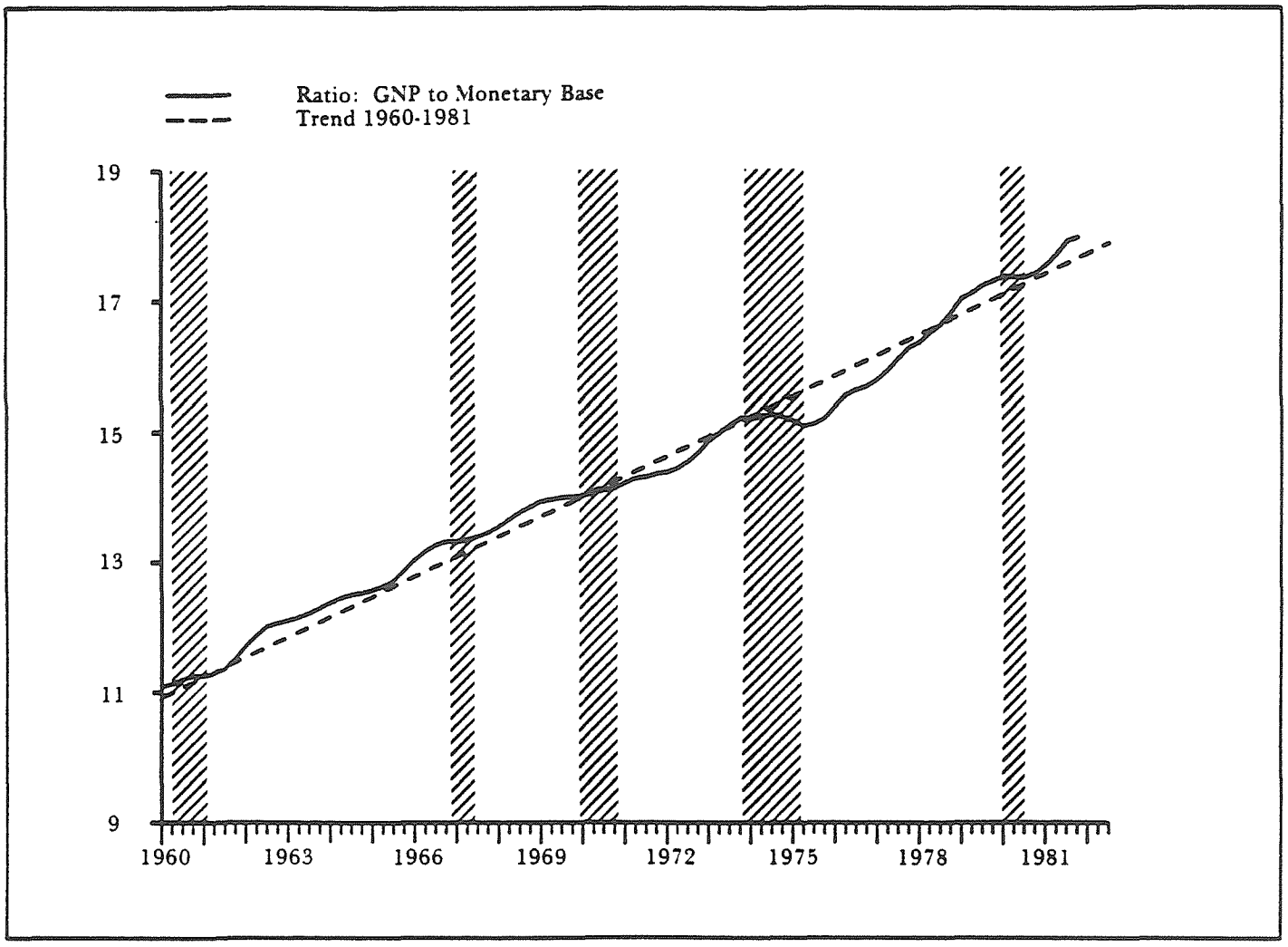
Turning to the more immediate concern of these hearings — the money market mutual funds, cash management accounts, negotiable orders of withdrawal, and the like, which have proliferated in recent years — I can see little to differentiate recent developments in form or substance from the events of the early 1960's. Indeed, it seems fair to argue that the repeal in the marketplace (if not in Congress) of deposit interest rate ceilings (on both demand and time accounts) has finally reached the level of the man in the street. Ordinary savers — if you will, the members of this country's yeoman stock who do the nation's work, pays its bills, and save for its future — were ripped off during years of accelerating inflation, but they are now coming into their own. Increasingly, a fair return is available to the small saver as well as the big one.

From the vantage point of a monetary technician, the most remarkable characteristic of this entire saga has been the extraordinary stability of the financial response mechanism through an era of truly dramatic structural changes. Figure 2, for example, illustrates the essential stability between sustained movements in the Federal Reserve System's balance sheet (as measured by the adjusted monetary base calculated by the Federal Reserve Bank of St. Louis) and the subsequent sustained level of money demand for goods and services in the United States. As the President's Council of Economic Advisers stated in its most recent Annual Report:

> "It is often stated that such financial innovations as money market funds undermine the conduct of monetary policy. Statistical support for this assertion is dubious. What would have to be demonstrated is that financial innovation — which is to a large extent the result of policy-imposed constraints on the financial system in an inflationary environment — has made it more difficult to achieve a given monetary target, and that the link between changes in nominal GNP and changes in the monetary

Figure 2

The Trend of Velocity Has Been Stable



Data are trailing four-quarter moving averages. Monetary base has been lagged two quarters.

Shaded areas, except for the mini-recession of 1966-1967, represent periods of recession as designated by the National Bureau of Economic Research.

Sources: Econalyst Data Base; Morgan Stanley Research

aggregates -- that is, changes in velocity -- has become less predictable. The evidence does not seem to support either proposition."

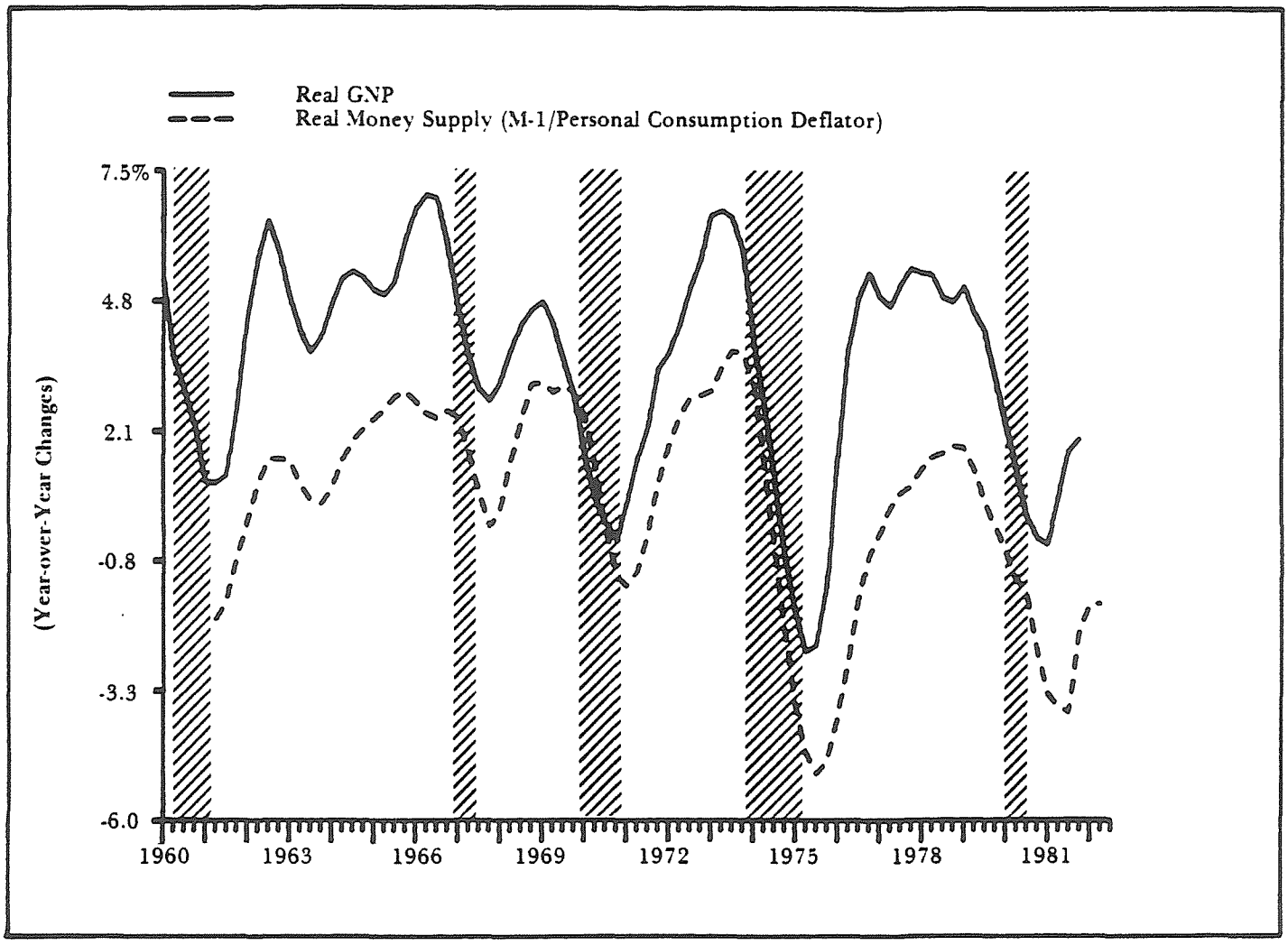
Moreover, so far as money market mutual funds are concerned, there are some important tehcnical considerations to keep in mind. The shares of such funds are of course not "money" in the generally accepted sense of being in and of themselves assets that would serve as both a medium of exchange and a store of value. Rather, if I desire to purchase shares in my money market mutual fund account, I must surrender title to some quantity of money by sending a check or a wire transfer drawn on an M-1 type balance in order to do so. Conversely, when I pay for someting with a money market mutual fund "check," I actually give the fund an order to sell shares in my account. The fund, in effect, obtains some M-1 for me so that my payment can be made. The point is, that while my money market fund account ebbs and flows, the quantity of transaction balances in the banking system is not affected. Thus, while money market funds may create a significant effect on transaction velocity (the turnover of deposits in the banking system), there has been far less impact on income velocity (which is the ratio of GNP to money supply).

What's more, the behavior of both the overall economy and of the price level continues to follow closely prior changes in the monetary base and the narrowly defined money supply. Figures 3 and 4 trace these relationships over the past 20 years. For example, short-run changes in the rate of monetary expansion -- which is shown in Figure 3 on a real basis, adjusted for price changes -- are generally reflected with a lag of about six months in the pace of real activity. This shows clearly in the figure, including the blip in economic growth in late 1980 and early 1981 that followed the surge in monetary growth between May and November 1980. (Because the data in Figure 3 have been computed as four-quarter moving averages, the current business downturn is not yet reflected.) Similarly, the rate of change in the price level started to slow in the spring of 1981, almost exactly two years after parallel slowdown in the underlying rate of monetary growth in mid-1978 (see Figure 4).

