SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

September 12-13, 1982

PPS-82-2

CENTER FOR
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Graduate School of Management

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1. Shadow Open Market Committee Members - September 1982

2. SOMC Policy Statement, September 12, 1982

3. Position Papers prepared for the September 1982 meeting:

The Voices of "Failure" and the Failure of Monetary Policy-Making, Karl Brunner, University of Rochester and Universität Bern

Fiscal Policy Outlook - A Report to the SOMC, Rudolph G. Penner, American Enterprise Institute

Forecasting Multipliers in the 80's: The More Things Change the More They Stay the Same, James M. Johannes and Robert H. Rasche, Michigan State University

Economic Prospects Through 1983 and Economic Outlook: Alternative Forecasts, Robert J. Genetski, Harris Trust and Savings Bank

Economic Projections, Burton Zwick, Prudential Insurance Company of America

Money and the Economy, H. Erich Heinemann, Morgan Stanley & Co., Incorporated

SHADOW OPEN MARKET COMMITTEE

The Committee met from 2:00 p.m. to 8:00 p.m. on Sunday, September 12, 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.

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

Economic recovery may be underway. Inflation continues to fall, but the speed and durability of the recovery remain in doubt. Some foresee the economy reverting to stagnation or recession in 1983 after a brief period of expansion. Others foresee sustained recovery with growth of real output rising as much as 6 percent in 1983 and beyond.

Three main factors contribute to the high degree of uncertainty. First is the failure of the Administration and Congress to reduce federal expenditures and to implement regulatory reform as promised. Legislation proposed to control interest rates poses an additional threat. Second, the Federal Reserve's commitment to a policy of slower money growth has produced a substantial and welcome reduction in inflation. Its failure to improve monetary control procedures has unduly increased the cost of disinflation and heightened uncertainty about its continuing commitment to this policy. Third, there is a rising probability of defaults by major borrowers. Defaults, bank failures, and mismanagement by central banks and governments increase uncertainty about the outlook for the world economy.

REDUCING UNCERTAINTY AND PREVENTING PANIC

Governments and central banks can improve the performance of their economies by reducing uncertainty and increasing the credibility of current policies. If governments make clear that they will take non-inflationary actions to prevent financial panics in the event of defaults, uncertainty can also be reduced.

The Reagan Administration has made unbelievable estimates of economic growth. This mistake has not been corrected. The Administration continues to present wildly optimistic forecasts. To hide future deficits, forecasts of inflation remain higher than is consistent with the monetary policies advocated by the Administration. By making unbelievable forecasts, the Administration evades the fiscal problem, and adds to uncertainty.

The Federal Reserve deserves major credit for the decline in inflation. It must also accept responsibility for the excessive uncertainty that clouds the outlook for 1983. We again urge the Federal Reserve to make the major procedural changes required to improve control of money and thereby reduce uncertainty.

Fear of defaults and bank failures has grown with the stagnation of the world economy and the very large changes in some relative prices, most notably the price of oil. The possibility that defaults and failures can spread from country to country is widely recognized. No steps have been announced to show that central banks and governments have determined appropriate policies to deal with the problem in a non-inflationary way.

A clear statement of responsibility should be made by central banks and governments in major countries. The statement should explain the scope or extent of responsibility to financial institutions including domestic branches of foreign institutions, foreign branches of domestic institutions, and the public. The statement should distinguish clearly between preventing a decline in the money supply and protecting the interests of bank investors. The former is a public responsibility, the latter is not.

UNCERTAINTY SURROUNDING FISCAL POLICY

The Administration's rhetoric about fiscal policy and government growth is markedly different from its performance. It has not implemented its promised program to reduce the size of government and growth of government spending. Government spending continues to grow faster than output, and the government's share of GNP appears likely to remain above 24 percent.

No one knows when the fiscal stalemate will end or how it will end. A program that was supposed to provide greater certainty about future taxes, to facilitate private planning, has instead done the opposite. No one knows what future tax rates on saving, investment, and income will be.

We believe the Administration should begin to resolve the problem by reducing spending $70-billion below its present projected growth path by fiscal year 1985. Cuts must come from all programs including transfer payments and defense. Spending cuts of this magnitude will not end the fiscal crisis. The Administration must present a credible long-range plan to hold the growth of federal spending beyond fiscal 1985 below the growth rate of GNP.

UNCERTAINTY SURROUNDING MONETARY POLICY

We applaud the Federal Reserve's commitment and the success of its policy to reduce inflation. Inflation, this year, will be the lowest since 1976. If the Federal Reserve continues to reduce monetary growth, inflation will continue to fall. By the middle of the decade, inflation can be ended.