In sharp contrast, Morgan Stanley's measure of the "expanded" money supply -- which includes in addition to M-1, overnight repurchase agreements and Eurodollars, as well as 50 percent of money mutual funds outstanding -- has shown a sharp acceleration over the past year, owing to the rapid growth of money market funds. On the assumption that there are systematic associations

Figure 3

The Synchronous Movement of Money and the Economy



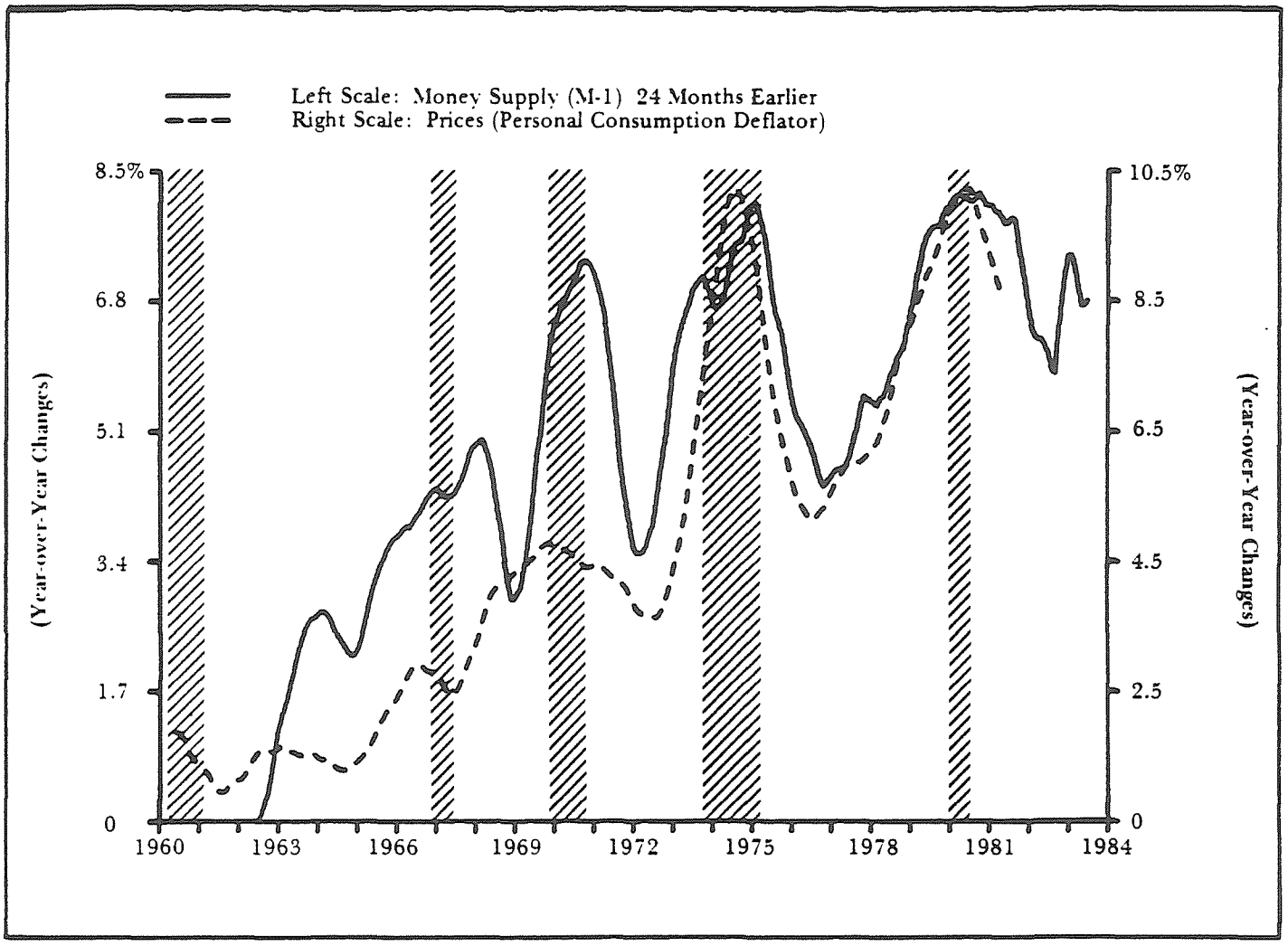
Data are trailing four-quarter moving averages. Money supply has been lagged two quarters.

Shaded areas, except for the mini-recession of 1966-1967, represent periods of recession as designated by the National Bureau of Economic Research.

Sources: Econalyst Data Base; Morgan Stanley Research

Figure 4

Disinflation is on Schedule



Data are 12-month moving averages centered on the sixth month.

Shaded areas, except for the mini-recession of 1966-1967, represent periods of recession as designated by the National Bureau of Economic Research.

Sources: Econalyst Data Base; Morgan Stanley Research

between money, spending, and prices, one would have expected an acceleration of this sort to be reflected in the economy (the year-over-year increase in expanded money was almost 17 percent in January 1982, up from 9.4 percent a year earlier). The fact that it has not been so reflected could be an indication that (1) money fund shares lack some of the critical properties of money, or (2) as is more likely, their creation does not result in a net expansion of the effective stock of transaction blances. (Data on the expanded money stock are reported regularly in Morgan Stanley's weekly publication, Money and the Economy.)

In summary, it seems to me unlikely that the rapid spread of devices to avoid Federal limitations on the payment of interest on deposits has impaired in any material way the conduct of monetary policy. Aggregate economic activity continues to be most closely related to prior changes in traditional measures of transaction balances. In any event, to the extent that financial innovations of the sort being focused on in these hearings represent a "problem" — which I doubt — the way to deal with it is to reduce inflation and eliminate regulations. New rules, which would have as their primary purpose a reduction in the yield to investors, would serve no useful end and would be inequitable to some of the nation's most productive citizens, who too long have been penalized by the unlegislated inflation tax.

TARGETS FOR MONETARY POLICY

One of the central themes in these hearings, as I understand the questions raised by the Chairman, concerns the proper definition of the "money supply" that the Federal Reserve System should be seeking to control in its day-to-day implementation of policy. This is, of course, one of the oldest questions in economics, and one which has never been answered satisfactorily. To be sure, there is fairly general agreement that currency and accounts available for third party payments inlcude most of the criteria of "money." The Federal Reserve's official definition of a "transaction account" picks up most of these characteristics:

> "All deposits on which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, and telephone and preauthorized transfers (in excess of three per month) for the purpose of making payments to third persons or others."

In practice, however, it is obvious that there are many gray areas that greatly complicate the problem of defining and measuring "money" for the purposes of monetary control. Just to cite one very simple example — how would you classify a bank account which is generally inactive but is occasionally used aggressively (say, once every two or three years) when its holder decides to make a series of major expenditures? There are no easy answers to questions of this sort. In the meantime, the Federal Reserve is left with the totally practical need to decide what it should be controlling, and how. I have already argued that the monetary base and conventionally defined M-1 have provided adequate gauges of monetary changes during a period of major structural upheaval in the financial system. Sustained accelerations or decelerations in these aggregates have generally provided reliable clues to subsequent developments in total spending, and, eventually, in inflation. But adequate performance is not optimal performance. Therefore, it seems to me that consideration should be given to reforms that could further stabilize the relationships between Federal Reserve actions in controlling the monetary base, growth in the money supply, and the overall performance of the economy.

The Monetary Control Act of 1980 was designed, as you know, to simplify and rationalize bank reserve requirements. To some extent, it succeeded in doing so. When the Act is fully implemented in 1987, bank reserve requirements will indeed be less complicated than they were prior to its passage. But to my way of thinking, reserve requirements will still be too complicated and will still represent a thinly disguised, unlegislated tax on the banking system. There will still be three categories of bank reserves (12 percent, 3 percent, and zero, depending on the type of account and its maturity), and the actual level of reserves will still be well in excess of the cash balances prudent bankers would hold in the absence of any regulation. In rough outline, the approach I would prefer is as follows:

* Remove all constraints on the payment of interest on deposits, including the remaining prohibition on the payment of interest on demand deposits. Action of this sort would represent an essential first step to eliminating the incentive to develop subterfuges to avoid rate ceilings and differential reserve requirements. For example, the automatic transfer service offered by many banks had the effect — prior to the passage of the Monetary Control Act — of reclassifying

what in reality were demand deposits into savings accounts. This lowered the effective reserve requirement for the bank and allowed the depositor to earn interest on a checking balance, which at that time was illegal.

* Impose a single, uniform reserve requirement at an absolutely low level (say, one or two percent) on all liabilities of all financial institutions that offer deposit services to the public. The only possible exemption from this reserve requirement might be capital notes of perhaps seven years' or more maturity. There would be no need for banks to try to avoid such a reserve requirement, since prudent banking demands that some cash be kept on hand at all times.
* Allow the marketplace to determine the yield on all liabilities of financial institutions. For purposes of social accounting, the public and the institutions would be asked to distinguish between sight accounts (from which third-party payments could be made) and time accounts (from which such payments could not be made). There would be no incentive for banks to allow their depositors to blur the distinction between the two types of accounts because both would carry market rates of interest.
* Require the Federal Reserve to manage its own balance sheet explicitly by setting targets for the monetary base. The base is the only aggregate that the central bank can control directly and in any event (with or without additional reforms) ought to be the primary focus of Federal Reserve actions. The present system of multiple monetary targets has its bureaucratic uses, since emphasis can always be placed on the aggregate that is closest to the mark, but it does not provide optimal policy performance.

The advantage which in my judgment would emerge from an approach of this sort would be a substantial stabilization of the relationship between direct actions by the monetary authorities and the subsequent response in monetary growth, in the financial markets, and in the overall economy. On the assumption that growth in the monetary base was then maintained along a

stable and non-inflationary path (a critical assumption, to be sure), the likelihood of attaining a sustainable acceleration in real economic growth would be greatly enhanced.

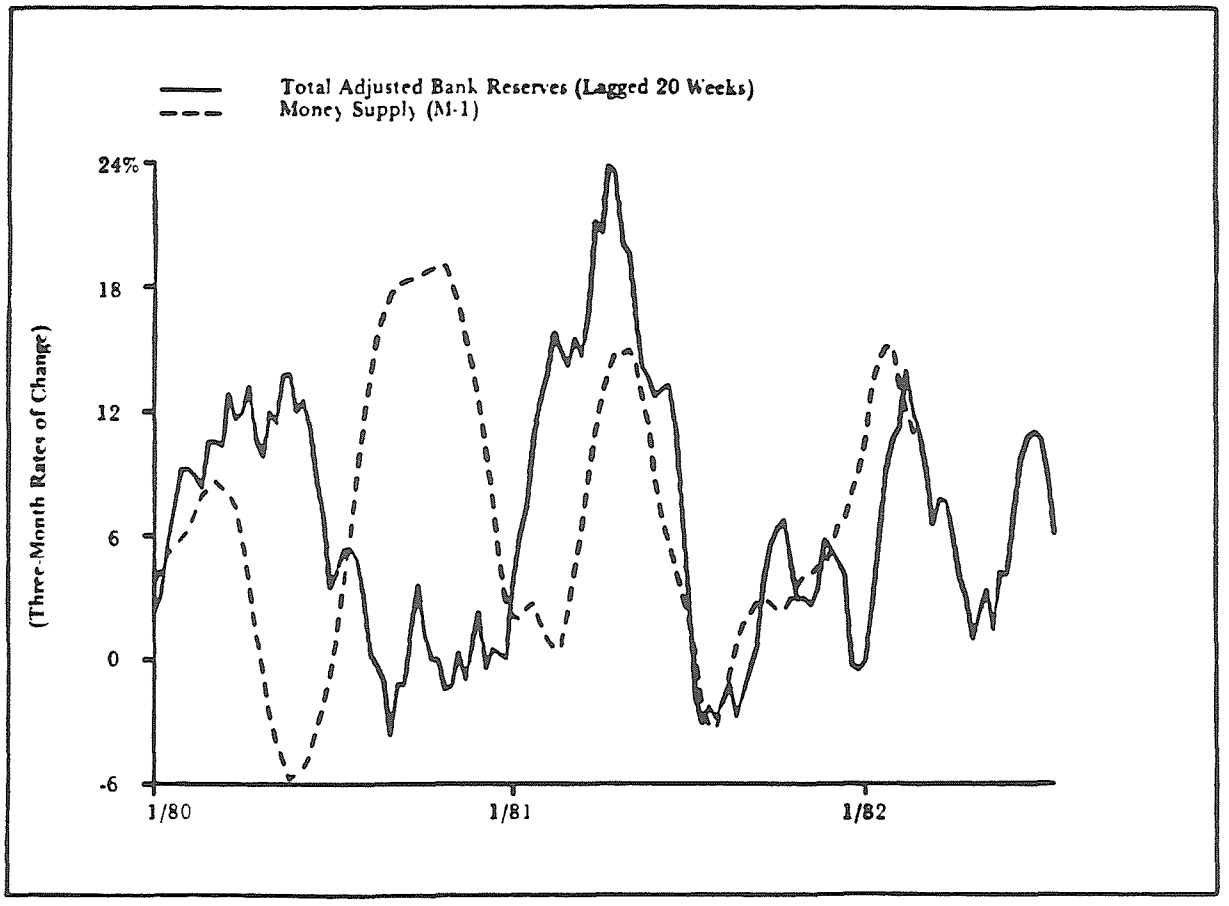
Thank you for the opportunity to present my views here this morning.

APPENDIX

Additional material provided to the Shadow Open Market Committee by H. Erich Heinemann, Morgan Stanley & Co.. Incorporated.

Figure 1

The Lagged Relationship Between Bank Reserves and Monetary Expansion

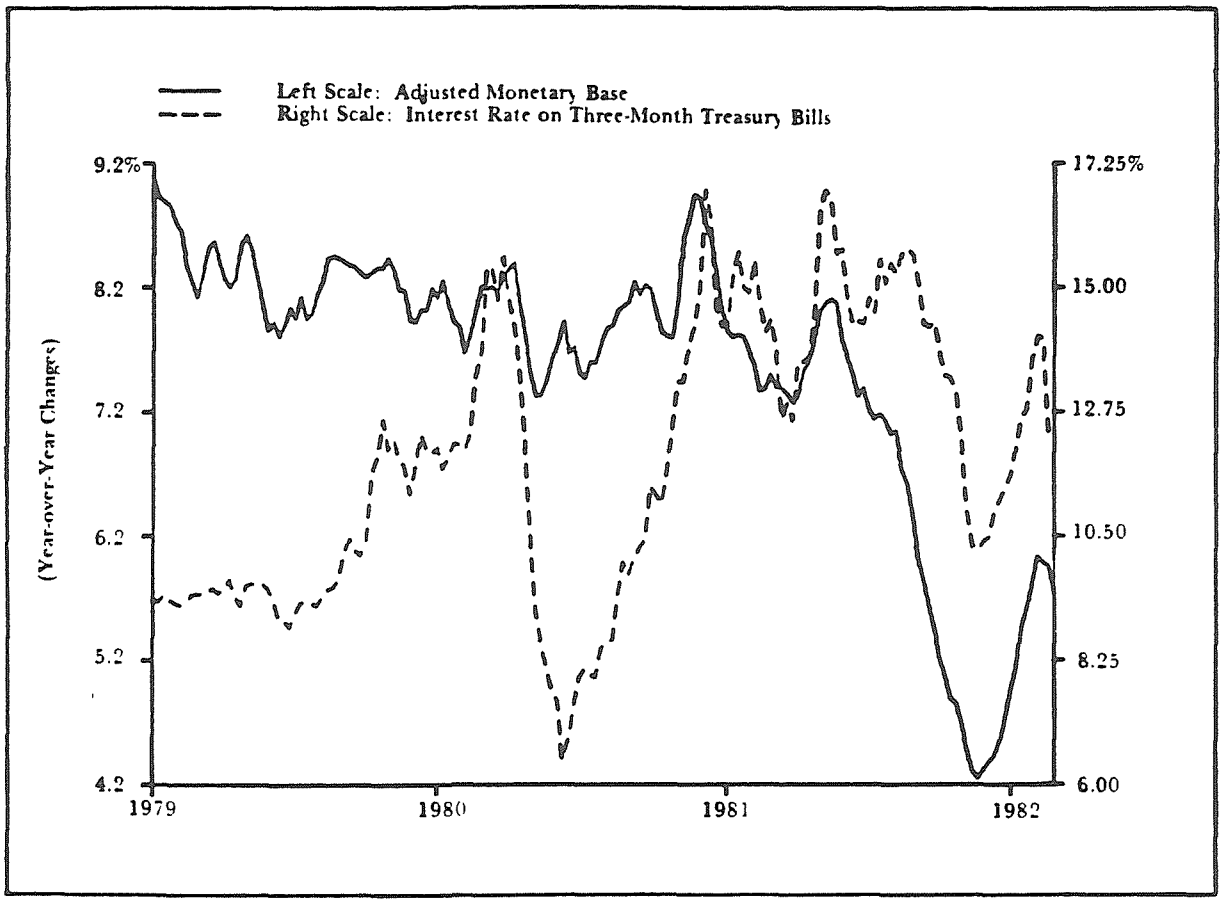


Data are four-week moving averages.

Sources: Econalyst Data Base; Morgan Stanley Research

Figure # 2

Monetary Base and Short-Term Interest Rates

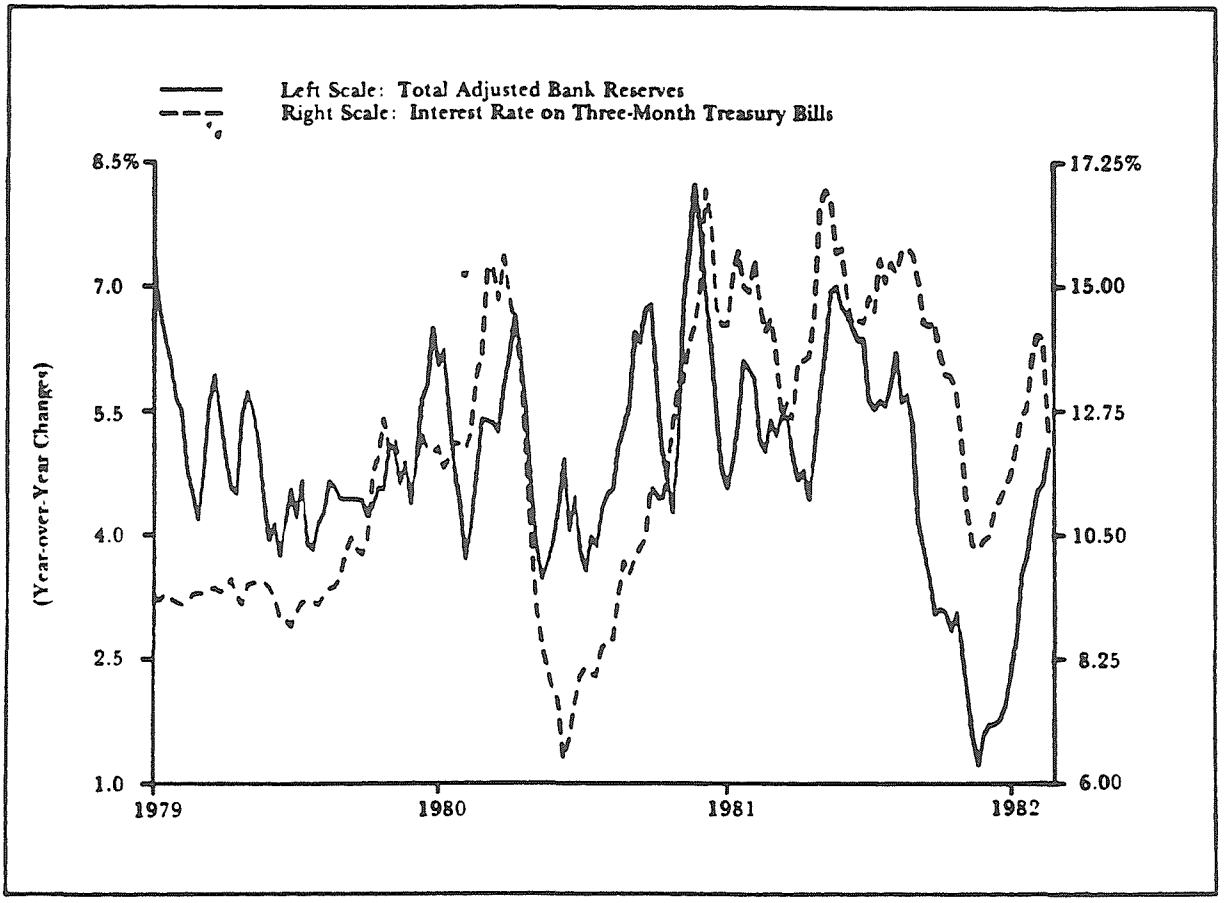


Data are four-week moving averages

Sources: Econalyst Data Base; Morgan Stanley Research

Figure 3

Bank Reserves and Short-Term Interest Rates



Data are four-week moving averages.

Sources: Econalyst Data Base; Morgan Stanley Research

THE BEHAVIOR OF THE MONETARY AGGREGATES: THE PREDICTABILITY OF THE PAST AND SOME PROGNOSTICATIONS FOR THE FUTURE

James M. Johannes and Robert H. Rasche
Michigan State University

I. A RETROSPECTIVE ANALYSIS OF 1981

Judging by the hand wringing and gnashing of teeth on the part of Federal Reserve officials in the course of recent speeches, 1981 represents a year of historically unprecedented difficulties for monetary management. A representative sampling of the anguish can be culled from the recent sayings of President Solomon of the Federal Reserve Bank of New York:[1)]

> The ongoing process of financial innovation seems to have produced a sharp and largely unexpected divergence this year in the performance of the narrow money measures (such as M-1B) and the broader measures (such as M-2 and M-3). In the eleven months through November, M1-B, adjusted for the effects of the introduction of nationwide NOW accounts at the beginning of the year, rose at a 2.8 percent annual rate. The comparable rates for the broader measures M-2 and M-3, however, were 10.1 percent and 11.3 percent, respectively. . . . Perhaps just as important, we did not anticipate, and almost certainly could not have anticipated, the extent of these divergencies. In terms of the midpoints of our 1981 targets for M-1B and the broader measures, the divergencies allowed for were far smaller than the divergencies that have actually materialized. . . . Thus the very large gap between M-2 and M-1B in 1981 represents an extremely unusual, if not actually unique situation that has complicated the task of setting policy as the year has proceeded.

The basic message of this report to the Shadow Open Market Committee is that we find no substantive basis for these contentions. There was nothing particularly unusual about the differential behavior of the various monetary aggregates during 1981 (adjusted for the regulatory change allowing for nationwide NOW accounts; the behavior was certainly not unique; and while the behavior obviously was unexpected by the Federal Reserve System, there is no reason why it should have been unexpected. The current bewilderment within

the Federal Reserve System about the events of 1981 is yet another demonstration of the old proverbs that "you can lead a horse to water, but you can't make him drink" or even more appropriately "you can't teach an old dog new tricks."

In spite of all the talk about the behavior of the different monetary aggregates in 1981, there has been pitiful little analysis of what actually happened. This problem is easily analyzed within the Brunner-Meltzer non-linear money multiplier framework, and thus the empirical question raised by President Solomon in the quotations above can be addressed using our money multiplier component forecasting models.