We recommend that the Federal Reserve manage the monetary base so as to increase the money supply (M-1) by 4 percent to 4.5 percent from the average of the fourth quarter of 1982 to the fourth quarter of 1983. For the balance of 1982, the money supply should remain in a 5 percent to 5.5 percent growth path.

The costs of ending inflation have been higher than necessary. Unreliable control procedures have kept long-term interest rates, after adjusting for inflation, at extra-ordinary levels. These rates contribute to the current stagnation, recession, and high unemployment. Recent declines in interest rates can be reinforced dramatically by stabilizing the growth rate of money.

Recent events have borne out our contention that the Federal Reserve's procedures are a main cause of high interest rates. Once money growth returned to the target range, the belief spread that the Federal Reserve was not about to embark on another round of inflation. Credibility increased. Uncertainty about future inflation declined, and interest rates fell. Despite the much discussed deficits, sustained declines in reported money growth reduced interest rates, as on many previous occasions.

Long-term interest rates on government bonds remain 3 percent higher than the levels that prevailed before the Federal Reserve changed operating procedures in October 1979 despite a 2 percent to 3 percent decline in the rate of inflation. Long-term interest rates adjusted for inflation are, therefore, 5 percent to 6 percent higher than in September 1979.

Recent proposals in Congress call on the Federal Reserve to reduce real interest rates. Such proposals are misguided, thinly disguised attempts to increase money growth. If adopted, they would increase future inflation and, therefore, raise interest rates.

Congress should insist that the Federal Reserve improve operating procedures and remove the self-imposed restrictions that are the true cause of higher interest rates. Lasting reductions in real interest rates will only result from a credible policy of monetary and fiscal restraint.

FINANCIAL FRAGILITY

Drysdale, Penn Square, Lombard-Wall, Mexico, and Poland are not likely to be the only major shocks to the financial system. The risk of default, and the spread of failures, are serious threats to the international and domestic banking structure. The continuing weakness of the thrift industry — a direct result of mistaken regulation, bureaucratic inertia, Congressional lassitude, and inflation — contributes to the general problem of financial fragility.

The potential crisis can be averted if governments act correctly. They must recognize that their responsibility is limited to protection of the integrity of the money supply. There should be no inflation, no deflation, no socialization of losses, and no bailouts of unwise, mistaken investment decisions.

The correct procedure for domestic default is to lend to the market, at a penalty rate, to prevent bank runs and to reduce uncertainty about the survival of otherwise solvent firms and institutions. We call on the regulatory agencies to issue a clear statement of their policies. The Federal Reserve should declare that it intends to serve as a lender of last resort to the financial system in a non-inflationary manner. Insolvent banks or financial institutions should be permitted to fail.

Off-shore banks pose a different problem. A run on banks in the Cayman Islands or in Luxembourg — where there are no central banks — could precipitate a panic affecting domestic markets directly or through its effect on banks in third countries. There is presently no clear policy for dealing with a problem of this kind.

An international agreement or understanding about where responsibility begins and ends should be reached before failures occur. We propose that each country accept responsibility as lender of last resort to banks or branches of banks operating within the home country, regardless of the nationality of the owners. Foreign banks or branches located in the home country should be permitted to borrow, at a penalty rate, during a financial crisis even where borrowing of this kind is not permitted under ordinary circumstances.

The present financial crisis — serious as it is — is a temporary phenomenon that should be dealt with by temporary measures. It does not justify a permanent increase in the lending capacity of the International Monetary Fund.

THE VOICES OF "FAILURE" AND THE FAILURE OF
MONETARY POLICY-MAKING

Karl BRUNNER

University of Rochester

and

Universität Bern

I. THE VOICES OF FAILURE

Almost three years ago the Federal Reserve Authorities announced a major change in monetary policy. The events prompting this decision are well known. The basic inflation rate drifted from the early 60's to the late 70's in response to an essentially accommodating policy from a negligible level to around 8 percent p.a. The consequences were most dramatically revealed by a series of crises on the foreign exchange market. The Federal Reserve authorities recognized in October 1979 that monetary policy need be designed more effectively (or willingly) to lower inflation and support the dollar. A new tactical procedure was initiated for this purpose. The operational change was expected to tighten control over monetary growth and prevent the inflationary drift experienced in previous years.

The passage of time since October 1979 offers some perspective about the nature of the policy introduced, its mode of execution and consequences. Some success should be clearly recognized. Monetary growth was effectively lowered (in the average) over the past three years. Inflation responded moreover to the broad change in monetary affairs. The rate of change in the price-level and the momentum of wage settlements was substantially reduced over the past years.