First consider the money multipliers for two monetary aggregates (indexed by i) with respect to any of the various reserve or monetary base aggregates (indexed by j). We can express this relationship as:

$$\ln M_i = \ln m_{ij} + \ln R_j \qquad \begin{matrix} i = 1, I. \\ j = 1, J. \end{matrix} \qquad (1)$$

The relative behavior of two monetary aggregates, i_1 and i_2, is completely determined by the behavior of the two money multipliers, since, given an R_j,

$$\ln M_{i_1} - \ln M_{i_2} = \ln m_{i_1 j} - \ln m_{i_2 j}. \qquad (2)$$

In addition, the multipliers for the various monetary aggregates can be written as the ratio of a numerator which depends only on the monetary aggregate (i.e is indexed only by i) and a denominator that depends only on the reserve aggregate selected (i.e. indexed only by j). Thus we can write

$$\ln m_{ij} = \ln Num_i - \ln Den_j \qquad (3)$$

and regardless of the reserve aggregate we can rewrite (2) as:

$$\ln M_{i_1} - \ln M_{i_2} = \ln Num_{i_1} - \ln Num_{i_2}. \qquad (4)$$

In the case of M1 and M2, the numerators of the respective multipliers are $[1 + k(1+tc)]$ and $[1 + k(1+tc) + t_1]$ using the notation of our previous reports to this committee. The convenient part of this analysis is that the result, (4), is invarient to our choice of reserve aggregate on which to base the multiplier.

Our predictions of the relative behavior of M1 and M2 and M1 to M3, based on our multiplier component forecasts over a one month horizon for the 12 months of 1981 are presented in table 1. The forecasts for January through June are those that are prepared on an export basis for the September, 1981 Shadow committee meeting, and reflect the data available as of August, 1981. The forecasts for July through December are new and reflect the data that is available as of January 1982. It is important to note that these forecasts of the component ratios include intervention terms to allow for the extension of NOW accounts nationwide in January, 1981. These intervention terms are those described in our last report to this committee and reflect a simple log linear adjustment for the months of January through April, 1981.[2)] The models used to generate the forecasts are estimated over sample periods ending in December, 1979.[3)] It should also be noted that no adjustments have been made to the models or forecasts for the introduction of All Savers Certificates in October, 1981.

The forecast errors in table 1 fail to indicate that anything unique, or indeed even highly unusual, is going on with respect to the relative behavior of the various monetary aggregates in 1981, after allowance is made for the extension of NOW accounts nationwide. The average (one month ahead) forecast error for the M-3, M-1B differential is essentially zero. There is a small positive error on average for the M-2, M-1B differential, but it is this differential that would be most sensitive to the NOW account shift, and the largest positive errors are in the first four months of the year. Since our NOW account adjustment was not designed to be exact, but rather to replicate on average, with a very simple functional form, the type of shift that the Board of Governors found from its sampling information, we feel that it is safe to interpret the data in table 1 as suggesting that the impact of financial innovation, as contrasted with the impact of changes in the regulatory environment, on the differential behavior of the various monetary aggregates was highly predictable during 1981.

It is one thing to claim that the behavior of the various monetary aggregates during 1981 is explainable with perfect hindsight as in table 1. It is quite another thing to claim that they should have been foreseen. In this case, we feel that there is substantial evidence for even this stronger claim. Last March we presented a set of forecasts to the Shadow Open Market Committee

TABLE 1

Differential Behavior of Various Monetary Aggregates: 1981

	$\ln(M_2)-\ln(M_{1B})$			$\ln(M_3)-\ln(M_{1B})$		
	Actual	Predicted	Difference	Actual	Predicted	Difference
Jan.	1.38677	1.38145	.00532	1.55625	1.54930	.00695
Feb.	1.41667	1.40869	.00808	1.58827	1.58384	-.00443
March	1.41810	1.41722	.00088	1.58493	1.58939	-.00446
Apr.	1.39223	1.38090	.01133	1.55384	1.56341	-.00957
May	1.41611	1.41599	.00012	1.58298	1.57651	.00647
June	1.41521	1.41009	.00512	1.58346	1.57556	.00790
July	1.40540	1.40406	.00134	1.57661	1.58201	-.00540
Aug.	1.41391	1.41470	-.00079	1.58802	1.58994	-.00192
Sept.	1.41721	1.41235	.00486	1.59387	1.58621	.00766
Oct.	1.42018	1.41369	.00649	1.59528	1.59594	-.00066
Nov.	1.42000	1.41847	.00153	1.59434	1.59139	.00294
Dec.	1.40701	1.41603	-.00902	1.58052	1.58864	-.00812
Mean error			.00294			-.00022
Standard deviation of errors			.00498			.00612

meeting that indicated our predictions of the behavior of the M-1B, M-2 and M-3 adjusted unborrowed reserves multipliers for the remainder of 1981, based on information available at the end of February, 1981. This included the data on the monetary aggregates for January, 1981, and the initial results of the Board of Governors survey data on shifts into NOW accounts from non-demand deposit sources as reported in Chairman Volcker's testimony of February 25, 1981. These forecasts are a matter of public record.[4)] Using those forecasts, which incorporate only the NOW account shifts that occurred in January, 1981, and assume no subsequent shifts into NOW's from non-demand deposit sources, we find an average forecast error of 2.4 percent for the fourth quarter of 1981 in the ratio of M-1B to M-2, and an average forecast error of 2.3 percent for the fourth quarter of 1981 in the ratio of M-1B to M-3. Such errors are very small when it is realized that the average forecasting horizon is 10 months! Furthermore, the 2+ percent error is divided into an underestimate of fourth quarter M-1B of approximately 1.6 percent and an overestimate of fourth quarter M-2 and M-3 of .8 and .7 percent, respectively. This is just the type of forecasting errors that are to be expected given our incomplete information on the extent of the NOW account shifts. Given that by all estimates the NOW account shift was completed by the end of April, 1981, there is no reason why anyone should remain bewildered about the differential behavior of the monetary aggregates after the middle of 1981.

II. PROGNOSTICATIONS FOR 1982

At present, we are somewhat handicapped in making forecasts for 1982. The Board of Governors has just released (February 5, 1982) revisions to the monetary aggregates. Many of the revisions (changes in seasonal adjustment techniques, new call report benchmarks, renaming M_{1B} as M_1) do not cause us any difficulty. The consolidation adjustment for vault cash of thrift institutions in M-1 and the netings of CIPC of thrifts against transactions deposits also should not cause us severe problems, since they have negligible impact on growth rates of M-1. Unfortunately, the compositional changes involving the allocation of retail RP's and money market mutual funds between M-2 and M-3 have a substantial impact on our t_1 and t_2 component ratios. At the present (March 1, 1982) historical data for the revised series are not available. Thus we have not been able to reestimate our models with the new data, nor can we forecast with the existing models and the revised data.

We have chosen to use the old (1981) data and construct M-1 forecasts for 1982 based on a December, 1981 origin. While our forecasts for t_1 and t_2 obviously will be in error compared with the new data, the errors should be essentially offsetting since only the sum of t_1 and t_2 is involved in forecasting the various M-1 multipliers. Our M-1 multiplier forecasts should not be affected systematically by the recent revisions. Our current forecasts on the M-1 adjusted unborrowed reserves multiplier are:

	1981	1982	
Jan.		9.6489	
Feb.		9.7931	
Mar.		9.8717	
Apr.		9.9980	
May		9.7494	
June		9.9360	
July	10.2693	9.8506	
Aug.	10.1550	9.8320	
Sept.	10.0738	9.8041	
Oct.	9.9806	9.7761	
Nov.	9.9497	9.7434	-2.2%
Dec.	9.9757	9.7409	

FOOTNOTES

1) Anthony M. Solomon, "Financial Innovation and Monetary Policy," Sixty-Seventh Annual Report of the Federal Reserve Bank of New York, 1981, pp. 4-5. (Emphasis added.)

2) The NOW account adjustment is that described in the "Shadow Open Market Committee Policy Statement and Position Papers, September 13-14, 1981," Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, PPS-81-8, p. 42-46.

3) For what follows it is interesting to note parenthetically that the models are nearly identical to models estimated through 1978. See ibid., p. 40.

4) Shadow Open Market Committee Policy Statement and Position Papers, op. cit., pp. 61-64.

SOURCES OF FINANCING FOR THE GOVERNMENT DEFICIT

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Michigan State University

This analysis updates materials that I supplied to the Shadow meeting on a regular basis several years ago. The analysis is derived from the combination of the Treasury identity for the government financing requirement, including both the unified budget deficit and the deficit of off-budget agencies, and the Federal Reserve identity for the sources and uses of member bank reserves. In table 1 the three major categories of financing for the government deficit are identified: 1) borrowing from private capital markets, 2) increases in the net source base by the Federal Reserve (monetization of the deficit if you like) and 3) borrowings from Foreign Official Institutions. The latter represents that portion of the government deficit that is financed by Foreign Official Institutions and does not have to be sold on the private capital markets. All other of the detailed sources of financing of the government deficit have been lumped into the fourth category, "other" in table 1. Most of the detailed items in this category are either Federal Reserve or Treasury "float" accounts that may be a substantial source of financing in the short run, but are not available in any large amount as a permanent source of financing. I have the detailed data available on a monthly and quarterly basis, but none of it is seasonally adjusted, and the strong seasonal components in the series tend to obliterate the longer run movements of the series. Therefore, the information in table 1 has been aggregated to an annual basis.[1)]

The first striking feature of table 1 is the dramatic decline since 1977-78 in the percentage of the deficit that has been financed by foreign official institutions. Unfortunately, the component data of this series are not available

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1) A full explanation of the derivation of the numbers in table 1 appears in my earlier article "Financing the Government Deficit," Policy Studies Journal, Autumn 1980.

TABLE 1

Sources of Financing of U.S. Government Deficit
(Billions of Dollars)

A. Calendar Years	76	77	78	79	80	81 (11 mo.)
Total Financing Required	62.1	61.4	52.8	41.4	83.3	74.5
(1) Borrowing on Private Capital Market	49.6	19.4	22.3	51.6	65.1	64.5
(2) Change in Net Source Base	6.4	11.4	14.3	9.3	9.0	2.6
(3) Borrowings from Foreign Official Institutions	7.0	29.4	29.0	-22.6	2.8	5.0
(4) Other	-1.0	1.3	-12.8	3.1	6.5	2.4

B. Fiscal Years	77	78	79	80	81
Total Financing Required	53.7	59.0	39.7	73.2	78.9
(1) Borrowing on Private Capital Market	23.5	24.3	35.2	68.6	68.7
(2) Change in Net Source Base	5.3	12.3	13.6	10.4	5.6
(3) Borrowings from Foreign Official Institutions	20.3	23.3	1.2	-4.5	4.6
(4) Other	4.7	-.9	-10.3	-1.3	--

on a geographic basis, but some insight into what is happening can be obtained from table 3.14, "Selected U.S. Liabilities to Foreign Official Institutions" in the Federal Reserve Bulletin. These data include more items than U.S. Government Securities, but among the various types of liabilities included, the major changes in volume outstanding since the end of 1978 has been in the Treasury Security subset. In the geographic area distribution, Official Institutions in Western Europe have reduced their holdings from 93.1 billion at the end of 1978 to 63.0 billion at the end of November, 1981. The decrease in 1981 alone was 18.6 billion; probably in large part the losses suffered by Europeans in the attempt to defend their currencies against a rising dollar in the absence of Federal Reserve intervention in foreign exchange markets.

The other large, and offsetting movement has been the increase in U.S. dollar liabilities to Asian Official Institutions from 70.8 billion at the end of 1979 to 91.3 at the end of November, 1981. Presumably this represents significant accumulations by OPEC members.