This progress was accompanied however by economic stagnation and recession. Real national product fluctuated since 1979 within an interval of about 3-4 percent around an approximately stationary level. The economy slid moreover into a recession not recognized by the official forecasts supplied by the Administration in the early months of 1981. The emerging doubts and questions bearing on the course of policy deepened and widened with the manifest disarray of financial markets. Since early 1980, interest rates attained a remarkably high level (in the average) and exhibited a singular variability. The record traced in recent years by the financial markets is

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unique in the peace time history of the USA. The behavior of interest rates threatens moreover the survival of many financial institutions and has aggrevated in recent months an increasingly fragile network of international credit relations. The uncertainty gripping the financial markets seems to envelop both financial institutions and some governments with a comparatively large exposure to short-term liabilities.

Progress in any particular dimension seems hardly worth any notice in the media or political market. This market thrives on "crises" and "problems". The recession with the uncertain prospects of recovery, and most particularly the disarray expressed on financial markets, affected the public debate about the future course of policy. "Liberal" and "neo-conservative" commentators, including some Federal Reserve officials, emphatically declared the massive failure of the monetary policy pursued by the Fed. They urged the Federal Reserve Authorities to abandon what was deemed to be their "monetarist bias". An "alternative policy" could be expected to lower interest rates permanently, reduce their variability and assure a sustained recovery.

The "voices of failure" offered neither adequate articulation of events nor an acceptable explanation of the apparent failure. Their basic thrust would push the Fed once again into a dominantly accommodating stance with the prospect of permanent and increasing inflation. Their attention thoroughly misses moreover the crucial short-term and long-term aspects of our monetary policymaking associated with the observed failure.

II.   THE NATURE OF THE "FAILURE"

1.   The Interest Rate Syndrome

The singular behavior of interest rates emerged shortly after the change in the Fed's operating procedure. The public announcement of the change suggested that the Fed would assign "less significance" to interest rates and attend more explicitly to a control over monetary growth. A prevalent analysis enshrined in many textbooks on macro-economics informs us that such changes in policy procedures affect the relative variability of monetary growth and interest rates. This approach yields a trade-off between the variability of the two magnitudes. The strategy of interest control, or even the tactical (i.e. instrumental) use of interest rates (more precisely: of the federal funds rate) for monetary control, lowers the short-run variability of interest rates and raises on the other hand the variability of monetary growth. The observed behavior of interest rates appears thus, according to this story, to be the natural

consequence of a shift from a dominant pattern of "interest rate control" in one form or another to a more developed stance of monetary control.

A number of studies prepared at the Board of Governors of the Federal Reserve System and at some of the regional Federal Reserve Banks articulate the explanation in more detail. One version emphasizes that the change in operating procedure generated misapprehension and confusion around the financial markets. Other studies demonstrate a statistical connection between the variability of monetary growth and the variability of short-term interest rates. This connection was attributed to the change in operating procedures. The financial market expected under a policy of monetary control a dominant pattern of "regressive behavior" by the Fed. Unanticipated and substantial deviations of monetary growth from the target path were expected to induce corresponding adjustments in the Fed's reserve operations. Positive surprises in monetary growth increase and negative surprises lower under the circumstances short-term interest rates. The operation of the connection depends sensitively on the financial markets' confidence that the Fed is really committed to a policy of monetary control.

Some of the arguments and studies advanced contribute usefully to our information about the relation between monetary policymaking and financial markets. None provides however an acceptable explanation of the observed behavior of interest rates. Three major facts must be recognized in this context. One refers to the level and variability of interest rates over all maturities. The second involves the remarkable correlation between interest rates over the whole yield curve. The singular variability exhibited substantial co-movements between short- and long-term interest rates. Lastly, the short-run variability of monetary growth did not decline after the change in operating procedure. It actually increased somewhat.

These patterns cannot be explained by the observed connection between short-run "monetary surprises" and subsequent movements in short-term interest rates. Rational market expectations operating under a system of monetary control are not sufficient to produce the particular connection. The tactical procedure used in the context of lagged reserve accounting contributed probably to the joint increase in the (short-run) variability of short-term interest rates and of monetary growth.

Whatever the role of "institutional policy" may be, the occurrence of monetary surprises under a system of monetary control cannot explain the failure lamented in the media. The effect of monetary surprises depends critically on the market's expectation that such surprises will be systematically corrected. Surprises are thus, according to this account, essentially interpreted as transitory events and will not

affect the behavior of intermediate and long-term interest rates. This account thus implies that the change in operating procedure raises the shortest-run variability of short-term interest rates with negligible effect on the variability of longer term interest rates. A confident expectation of anti-inflationary monetary control would moreover lower the inflation premium and decrease long term rates. These implications are not reconcilable with the three major facts mentioned above.