What financing is likely to be provided by foreign official sources in the coming months? Given recent trends in the spot price of oil and the outbreak of price cutting within OPEC, it seems unlikely that "petro dollars" will continue to accumulate at rapid rates in the near future. Indeed if we are to take seriously the recent reports of the balance of payments situations in a number of OPEC countries, it is conceivable that a "runoff" of petro dollars could occur in the near future if the price of oil continues to decline. Also, given the current price of the U.S. dollar in terms of Western European currencies, it does not seem likely that European central banks would intervene to buy large quantities of dollars, even if the dollar were to start declining. Therefore, my conclusion is that it is unlikely that these institutions, around the world, will be a major factor in the financing of the U.S. deficit. I think 1982 in this respect, will more closely resemble 1979-81 than 1977-78.

That brings us to the Federal Reserve. If we assume a maximum of 3-5 percent growth in the net source based over 1982, allowing for the Fed to be somewhere near or above its M_1 targets and some upward drift in the M_1 -- gives something in the range of 4.5 to 7.5 billion of financing to be provided by the Federal Reserve. Thus it is likely that the bulk of the 1982 deficit will have to be financed in the private market as it was in 1980-81.

Prepared for Shadow Open Market Committee, March, 1981.

ECONOMIC PROSPECTS THROUGH 1983
and
BUSINESS OUTLOOK-MONTHLY UPDATE

Robert J. Genetski
Harris Trust and Savings Bank

Background paper prepared for the March 14-15, 1982 meeting of the Shadow Open Market Committee and distributed earlier by Harris Trust and Savings Bank.

HARRIS BANK
Chicago Illinois

Harris Economics

February 26, 1982

BUSINESS OUTLOOK—MONTHLY UPDATE

The decline in business activity appears to be moderating and soon will give way to the beginning of an economic recovery. Signs of recovery could appear anytime from now to July. However, the recent conduct of monetary policy poses a significant threat to attaining economic prosperity with low inflation. Although signs of an economic recovery are likely to appear soon, there is a growing probability that any such recovery will be characterized by a surge in spending that ushers in higher inflation and another roller coaster pattern of business activity.

The Recession Continues

Business activity dropped sharply in January as bad weather aggravated an already serious decline. Tentative data for early February indicate that some of the extreme weakness of the previous month is being offset. In early February, initial claims for unemployment insurance dipped to 520,000 per week on average, (down from the 550,000 range of the previous two months). Autos also staged a modest comeback, with sales of domestic cars in the first 20 days of February averaging 6.5 million units at an annual rate, up from 6.0 million units in January.

In spite of these coincident indicators, leading indicators such as sensitive commodity prices, housing starts and stock prices continue to point to a weak economy in the period immediately ahead. At this point the decline in business activity appears to have moderated, but evidence on the precise timing of the recovery is not conclusive.

The Surge in Money Continues

The Fed does not appear to have made any headway in solving its monetary problems. In the four months since October the M1 measure of money (currency plus checkable deposits) has grown at a double digit pace. As shown in the following table, the main factor in the recent spurt in the money supply was aggressive purchases of securities by the Fed. Between October and February the Fed purchased $4 billion of securities. During the entire year ending in October, 1981 when policy was highly restrictive, the Fed added only $1.4 billion to its holdings of securities.

MONETARY AGGREGATES
(Annual Rates of Change)

	October 1980-October 1981	October 1981-February 1982[E]
M1	4.2%	10.8%
St. Louis Monetary Base	4.7%	9.0%
Fed Holdings of Securities and Acceptances	1.1%	9.3%

[E]Estimate for M1 is an average of the two weeks ending February 10; estimates for the Monetary Base and Holdings of Securities are for the three weeks ending February 17.
Source: Federal Reserve Board; Harris Bank

Inflation—Another Cycle?

After several years of gradually lower monetary growth the inflation cycle appears to be broken. Sensitive commodity prices have dropped 40% over the past two years, producer price increases have averaged 4%-5% at an annual rate since last spring, and consumer prices and wages during the past four months slowed to the 5% and 7% vicinity, respectively. However, this relief may not last. The sharp boost in the monetary base in recent months has lifted the 2-year average growth of M1 (our key indicator of future inflation) from the 5%-6% range to 7%. While this change should not affect the inflation numbers in the immediate future, it does suggest that by year-end inflation may be moving back toward the 8% vicinity.

Interest Rates - More Erratic Moves Ahead

The recent drop in short-term rates reflects the continued instability inherent in recent swings in the money supply. A forthcoming Harris Economics paper on interest rates will show that the volatility of month-to-month moves in the money supply during the past two years has added as much as 4 to 6 percentage points to the real rate for short-term commercial paper. The impact of monetary volatility and the resultant funding risk has been so strong as to overwhelm the impact of liquidity and cyclical factors in determining interest rates. Recognizing the role of monetary volatility in determining interest rates suggests that there is a wide band of interest rate possibilities associated with the same average yearly increase in the money supply.

After allowing for inflationary expectations of 8%-9%, 4-month commercial paper rates of 13%-14% incorporate a real premium of approximately 5 percentage points. If, as we expect, the inflationary premium drops to 7% by year-end, while monetary volatility remains high, commercial paper rates of 12% and a prime of 14% could be expected by December. However, if the Fed were to stabilize monetary growth, interest rates could be as much as 3-4 percentage points lower, while even greater monetary volatility would imply a prime rate in the 17%-18% vicinity. A year-end prime rate range of 10%-18% is obviously too wide a range to be helpful for planning purposes. However, this is indicative of the extreme risk that most businesses face and will continue to face as long as the degree of monetary volatility remains uncertain.

Summary

Although the near-term economic forecast dated February 11, 1982 has not changed, more recent monetary developments imply substantial volatility, the probability of a more vigorous rebound in the second half of 1982, and higher inflation rates for 1983. These indications are still preliminary and could be altered if the Fed quickly returns monetary growth to its targeted range.

Robert J. Genetski
Vice President and Economist

CURRENT ECONOMIC STATISTICS

	JUNE 1981	JULY 1981	AUGUST 1981	SEPTEMBER 1981	OCTOBER 1981	NOVEMBER 1981	DECEMBER 1981	JANUARY 1982	FEBRUARY 1982
MONEY AND PRICES									
MONETARY BASE (BILLIONS OF $)	167.2	167.7	168.5	168.5	168.1	169.2	170.7	171.9	173.0[F]
% CHANGE*	5.2	3.6	5.9	0.0	-2.8	8.1	11.2	8.8	8.0
M-1 (BILLIONS OF $)	428.4	429.4	431.1	431.2	432.9	436.4	440.9	448.6	447.9[F]
% CHANGE*	-2.2	2.8	4.9	0.3	4.8	10.1	13.1	23.1	-1.9
WPI-FINISHED GOODS (1967=100)	270.3	271.3	272.1	272.6	273.9	275.3	276.1	277.3	NA
% CHANGE	0.6	0.4	0.3	0.2	0.5	0.5	0.3	0.4	NA
CPI-ALL URBAN (1967=100)	270.6	273.7	275.9	278.9	280.1	281.5	282.6	283.4	NA
% CHANGE	0.7	1.1	0.8	1.1	0.4	0.5	0.4	0.3	NA
PRODUCTION AND ORDERS									
INDUSTRIAL PRODUCTION (1967=100)	152.9	153.9	153.6	151.6	149.1	146.4	143.4	139.1	NA
% CHANGE	0.1	0.7	-0.2	-1.3	-1.6	-1.8	-2.0	-3.0	NA
DURABLE GOODS NEW ORDERS (BILLIONS OF $)	88.303	89.696	87.350	86.278	77.804	79.956	79.764	78.583	NA
% CHANGE	0.2	1.6	-2.6	-1.2	-9.8	2.8	-0.2	-1.5	NA
NONDEFENSE CAPITAL GOODS NEW ORDERS (BILLIONS OF $)	23.230	24.226	24.700	23.026	20.996	23.813	22.518	22.227	NA
% CHANGE	-2.7	4.3	2.0	-6.8	-8.8	13.4	-5.4	-1.3	NA
HOUSING STARTS**	1.046	1.040	0.946	0.899	0.854	0.860	0.899	0.894	NA
INCOME, SALES AND EMPLOYMENT									
PERSONAL INCOME (BILLIONS OF $-SAAR)	2,384.3	2,419.2	2,443.4	2,462.6	2,474.7	2,492.0	2,490.9	2,494.7	NA
% CHANGE	0.7	1.5	1.0	0.8	0.5	0.7	0.0	0.2	NA
RETAIL SALES (BILLIONS OF $)	87.385	87.356	88.593	88.699	86.660	87.222	87.060	86.119	NA
% CHANGE	2.2	0.0	1.4	0.1	-2.3	0.6	-0.2	-1.1	NA
AUTO SALES-TOTAL**	7.5	8.2	10.4	8.8	7.2	7.7	7.2	8.2	8.9[F]
DOMESTIC**	5.2	5.9	8.2	6.7	5.2	5.4	5.0	5.7	6.5[F]
IMPORTS**	2.2	2.3	2.2	2.1	2.1	2.3	2.3	2.5	2.4[F]
EMPLOYMENT (MILLIONS OF PERSONS)	100.430	100.864	100.840	100.258	100.343	100.172	99.613	99.581	NA
% CHANGE	-0.6	0.4	0.0	-0.6	0.1	-0.2	-0.6	0.0	NA
UNEMPLOYMENT RATE	7.4%	7.2%	7.3%	7.6%	8.0%	8.3%	8.8%	8.5%	NA
LEADING INDICATORS (1967=100)	134.1	134.3	133.3	131.1	128.8	128.6	129.4	126.4[F]	NA
% CHANGE	-0.9	0.1	-0.7	-1.7	-1.8	-0.2	0.6	-2.3	NA

ALL DATA ARE SEASONALLY ADJUSTED
% CHANGE GIVES MONTH-TO-MONTH PERCENT CHANGES
* PERCENT CHANGES ARE MONTH-TO-MONTH CHANGES AT AN ANNUAL RATE
** MILLIONS OF UNITS AT A SEASONALLY ADJ ANNUAL RATE
F HARRIS BANK ESTIMATE

HARRIS BANK
Chicago Illinois

Harris Economics

February 12, 1982

ECONOMIC PROSPECTS THROUGH 1983

A volatile monetary policy is leading to erratic and conflicting signals throughout the economy. These signals are likely to continue through the first half of 1982 before giving way to clear signs of recovery in business activity. At the present time prospects for 1983 are for a moderate recovery. This forecast is based on the assumption that the small change in government tax and spending policies will have a moderately positive impact on productivity, while monetary policy limits the expansion in spending. As more information becomes available on policy changes and the magnitude of the economy's response to supply-side economics, a more definitive view of 1983 will be possible.

Conflicting Economic Signals

The increase in money creation between October and December began to pave the way for a typical cyclical recovery. Lower interest rates, a boost in housing activity and an increase in the leading indicators in December were clear signals that a cyclical recovery was nearing. However, when a 13% annual rate increase in money in December was followed by a 24% annual rate rise in January, the magnitude of these numbers increased uncertainty, lifted interest rates and dimished the likelihood of a sustainable recovery.

The lack of a clear direction in the economy is likely to continue in the months ahead. Once the Fed has reattained its money targets, the process of recovery can start anew. At the present time the recovery is expected to begin in earnest by this summer.

Interest Rate Problems

Interest rates moved sharply higher in December and January. While many observers attribute the move to concern over future federal deficits, the higher rates developed as it became apparent that the Fed was rapidly increasing the growth in money. A recent study by the Economic Research Office shows that month-to-month volatility in the money supply can add a significant risk premium to interest rates (over and above inflation). The reduction in this risk premium during the fourth quarter, which followed six months of more stable money growth, as well as recent increases in this premium are consistent with the results of our study.

Unfortunately, our volatility measure suggests that the recent erratic moves in money will add to the risk premium and keep interest rates higher than previously expected during the first half of this year. Continued extreme volatility in money in the months ahead will drive rates even higher than our present forecast sugests, while more stable month-to-month moves in money will cause interest rates to fall short of our forecast. The outlook for interest rates presented in the following tables assumes that month-to-month volatility in money continues to be as erratic as it has been in the past two years.

Federal Deficits and Supply-Side Economics

Of all recent statements concerning future federal deficits, the most perceptive came from President Reagan when he indicated that no one really has any idea of the true magnitude of those deficits. Most forecasts of receipts fail to capture the feedback effects from lower taxes. It is reasonable to assume that lower tax rates will mean increases in taxable relative to nontaxable activities. There is no reliable estimate of how large an increase in revenues can be expected from this shift, so most forecasts assume no feedback at all. In an upcoming report on the federal budget we will show that tax receipts in the fourth quarter of 1981 were higher than might have been expected. If the fourth quarter figures are reflecting the feedback effects of supply-side tax cuts instead of a possible random erratic movement, then they suggest that future government revenues could be substantially higher than conventional forecasts have assumed.

Strong Profit Gain Seen for 1983

Since 1979, a weak economy and high interest rates have taken their toll on corporate profits. After-tax profits (adjusted to exclude inventory profits and to allow for depreciation at replacement cost) are expected to show year-over-year declines of almost 10% in the first half of 1982. For 1982 as a whole, this measure of profits is forecast to be the same as it was in 1979. For 1983, the combination of an economic recovery, lower interest rates, and corporate tax breaks is expected to produce an increase in after-tax adjusted profits of close to 20%.

Summary

The sharp rise in money in January has increased uncertainty and added a further premium to interest rates. If monetary growth remains rapid in the months ahead, then the odds for a sustained and lasting recovery will decline. Further volatile money growth threatens to keep interest rates extremely high, thereby threatening the Administration's future objectives. At present, the forecast assumes that the Fed will quickly reduce the money supply and put the recovery back on schedule.

Robert J. Genetski
Vice President and Economist

ECONOMIC OUTLOOK
(BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES)

	ACTUAL	FORECAST								YEARS			
	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1980	1981	1982	1983
GROSS NATL PRODUCT	2984.9	3019.7	3084.5	3172.7	3253.6	3329.1	3397.3	3465.7	3535.5	2626.1	2922.2	3132.6	3431.9
%CH	2.7	4.7	8.9	11.9	10.6	9.6	8.4	8.3	8.3	8.8	11.3	7.2	9.6
CONSTANT DOLLAR GNP	1495.6	1487.6	1493.8	1513.6	1528.7	1542.7	1553.5	1563.7	1574.7	1480.7	1509.5	1505.9	1558.7
%CH	-5.2	-2.1	1.7	5.4	4.1	3.7	2.8	2.6	2.8	-0.2	2.0	-0.2	3.5
PRICE DEFLATOR	1.9958	2.0299	2.0649	2.0962	2.1284	2.1580	2.1868	2.2163	2.2452	1.7738	1.9360	2.0799	2.2016
%CH	8.4	7.0	7.1	6.2	6.3	5.7	5.4	5.5	5.3	9.0	9.1	7.4	5.9
CONSUMPTION EXPENDITURES	1909.5	1944.1	1986.7	2047.1	2098.4	2144.3	2188.7	2234.1	2278.6	1672.7	1858.1	2019.1	2211.4
%CH	5.6	7.4	9.1	12.7	10.4	9.0	8.5	8.6	8.2	10.7	11.1	8.7	9.5
DURABLES	226.4	229.2	237.5	254.6	265.4	274.4	283.0	292.4	302.7	211.9	232.0	246.7	288.1
%CH	-15.6	5.1	15.3	32.1	18.1	14.3	13.1	14.0	14.9	-0.2	9.5	6.3	16.8
NONDURABLES	760.9	771.0	784.3	801.9	819.2	834.5	848.5	862.2	874.2	675.7	743.4	794.1	854.9
%CH	5.2	5.4	7.1	9.3	8.9	7.7	6.9	6.6	5.7	12.2	10.0	6.8	7.7
SERVICES	922.2	943.9	964.9	990.6	1013.8	1035.4	1057.2	1079.5	1101.7	785.2	882.7	978.3	1068.5
%CH	12.0	9.7	9.2	11.1	9.7	8.8	8.7	8.7	8.5	12.8	12.4	10.8	9.2
INVESTMENT EXPENDITURES	443.6	433.3	440.8	458.5	475.0	495.2	510.6	525.7	540.8	395.3	450.6	451.9	518.1
%CH	-15.7	-9.0	7.1	17.1	15.2	18.1	13.0	12.4	12.0	-4.9	14.0	0.3	14.6
NONRES FIXED EXPEND	332.6	333.1	331.9	335.7	340.5	347.2	353.9	360.2	366.9	295.9	327.1	335.3	357.1
%CH	-3.0	0.6	-1.4	4.7	5.8	8.1	7.9	7.3	7.7	5.8	10.5	2.5	6.5
PRODUCERS DUR EQUIP	201.2	201.8	202.1	206.1	210.5	215.9	220.8	225.0	229.3	187.1	202.0	205.1	222.8
%CH	-10.5	1.3	0.6	8.2	8.8	10.7	9.4	7.8	7.9	2.0	8.0	1.5	8.6
BUSINESS STRUCTURES	131.4	131.3	129.8	129.6	130.0	131.3	133.1	135.2	137.6	108.8	125.0	130.2	134.3
%CH	10.2	-0.4	-4.5	-0.6	1.2	4.1	5.6	6.5	7.3	13.0	14.9	4.1	3.2
RES FIXED EXPEND	93.4	89.3	93.6	104.4	117.1	132.5	144.1	155.4	167.7	105.3	105.3	101.1	149.9
%CH	-25.4	-16.4	20.7	54.8	58.3	63.9	39.9	35.3	35.6	-11.2	0.1	-4.0	48.3
INVENTORY CHANGE	17.6	10.9	15.3	18.4	17.4	15.5	12.6	10.1	6.2	-5.9	18.2	15.5	11.1
NET EXPORTS	16.0	17.6	19.5	19.0	14.5	11.7	8.4	4.0	-4.0	23.3	23.8	17.7	5.0
GOVT PURCHASES	615.7	624.7	637.5	648.1	665.7	677.9	689.6	701.9	720.1	534.7	589.6	644.0	697.4
%CH	19.5	6.0	8.5	6.8	11.3	7.5	7.1	7.3	10.8	12.9	10.3	9.2	8.3
FEDERAL	246.7	249.2	256.0	260.3	272.2	278.6	284.4	291.4	304.6	198.9	228.6	259.4	289.8
%CH	41.0	4.1	11.4	6.9	19.6	9.7	8.6	10.2	19.7	18.5	14.9	13.5	11.7
MILITARY	165.8	175.7	182.7	187.0	197.1	203.5	210.4	217.2	229.1	131.7	153.3	185.6	215.1
OTHER	81.0	73.5	73.3	73.3	75.1	75.1	74.0	74.2	75.7	67.2	75.2	73.8	74.8
STATE & LOCAL	369.0	375.5	381.5	387.8	393.5	399.3	405.2	410.5	415.3	335.8	361.1	384.6	407.6
%CH	7.4	7.2	6.5	6.8	6.0	6.0	6.0	5.3	4.8	9.8	7.5	6.5	6.0

NOTE: PERCENTAGE CHANGES AT ANNUAL RATES

2/11/82

ECONOMIC OUTLOOK
(BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES)

	ACTUAL	FORECAST								YEARS			
	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1980	1981	1982	1983
PRETAX PROFITS*	207.3	200.3	201.4	209.0	212.9	217.7	219.3	220.7	222.3	245.5	231.9	205.9	220.0
%CH	-38.8	-12.9	2.3	15.8	7.7	9.4	3.0	2.4	3.0	-3.8	-5.5	-11.2	6.8
PRETAX PROFITS ADJ 1)	176.0	168.5	169.7	180.5	188.1	194.8	198.7	202.4	206.5	182.7	191.3	176.7	200.6
%CH	-34.6	-16.0	2.8	28.2	17.8	15.0	8.5	7.6	8.3	-7.2	4.7	-7.6	13.5
TAX LIABILITY	66.9	64.2	64.2	66.1	66.3	67.6	67.9	67.8	67.7	82.4	77.3	65.2	67.8
%CH	-46.3	-15.0	-0.3	13.0	1.1	8.0	1.7	-0.2	-0.9	-6.0	-6.2	-15.6	3.9
AFTER TAX PROFITS	140.5	136.1	137.3	142.8	146.6	150.1	151.5	152.8	154.6	163.2	154.7	140.7	152.3
%CH	-34.7	-11.9	3.5	17.2	10.9	10.0	3.6	3.6	4.8	-2.7	-5.2	-9.0	8.2
AFT TAX PROF ADJ 1)	109.1	104.3	105.5	114.4	121.7	127.1	130.9	134.6	138.8	100.3	114.0	111.5	132.8
%CH	-25.8	-16.6	4.6	38.2	28.3	19.0	12.2	11.8	13.2	-8.1	13.6	-2.2	19.2
PERSONAL INCOME	2484.4	2513.7	2561.9	2623.1	2677.8	2739.8	2796.3	2852.6	2910.0	2160.3	2403.6	2594.1	2824.7
%CH	7.2	4.8	7.9	9.9	8.6	9.6	8.5	8.3	8.3	11.1	11.3	7.9	8.9
TAX & NONTAX PAYMENT	398.0	399.8	409.9	388.8	394.4	406.4	417.2	389.9	399.8	338.5	388.2	398.2	403.3
%CH	-1.8	1.8	10.5	-19.1	5.9	12.7	11.1	-23.7	10.5	12.1	14.7	2.6	1.3
DISPOSABLE INCOME	2086.4	2113.9	2152.0	2234.3	2283.4	2333.4	2379.1	2462.7	2510.2	1821.7	2015.5	2195.9	2421.4
%CH	9.0	5.4	7.4	16.2	9.1	9.1	8.1	14.8	7.9	11.0	10.6	9.0	10.3
PERSONAL OUTLAYS	1962.3	1997.9	2041.9	2103.7	2156.6	2203.9	2249.9	2296.8	2342.9	1720.3	1908.8	2075.0	2273.4
%CH	5.7	7.5	9.1	12.7	10.4	9.1	8.6	8.6	8.3	10.6	11.0	8.7	9.6
PERSONAL SAVINGS	124.1	116.0	110.1	130.6	126.8	129.5	129.2	165.9	167.3	101.4	106.6	120.9	148.0
%CH	81.6	-23.7	-18.8	98.0	-11.1	8.8	-0.9	171.9	3.4	17.6	5.2	13.4	22.4
SAVING RATE(%)	6.0	5.5	5.1	5.8	5.6	5.5	5.4	6.7	6.7	5.6	5.3	5.5	6.1
EMPLOYMENT	100.0	99.9	100.0	100.5	101.2	102.0	102.7	103.3	103.7	97.3	100.4	100.4	102.9
%CH	-2.4	-0.6	0.4	2.0	2.8	3.2	2.8	2.4	1.6	0.3	3.2	0.0	2.5
LABOR FORCE	109.2	109.5	109.8	110.1	110.5	111.0	111.5	112.0	112.5	104.8	108.7	110.0	111.8
%CH	1.8	1.3	1.1	1.1	1.5	1.8	1.8	1.8	1.8	1.8	3.7	1.2	1.6
UNEMPLOYMENT RATE(%)	8.4	8.8	8.9	8.7	8.4	8.1	7.9	7.8	7.8	7.2	7.6	8.7	7.9
PRODUCTIVITY-NONFARM	0.980	0.975	0.975	0.982	0.986	0.991	0.994	0.998	1.001	0.988	0.996	0.980	0.996
%CH	-7.4	-2.0	0.1	2.6	1.9	1.9	1.4	1.4	1.5	-0.3	0.8	-1.6	1.7
INDUSTRIAL PRODUCTION	1.463	1.438	1.441	1.471	1.492	1.510	1.523	1.533	1.546	1.470	1.509	1.460	1.528
%CH	-16.5	-6.8	0.8	8.7	5.8	5.1	3.3	2.9	3.2	-3.6	2.6	-3.2	4.6

*NOTE: PROFITS FOR 81:4 ARE ESTIMATES.
1) PROFITS ARE ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.