The trade-off hypothesis based on standard textbook analysis encounters the same difficulties. It systematically neglects all aspects of the term structure of interest rates. This neglect omits an essential mechanism yielding crucial information about the market's assessment of monetary policymaking. A prevalent conviction that the Fed will maintain an effective anti-inflationary monetary control does not raise the variability of all interest rates and would not produce the co-movements observed. We may also note in passing that this strand of analysis neglects with the term structure also the interaction between an array of asset markets. Interpretations based on this analysis, typically represented by frequent statements made by Federal Reserve officials, systematically equate all the stochastic shocks operating around the complex of financial markets to the disturbances or shifts in money demand. The diverse shocks are however not equivalent with respect to their economic effects under alternative strategies (i.e. monetary or interest controls). Arguments based on the trade-off analysis usually postulate moreover that money demand is perturbed by purely transitory shocks. Once again, this postulate yields implications very different from the pattern observed.

We conclude that the "failure" manifested by the behavior of interest rates cannot be attributed to a change in monetary regime per se. In particular, it cannot be explained in terms of a shift from an "essentially flexible" interest strategy to a system of effective monetary control. It is not the confusion and misapprehension produced just by a change in strategy or tactics which produced the "failure syndrome". This syndrome was dominated by the behavior of our monetary authorities, most particularly by an uncertain sense of commitment to an anti-inflationary policy with a corresponding strategy of monetary control conveyed to a broad public. A long tradition of misleading statements, a sequence of broken promises to pursue anti-inflationary policies, the many contradictions observed between statements made by Fed officials since October 6, 1979, a more or less veiled opposition of important Fed officials to a policy of effective monetary control, and lastly, the variability of monetary growth after the promise offered in October 1979 to tighten control and improve performance, all contributed to a diffuse and pervasive uncertainty about the

trend in monetary policymaking. The array of experiences imposed on financial markets lowered the credibility of the Fed's monetary strategy. The resulting uncertainty imposed a substantial risk premium of several percentage points on the gross real rate of interest. It was also expressed by cross currents of reassessments and re-reassessments of accruing information about future policies and thus produced the remarkable volatility. This uncertainty was not confined to the immediate future but involved perceptions over an extended horizon. The position papers for the meetings of September 1981 and March 1982 explained in greater detail the effect of a pervasive uncertainty fostered by our policymaking on the behavior of financial markets. The argument shows in particular how such policymaking should be expected to produce the patterns summarized by the three major facts.

The analysis presented in previous position papers implies a persistent anti-inflationary policy (in the average) gradually lowers the markets uncertainty. As time passes and the markets learn about such persistence throughout the noise of misinterpreted verbal and statistical events both the level and variance of interest rates decline. This actually happened over the past two years. The level moved along a declining trade for more than one year and the variance (on all maturities) declined by a large margin since 1980.

The "failure" expressed by the high level and variance of interest rates was thus not produced by the shift to a strategy of monetary control. It was conditioned by the basically uncertain commitment and the inadequate tactical delivery. The behavior of interest rates offered us consequently an index of the Fed's credibility level determined by the market. There was thus indeed a failure revealed by the observations noted above. We suffered the consequences of a fundamental failure in our policymaking institutions.

2.   An "Unforeseen" and "Avoidable" Recession

The second dimension of the alleged failure involves the recession emerging in late summer or fall of 1981. Two strands need be distinguished in this context. One strand of arguments confronts the Administration with the surprising appearance of the recession unforeseen by the policymakers. The second strand accuses the policy-makers of generating a recession in order to curb inflation.

The first strand does indeed reveal a specific failure of the Administration. The official forecasts published in the early months of the new Administration could hardly be substantiated in terms of available analysis and evidence. The forecast of output and inflation was difficult to reconcile with the Administration's proposed course of

financial policies. The "Shadow" noted in March 1981 that the execution of an anti-inflationary monetary policy would induce a recession under the conditions inherited at the time. The Administration's forecast emerged as a compromise of conflicting assessments advanced by various branches of the government. The preparations were probably also influenced to some extent by the daydreams of "supply siders". The simple political motivation to produce "numbers which look good" contributed to the outcome. This process could hardly produce any forecast relevantly addressed to economic reality. An essentially political procedure yielded a forecast, representing the Administration's official position, thoroughly disqualified within less than three quarters. The consequences of this numerological exercise lowered the credibility of the Administration's whole program. We observe unfortunately that the Administration proceeded for its most recent forecasting exercises in the same manner. We should recognize at this stage a failure in policy-making, a failure fostering subsequent repercussions on the political market which tend to obstruct the Administration's basic goals supported by the "Shadow" in its statement of March 1981.

The first component of the "recession failure" does not concern the fact of a recession but the failure to acknowledge publicly the probable consequences of an anti-inflationary policy. The second component addresses the fact of the recession. The ideas advanced in this context do not constitute a single coherent block. Some "supply siders" argued that inflation could be curbed by inducing an explosive and sustained growth due to reductions in tax rates. Others objected that an anti-inflationary monetary policy only achieves its purpose by producing a recession. A recession of sufficient length and depth forms thus, so we hear, the deliberate target of an anti-inflationary policy of monetary control.

The "supply siders" objection is easily shown to be unfounded. Important supply side effects due to existing expenditure programs and regulatory programs are neglected. There is no analytic or empirical basis to expect sustained rates of real growth of up to 8 percent p.a. necessary to remove inflation without lowering monetary growth below levels experienced in 1979/80.

The argument emphasizing the use of recessions as a means to curb inflation appears more frequently and dominates the media. It requires thus more serious attention. The issue has been discussed on several occasions at the meetings of the "Shadow" and was considered in previous position papers prepared over the past eight years. First and foremost, we need to emphasize that a necessary and sufficient condition for lower inflation is a correspondingly lower rate of monetary growth. We deny on the other hand that a recession with sufficient length and depth is a necessary

condition of an anti-inflationary program. Whether or not the monetary retardation required for our purposes translates into a recession depends crucially on the credibility of the policies pursued. A high credibility induces strong incentives to re-examine price-wage setting patterns established under the expectation of permanent inflation policies. A lower credibility obstructs such incentives. Monetary retardations produce consequently under the alternative states radically different output and price-level responses. The reader may find an excellent summary of the issue in an article by Marvin Goodfriend in the Economic Review, published by the Federal Reserve Bank of Richmond: "There is an important lesson in the successful restoration of price stability following the German hyperinflation which is relevant for our own time. A reduction in money growth can bring the inflation rate down significantly in a short period of time with relatively minor temporary reductions in real economic activity. But it must also be emphasized that for such a policy to work well, i.e. to affect inflation and not real economic activity, it is essential that the monetary authority announce and carry out real meaningful reform of its money growth policy. Suppose the monetary authority is truly committed to eventually bringing down money growth, but it moves in fits and starts or disguises its intentions, for example, to forestall criticism from groups hostile to its policies. Reductions in money growth, when they do come, will impact less on prices and more on real economic activity because there may be some doubt as to whether the money growth reductions will be sustained. The policy will work well only if the monetary authority establishes a commitment to bring money growth down that is credible to the financial markets and the public in general".

The emergence of a substantial recession in the course of an anti-inflationary policy reveals indeed a "failure in policy-making". The length and depth of the recession reflects the low credibility of current policies as a result of the past experiences. The same observations which conditioned the diffuse uncertainty expressed by financial markets also shape the magnitude and length of the recession. The failure attaches thus not to the decision (or fact) of a monetary retardation necessary to lower inflation. It attaches to our past record of policy-making and the strategic conception and tactical aspects still dominating our monetary policymaking.

III. THE "FAILURE" OF MONETARY CONTROL

The actual failures in policymaking described in the previous paragraphs should not obscure an important accomplishment. Monetary growth has been lowered in the

average over the past years. The course was moreover maintained during the recession. The rate of inflation substantially declined beyond the expectations expressed by last year's consensus forecast. Some progress appeared thus throughout diffuse uncertainty suffered by the financial markets. But the "voices of failure" still question this accomplishment. Their doubts are essentially concentrated on the technical feasibility (or desirability) of monetary control. Financial innovations create allegedly new and unpredictable patterns destroying the basis of monetary control. Measurement problems are so severe "that nobody knows what the money stock is". Nobody seems to know which of the various monetary aggregates to control. Lastly, it would appear more sensible to control directly the growth rate of nominal gross national product. The following sections examine these reservations addressed to a policy of monetary control.

1.   Financial Innovations

The fact of financial innovation can hardly be contested. We observed a remark-able array of new developments in the financial industry. Innovations occurred however also during the 1950's with the explosion of the thrift institutions. We also heard voices at the time that this process undermines the effectiveness of monetary policy.

Almost all arguments linking financial innovations with an erosion of monetary policy are essentially speculative and impressionistically suggestive. The conclusions are "plausible" impressions not supported by analysis or evidence. This issue has been addressed in previous position papers. The present section offers some important aspects of the problem.