	ACTUAL	FORECAST								YEARS			
	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1980	1981	1982	1983
INTEREST RATES													
NEW ISSUE AA INDUS BONDS	15.7	15.9	14.8	14.5	13.6	13.0	12.8	11.6	11.3	12.3	15.1	14.7	12.2
NEW ISSUE AA UTIL BONDS	16.9	17.0	15.9	15.5	14.6	14.0	13.8	12.6	12.3	13.3	16.2	15.7	13.2
PRIME RATE	17.0	16.0	15.5	13.8	13.1	12.3	11.6	11.4	11.2	15.3	18.9	14.6	11.6
COMMERCIAL PAPER 4 MOS 1)	13.0	13.7	13.2	11.5	10.8	10.3	9.9	9.7	9.5	12.6	15.2	12.3	9.8
3 MONTH T-BILLS	11.8	13.0	12.2	10.6	9.9	9.5	9.1	8.9	8.7	11.4	14.0	11.4	9.0
PRIMARY 90 DAY CDS	13.1	14.6	13.5	11.8	11.1	10.6	10.2	10.0	9.8	12.9	15.7	12.8	10.1
MONEY AND VELOCITY													
MONETARY BASE-(MB)	169.3	172.3	174.3	176.6	179.1	181.7	184.4	187.1	189.8	156.6	166.9	175.6	185.8
%CH	2.6	7.1	4.7	5.4	5.8	5.9	6.1	6.0	5.9	8.1	6.5	5.2	5.8
VELOCITY OF MB*	17.927	17.950	18.219	18.414	18.667	18.851	18.969	19.074	19.173	17.442	17.985	18.311	19.016
%CH	-4.8	0.5	6.1	4.5	5.6	4.0	2.5	2.2	2.1	0.7	3.1	1.8	3.9
MONEY SUPPLY-(M1)**	436.7	446.1	451.9	457.8	463.7	469.4	475.2	481.0	486.9	402.4	429.5	454.9	478.1
%CH	5.9	8.9	5.3	5.3	5.3	5.0	5.0	5.0	5.0	6.2	6.7	5.9	5.1
VELOCITY OF M1*	6.937	7.015	7.063	7.112	7.200	7.272	7.326	7.383	7.440	6.729	6.988	7.098	7.355
%CH	-6.3	4.6	2.8	2.8	5.0	4.1	3.0	3.1	3.1	1.7	3.9	1.6	3.6
MONEY SUPPLY-(M2)**	1806.9	1850.5	1885.6	1921.3	1960.0	1998.1	2036.9	2076.5	2116.8	NA	1746.4	1904.3	2057.1
%CH	9.8	10.0	7.8	7.8	8.3	8.0	8.0	8.0	8.0	NA	NA	9.0	8.0
VELOCITY OF M2*	1.723	1.711	1.707	1.715	1.726	1.733	1.733	1.734	1.736	NA	NA	1.714	1.734
%CH	-8.7	-2.9	-0.9	1.8	2.6	1.7	0.1	0.3	0.3	NA	NA	NA	1.1
CPI-ALL URBAN	2.813	2.864	2.909	2.953	2.998	3.039	3.079	3.120	3.160	2.470	2.724	2.931	3.100
%CH	7.8	7.4	6.4	6.2	6.2	5.6	5.4	5.4	5.2	13.5	10.3	7.6	5.7
AUTO SALES 2)	7.375	7.900	8.600	9.400	10.000	10.400	10.600	10.700	10.800	8.977	8.602	8.975	10.625
DOMESTIC	5.184	5.600	6.100	6.800	7.200	7.600	7.700	7.800	7.900	6.596	6.271	6.425	7.750
IMPORTS	2.224	2.300	2.500	2.600	2.800	2.800	2.900	2.900	2.900	2.405	2.331	2.550	2.875
HOUSING STARTS 2)	0.903	0.864	1.032	1.120	1.341	1.523	1.616	1.750	1.800	1.303	1.109	1.089	1.672

*NOTE: VELOCITY IS MEASURED AS GNP DIVIDED BY MONEY SERIES LAGGED TWO QUARTERS
**NOTE: DUE TO REVISIONS, M1 DATA ARE TEMPORARILY INCONSISTENT, AND M2 DATA ARE NOT YET AVAILABLE PRIOR TO OCTOBER 1980
1) PRIOR TO NOVEMBER 1979, COMMERCIAL PAPER 4-6 MOS
2) IN MILLIONS OF UNITS-SEASONALLY ADJUSTED ANNUAL RATES

ECONOMIC PROJECTIONS

Burton Zwick
Prudential Insurance Company of America*

Since the election of President Reagan in November 1980, the inflation rate has declined from the 10-11 percent area to about 8 percent in response to monetary restraint and slack in the economy. Despite many forecasts that inflation will continue to decline to the 6-7 percent area over the next 12 to 18 months, government bond rates remain near 14 percent, compared with a 12 percent rate in November 1980 and single digit rates as recently as October 1979. Following a decline in late 1981, short-term rates have recently risen above November 1980 levels, suggesting that double digit rates will persist throughout 1982.

Whether the rise in nominal rates reflects a rise in real rates or expectations that inflation will reaccelerate, economists both outside and inside the Administration perceive the rise in rates as a "no confidence" vote on Reaganomics from the financial markets. Unless confidence is restored, a major Reagan Administration objective — to promote capital formation and productivity growth — cannot be achieved.

A number of financial economists have pointed to changes in the financial structure and the determination of investors to earn after tax real returns to explain the rise in rates. While these factors undoubtably account for some of the increase in rates, I believe that most of the rise can be explained by two of the more traditional determinants of income and interest rates, namely, monetary policy and fiscal policy.

In October 1979, in response to a second dollar crisis within a year, the Federal Reserve reaffirmed its determination to control inflation by controlling money and announced a change in operating procedures, namely that policy

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* The projections presented here reflect my own personal views and should not be interpreted as the official view of the Prudential. I appreciate the comments of Michael J. Hamburger.

operations would henceforth be directed at controlling money rather than interest rates. Despite the change in policy, the money supply experienced unprecedented fluctuations in 1980 and sizable fluctuations in 1981 as well. These fluctuations took money substantially below its target in the spring of 1980 and substantially above its target in late 1980 and again in the first few weeks of 1982. (See the lower panel of table 1.)

Since interest rates also fluctuated by large amounts in 1980 and 1981, some analysts have argued that the fluctuations in money growth reflect other factors -- such as credit controls in 1980 and the introduction of NOW accounts in 1981 -- rather than Federal Reserve attempts to control rates. However, amidst the general interest rate volatility of the 1980-81 period, there have been several intervals of up to 16 weeks when the Federal funds rate traded within a narrow range (see table 2). During each of these intervals, money growth accelerated or decelerated sharply and moved outside or near the extreme end of the target range. The Federal Reserve was then forced to adjust the funds rate by large amounts in an attempt to restablish control over the money supply. This pattern of volatile money supply growth -- insofar as it contributed to unprecedented swings in long rates as well as short rates -- probably raised real rates at the long end of the yield curve by introducing a "volatility" component to the risk of holding long-term fixed income securities. Volatile money growth probably raised nominal rates further by undermining confidence in the Federal Reserve's ability to control money and inflation over the longer term. Stated somewhat differently, during the year of 1981 when money growth declined by several percentage points from its average in the 1977-80 period, the pattern of monetary deceleration was so erratic that investors saw little reason to expect lower money growth to persist.

Probably an even more important cause of high rates are the federal budget deficits projected not only for the recessionary period running through 1982 but for the recovery period of 1983 and 1984 as well. The Reagan Administration's 1983 budget message calls for budget deficits of $92 billion in 1983 and $83 billion in 1984. If the continued monetary restraint assumed in the Reagan Administration's projections leads to slower growth in 1983 and 1984, the 1983-84 deficits could easily rise to the $100-$150 billion range. Deficits of $100-$150 billion in 1983-84 would be equivalent to about 3 percent to 4 1/2 percent of GNP.