The issues posed by financial innovation for our purposes can be usefully organized in terms of two relations: the relation between the money stock and nominal gross national product and the relation between the monetary base and the money stock. The first relation is expressed by monetary velocity and the second by the monetary multiplier. Changes in the economic structure induced by financial innovations will be revealed by the time series pattern governing monetary velocity and the multiplier. If the assertions about the consequences of financial innovations typically advanced are correct, then we should observe significant shifts in the patterns characterizing either multiplier or velocity. The patterns prevailing until a few years ago could not explain under the circumstances the multiplier's behavior over the past few years. Similarly, a larger trend element and a significantly larger variance of the stochastic innovation term would describe the more recent time series

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process of velocity. A statistical examination of the data yields no support for these implications of the thesis bearing on the consequences of financial innovations. The trend in M-1 velocity shows for the 1970's a somewhat larger estimate than for the 1950's. Their respective 95 percent confidence intervals overlap however to a large extent. The variance of the stochastic innovation is actually substantially smaller for the 1970's than for the 1950's. There is thus most definitely no evidence of a significant increase in the variance. The data do however yield evidence of a significant change in the form of the stochastic process. A first order moving average (for the first difference of log V_1) ruling during the 1950's was modified into a random walk for log V_1.

The position papers regularly prepared by Robert Rasche for the meetings of the "Shadow" provide the necessary information bearing on the multiplier. This work, amplified and buttressed by scholarly papers in professional journals, yields until the early months of 1982 (the last report made) no change in the structure of the process generating the movement of the multiplier.

The statistical evidence yields so far no case at all for the dramatic policy consequences attributed to financial innovations. The controllability of monetary growth has not been affected. The experience of the Swiss National Bank indicates moreover that even in the context of a substantially larger unpredictable short-run behavior of the multiplier the Central Bank can still execute an effective anti-inflationary policy. Secondly, there is no evidence that the link between money stock and gross national product has significantly worsened. But, lastly, there is evidence of more or less gradual shifts occurring over time in the form of the process governing velocity.

The last two points bear on a standard argument advanced by Fed officials in support of a "flexible approach" to policymaking. Flexibility seems to be particularly required whenever we experience changes or a lessened reliability in the link between money and gross national product. But either one of the two evolutions converts the claim for a "flexible policies" into an empty gesture. A lessened reliability offers no assurance that "flexible adjustments" improve the policy record. Systematic responses to larger noise levels in the data raise the likelihood of destabilizing actions. A meaningful flexibility requires more and not less reliable information.

One last issue need be briefly emphasized in this context. Federal Reserve officials typically interpret the stochastic properties of velocity as representations of the random shocks operating on money demand. This interpretation justifies their case for an accommodative stance expressed specifically by an interest targeting policy.

But the equivalence between velocity and money demand shocks does not hold. The stochastic properties of velocity reflect all the shock patterns operating on the economy including shocks in the financial sector beyond money demand and most particularly also all real shocks. A more or less significant increase in the variance of "velocity innovations" offers thus no basis for a policy assigning greater weight to interest control.

2.   The Measurement Problem and the Choice Among Aggregates

The statistical results summarized above for our assessment of the role of financial innovations also offer information about the measurement problem. This problem was dramatically articulated by Frank Morris, President of the Federal Reserve Bank of Boston (Wall Street Journal, June 22, 1982). The previous section considered the possible effect of financial innovations, in the absence of any measurement problem, on the behavior of monetary aggregates. Morris emphasizes in addition that financial innovation creates essentially intractable measurement problems. The concept of a money stock would be meaningless and a monetary policy addressed to the control over monetary growth impossible to execute. Financial innovations blur apparently two distinctions: the differentiation between money and liquid assets and the differentiation between money and debt.

The innovative arrangements developed by the financial industry are indeed ingenious. But a description of these innovations and their immediate effect on port-folio managers offers little information beyond plausible speculation. We still understand the meaning of "money", i.e. any object generally (with high frequency and regularity) used as a means of payment. We observe a small group of assets held by participants in the social game which behave in this respect very differently than most other assets. The borderline between the two groups of assets and the specific forms of assets constituting money changes over time. The location of the borderline will hardly ever occur with any definite precision. We always need to cope with some measurement problem. The obligation of a Central Bank for an anti-inflationary monetary control necessarily includes a duty to maintain an adequate data base and re-examine with some regularity its measurement procedures. A Central Bank can always assure a persistent measurement problem by creating incentives for accelerated innovation (regulation and inflation) with a suitable inattention to the data requirement.

Little reason has been advanced thus far to convince us that the measurement problem is intractable and the error so large that any M- measure is "meaningless".

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We note on the other hand an extensive use of many other important economic magnitudes, e.g. the inflation rate, the change in the gross national product and of its components, the real rate of interest, the unemployment rate, budget data etc. with little qualification about their respective measurement error. Most particularly, no evidence has ever been presented suggesting that the measurement error of the nation's money stock vastly exceeds the error of the CPI as a measure of inflation. I suggest that the opposite holds true with a wide margin.

The statistical examination of the patterns traced by velocity and multiplier explored in past position papers and partly surveyed above yields important information bearing on our subject. A substantial measurement error seems to have emerged by the end of the 1970's. The revision of the measurement procedures consistent with the definition of money lowered however the measurement error to an acceptable range. There is still room for improvement which the Fed should explore. An intractable measurement problem with increasing error would necessarily be reflected by significantly shifting patterns of both velocity and multiplier. The results reported above and summarized in more detail in the position paper prepared for March 1982 offer no support for the claim that our data are seriously affected by large and increasing measurement errors. One of the results obtained is especially informative in this context. The velocity of the monetary base, denoted with V_O, is the product of the multiplier (for M-1) and V_1, or in logarithmic expression

$$\log V_O = \log m_1 + \log V_1$$

Let m_1^* and V_1^* designate the true magnitudes and μ and ν the respective (multiplicative) measurement errors, so that

$$\log m_1 = \log m_1^* + \mu \qquad \text{and} \qquad \log V_1 = \log V_1^* + \nu$$

The effect of measurement errors involving M-1 (or similarly M-2) does not affect the base velocity. It follows in particular that $\mu = -\nu$, i.e. the two measurement errors necessarily offset each other in the definition of the base velocity. The base velocity remains thus unaffected by this specific measurement problem. It could still be affected however by shifting substitution relations induced by financial innovations occurring in the absence of any measurement problem. But the time series comparison of base velocity for the 1950's and 1970's offers little support for such contentions. The rational response to the emergence of a serious and persistent measurement problem is thus quite simple: monetary policy should replace the instrumental use of the base for purposes of monetary control with a base control approach.

The argument concerning the differentiation between money and debt advanced by Morris offers a good example for the irrelevant impressions surrounding the discussion. Some innovations are supposed to invert the timing relation between money and debt creation. Under "overdraft accounts credit card systems" payments are made before debt is created. This innovation hardly affects however the basic characteristics and determinants of the money supply process. Morris also asserts that "automatic credit programs" must raise velocity. The effect of such programs depends essentially on lower transaction costs. They contribute over a period to a modest extent, with other innovations, to produce a positive trend in V_1 with a lesser effect on V_0. But whatever the magnitude of this effect may be, it supports no case against a feasible execution of monetary control.

The questions considered in this section also apply to the choice among monetary aggregates. The multiplicity of aggregates seem to pose a serious obstacle for a monetary control policy. Multiple aggregates offer at least a convenient objection against a policy of monetary control. Their appearance may have actually been influenced by such considerations. But they involve no serious problem for an effective anti-inflationary policy executed over a longer-term horizon. We note first that no aggregate beyond M-1 or M-2 need be considered as a relevant magnitude of monetary control. In the absence of unresolved or differential measurement problems monetary control can always be formulated in either M-1 or M-2. The choice will determine the benchmark of non-inflationary monetary growth to be considered by the policy maker. In the context of unresolved or unattended measurement problems for both M-1 and M-2 (as in the United Kingdom) monetary policymakers should provisionally target directly the monetary base.

3. Controlling Nominal GNP Versus Controlling Monetary Growth

Monetary control is not exercised for its own sake. It is an instrument used to influence the behavior of the price level or of the nominal gross national product. A strategy of monetary control manipulates an intermediate magnitude as a means to influence the behavior of an ultimate target. It is claimed on occasion that this intermediate targeting is inefficient. A "final targeting" is offered as a more efficient strategy. Monetary policy should directly control the nominal gross national product. Analytic elaborations of this idea which postulate a direct control of nominal GNP by the authorities, in the sense of a specific action which can immediately fix this magnitude, are hardly worth any discussion. A more relevant approach argues that an economic structure, defined by a model, implies a unique relation between policy

instruments and nominal GNP. No intermediate target is needed. On the contrary, it can be shown that, given the model, the use of intermediate targeting is in general an inferior procedure. This argument depends however crucially on the assumption of full and reliable information expressed by the model. This assumption still belongs at this stage to Never-Never Land. Controlling GNP on the basis of misconceived beliefs about the details of the economy's response structure involves substantial risks of a destabilizing activist policy pattern. The necessary and sufficient condition for "controlling nominal GNP" are simply not satisfied. There exists thus no relevant empirical basis for the claim that monetary control is an inferior procedure. This would be the case with ideal knowledge, but not in the reality of seriously incomplete information about the true structure governing economic processes.