TABLE 1

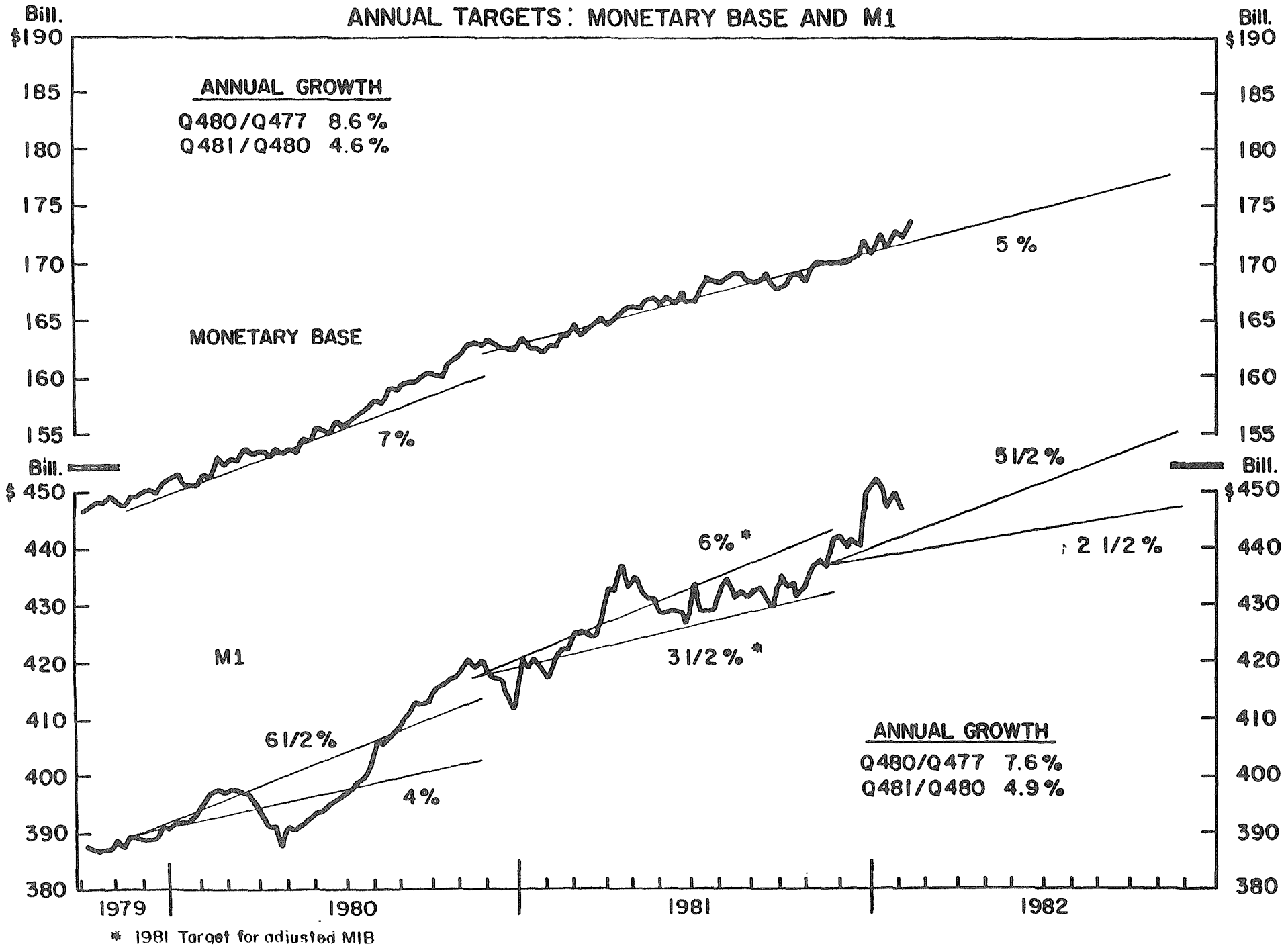
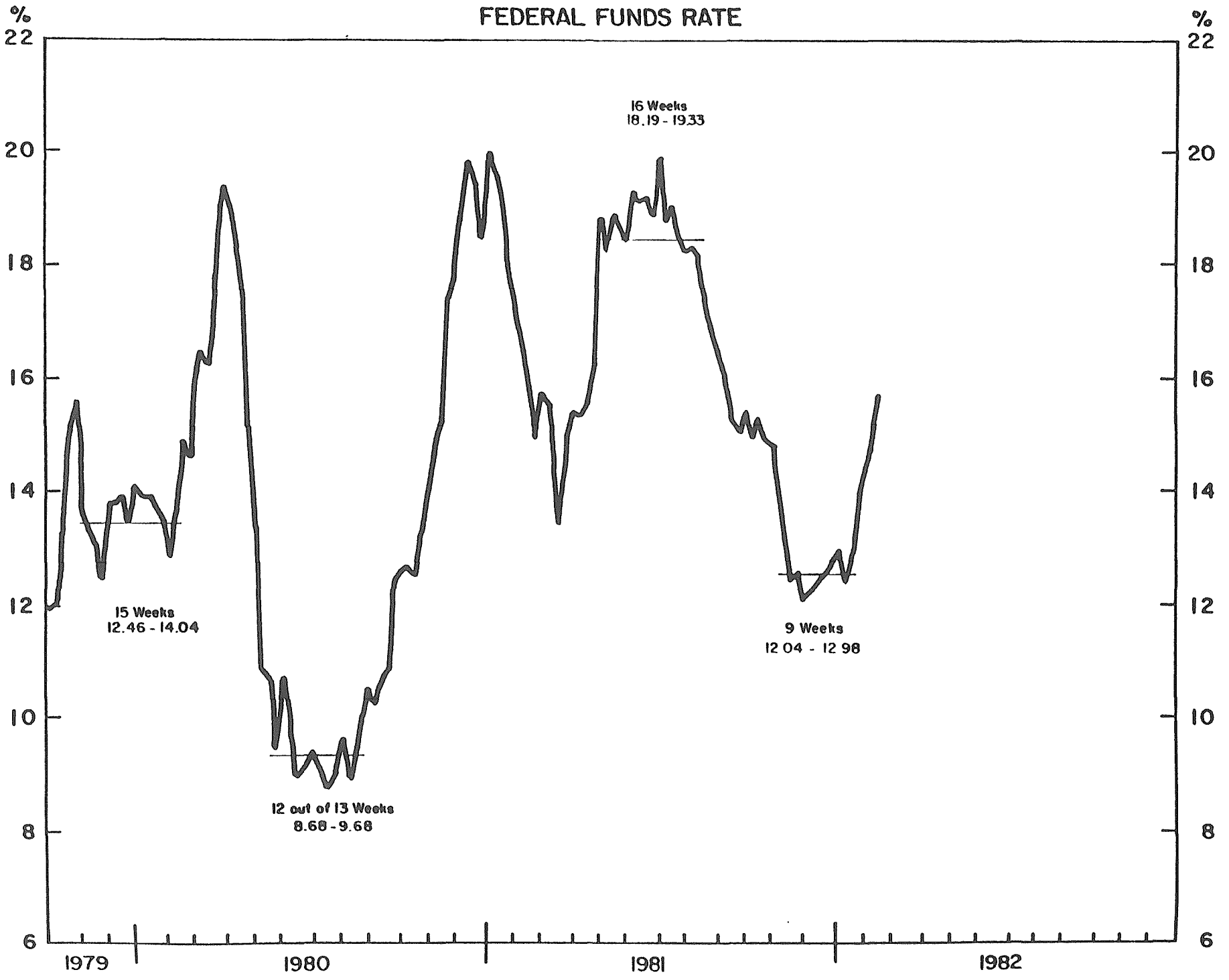

ANNUAL TARGETS: MONETARY BASE AND M1
Bill.
$190
185
180
175
170
165
160
155
ANNUAL GROWTH
Q480/Q477 8.6%
Q481/Q480 4.6%
MONETARY BASE
5%
7%
Bill.
$450
440
430
420
410
400
390
380
M1
5 1/2%
6%*
2 1/2%
3 1/2%*
6 1/2%
4%
ANNUAL GROWTH
Q480/Q477 7.6%
Q481/Q480 4.9%
1979
1980
1981
1982
* 1981 Target for adjusted MIB

TABLE 2


FEDERAL FUNDS RATE
%
22
20
18
16
14
12
10
8
6
16 Weeks
18.19 - 19.33
15 Weeks
12.46 - 14.04
12 out of 13 Weeks
8.68 - 9.68
9 Weeks
12 04 - 12 98
1979
1980
1981
1982

Though U.S. government financing (including the off-budget financing through the Federal Financing Bank) reached about 4 percent of GNP during the 1975 recession, such financing was a much smaller percentage during most of the 1970's. As shown in table 3, U.S. government financing was 0.6 percent and 1.5 percent of GNP in 1973 and 1979, cyclical peak years preceding the 1974-75 and 1980 recessions. With total funds raised by the non-financial sector running between 15 percent and 16 percent of GNP in these cyclical peak years, funds equal to about 14.5 percent of GNP were available for non-financial sector borrowers other than the U.S. government.

The two right columns of table 3 show a prospective flow of funds distribution in 1983-84, on the assumption that total funds raised remain closely related to GNP and run 16.5 percent of GNP in 1983-84, slightly higher than in 1973 and 1979. The first column for 1983-84 assumes annual budget deficits of $100 billion (plus $25 billion of off-budget financings) for total U.S. government financing equal to 3.5 percent of GNP; the far right column assumes deficits of $150 billion (plus $25 billion of off-budget financings) for a total equal to 4.9 percent of GNP. With 16.5 percent of funds available for all non-financial sectors, U.S. government borrowings equal to 3 1/2 percent to 5 percent of GNP leave 11 1/2 percent to 13 percent for non-U.S. government sectors, down from about 14.5 percent in the earlier peak years. Such a reduction in funds available — particularly down to 11 1/2 percent — implies increased pressure on the Federal Reserve to purchase securities, in which case the deficits promote inflation and higher nominal rates. Since the Federal Reserve is unlikely to buy more than $10 or $15 billion of the $100-$150 billion of treasury issues, the large federal deficit will crowd out some private borrowings and contribute to higher real rates. In the proposed figures, I have assumed that state and local government, foreign, and non-financial corporations will hold on to the bulk of their earlier shares, in which case most of the crowding out will occur in home mortgage and consumer credit financing. A large part of the deficits will be financed through higher household saving, but presumably at higher real rates.

Whatever the reasons for high bond rates, I believe that the state of the bond market — and realization that monetary expansion will further destabilize the markets — almost precludes a sustained move toward monetary expansion in 1982 by the Federal Reserve. I am assuming that the recent bulge in the money supply will be offset over the year, and the Federal Reserve will keep M1

TABLE 3

FUNDS RAISED IN CREDIT MARKETS BY NON-FINANCIAL SECTOR
AS PERCENT OF GNP

	1973	1979	1983-4	1983-4
Total Funds	15.3	16.0	16.5	16.5
U.S. Government*	0.6	1.5	3.5**	4.9***
Other	14.7	14.5	12.9	11.5
State & Local Govt.	1.0	0.8	0.8	0.8
Households	5.9	7.1	5.8	4.8
Mortgages	3.5	4.7	3.7	3.3
Consumer Credit	1.8	1.9	1.7	1.1
Other	0.6	0.4	0.4	0.4
Non-financial Business	7.3	5.8	5.7	5.3
Foreign	0.5	0.9	0.7	0.7

*Direct Federal Borrowings, including off-budget financing of Federal Financing Bank.

**Federal Government Budget Deficit of $100 billion per year, plus $25 billion off-budget financing.

***Federal Government Budget Deficit of $150 billion per year, plus $25 billion off-budget financing.

growth near or only slightly above the upper end of the target range of 2 1/2 percent to 5 1/2 percent. I am also assuming limited fiscal policy initiatives until after the election, leaving prospective budget deficits for 1983 and 1984 at $100 billion or higher.

The current recession should end within the next few months. However, continued monetary restraint is likely to produce much slower output growth during the recovery than in earlier post World War II recoveries. M1 growth of 5.5 percent — and monetary base (MB) growth of 6.5 percent — are consistent with 1982 nominal income growth of about 9.7 percent. Assuming inflation of about 6.7 percent, output will grow about 2.8 percent over the four quarters of 1982 (see table 4).

Though rates may remain high in the next few weeks as the Federal Reserve moves aggressively to bring the money supply under control, I believe that declining inflation and a slow recovery will promote a modest easing in rates over the year. By year end, government bond yields should be around 12 percent to 12 1/2 percent, down 150 to 200 basis points from current levels, but still quite high by historical standards. Short-term rates should be in the 10 percent to 12 percent area. The failure of rates to decline further will keep interest sensitive sectors, such as the housing and automobile sectors, extremely weak by historical standards. Reflecting low utilization rates as well as high interest rates, capital spending will also recover slowly despite the recent tax incentives to promote business investment.

One risk to this forecast is that current financial pressure — or concern about fiscal and monetary policies over the longer term — will cause rates to remain at current levels or, as suggested by some Wall Street economists, move to new highs before the end of 1982. In this event, I believe that the recovery will be even slower and the economy could reenter recession by early 1983. I reject this as a most probably forecast even though I have continuously underestimated the level of rates for the past year and a half. A second risk is that the Federal Reserve will move sharply toward expansion, either because of unacceptably high unemployment or large deficits. As mentioned above, I believe this is unlikely because the financial markets will simply not permit monetary reacceleration.

As at the time of the Shadow Open Market Meeting last September, the Committee emphasized that the Reagan Administration faced a severe credibility problem because of its failure to come to grips with the imbalance in

TABLE 4

ECONOMIC PROJECTIONS

(Percent Changes)

Projections for 1982 as of March 1982 Meeting

	GNP	Output	Deflator	M1	Velocity of M1	MB	Velocity of MB
Q4/81-Q4-82	9.7	2.8	6.7	5.5	4.0	6.5	3.0

Projections for 1982 as of September 1981 Meeting

Q4/81-Q4/82	9.0	1.9	7.0	5.0	3.8	6.0	2.8

(Annual growth in velocity of M1 was 3.7% for 1971-81, 3.6% for 1971-76, and 3.7% for 1976-81. For velocity of monetary base, annual growth was 2.4% for 1971-81, 1.9% for 1971-76 and 2.9% for 1976-81.)

its fiscal policy program. While its support of non-inflationary monetary policy, particularly with unemployment rising in an election year, is impressive, historical evidence strongly suggests that the Federal Reserve will not be able to maintain a restrictive policy in the face of deficits as large as those projected for 1983 and beyond. Recent Reagan Administration criticism of the Federal Reserve, though directed at the erratic pattern of money growth and the recent monetary expansion, only serves to raise further questions about the one institution of government that — for the year of 1981 taken as a whole — promoted a return to lower inflation rates.