A different interpretation of "GNP control" should be mentioned. It is not offered as an alternative to monetary control. It functions equivalently to the ultimate goal of a stable price-level as a long-term guide to the formulation of monetary control. This long-term guide sets the benchmark of average monetary growth. This benchmark depends on the trend in velocity and the economy's normal real growth. The same information (stable price-level and normal real growth) can be used to formulate the growth in nominal GNP as a guide for setting the benchmark of average monetary growth. This meaning of "GNP control" is thus quite consistent with a strategy of monetary control.

4. The Retreat to Permanent Inflation

Two aspects characterize the arguments opposing the use of monetary control policies. The previous sections discussed the first aspect represented by an array of plausible impressions with little basis in analysis or evidence. The remarkable disregard of relevant alternative policies forms the second aspect. The President of the Federal Reserve Bank of Boston, for instance, offers us no clues on what the alternative to an "impossible" policy of monetary control should be. The array of objections share however one central implication: they represent an implicit retreat to a policy of permanent inflation executed by one of several tactical procedures. Serious opposition to a policy of monetary control will not be reconciled, as a matter of fact, with a persistent and reliable anti-inflationary policy.

The proposal advanced this summer by 31 Democrat Senators specified an alternative beyond the usual objection to monetary control. The proposal specified an explicit return to a strategy of interest control. Some others argued that a change in the "policy mix" was required. The combination of a "loose" fiscal policy with low

monetary growth should be replaced by a large monetary expansion offset with a "tight" fiscal policy (balanced budget through higher tax rates?). Both proposals involve a retreat from anti-inflationary policies. Acceptance of these proposals would signal a commitment to permanent inflation, high and volatile interest rates and disarray in international monetary affairs. These consequences produce over time price and credit controls in shifting forms. They are also likely to raise real tax rates and lower the (weak) political pressure to control the magnitude of the budget. The battle over monetary control involves thus issues substantially beyond some tactical technicalities. Its outcome will influence the socio-political reality of the final years of this century.

IV. THE "INSTITUTIONALIZATION" OF MONETARY POLICY

The "voices of failure" do address a serious problem. They misunderstood however the nature of the issue. Both components (interest rates and recession) of the relevant failure reflect a long history of strategic conception and tactical procedures. This history produced the deflation of the Great Depression and the permanent inflation of our age. The massive failure of monetary policymaking directs our attention to a basic question: how can we arrange our monetary affairs in a manner which avoids simultaneously the risk of large and persistent deflation or inflation?

The problem of an optimal monetary arrangement, expressed by the choice of a monetary standard, may be approached in a different but equivalent mode. Agents participating in the social co-ordination game are exposed to a wide diversity of risks. Many risks express the operation of shocks modifying natural conditions, changes in technology, organizational skills and information, tastes, demographic conditions etc. But this variety of "real shocks" does not exhaust the risks confronting agents. The behavior of monetary authorities extends the range of shocks affecting the economy and correspondingly shapes the total risks experienced by agents.

The traditional ideology of Central Banking fully recognizes the on-going operation of shocks and the associated risks experienced in market transactions. The occurrence of the real shocks justifies apparently an activist mode of a discretionary policy. The opportunity to create monetary shocks by suitable discretionary management can be effectively exploited. Such exploitation should adjust the monetary shocks in response to all other shocks in order to minimize the total risk encountered by agents. The reliable formulation of a risk-minimizing activist strategy requires however a full knowledge of the true stochastic processes of all on-going

shocks with a corresponding information about the economy's interacting structure. This knowledge is a necessary and sufficient condition for reliable risk-minimization. This condition offers not even the roughest approximation to reality. Attempts at risk-minimizing strategies involve under the circumstances a substantial likelihood of raising the total risk of the social game. The Great Depression and the permanent inflation exemplify the point. The case for risk-minimizing activist strategies expresses thus a "cognitive conceit" beyond our relevant political concerns. The relevant political issue suggested by analysis and experience focusses our attention on a different question. What are the monetary arrangements which effectively prohibit an increase of the total risk produced by monetary shocks beyond the basic "natural risk?"

The relevant set of arrangements contains three major options: some form of a gold standard, a "free banking" system with private production of money, and a constant monetary growth standard. All three standards impose more or less stringent constraints on the government's power to manipulate monetary affairs. Each option requires ultimately an appropriate constitutional specification in order to anchor monetary arrangements beyond the incentives of a short-run political process. Even so, constitutional constraints are not beyond the longer-run operation of a political process. This long-term exposure of constitutional arrangements seems to affect all three options to a similar extent. It offers no rational basis for any preference among the major options. We are thus led to compare the total social risk produced under the alternative standards. This problem has not been sufficiently explored in the literature and was certainly never raised by policymaking staffs or officials. Some very preliminary examination suggest that a constant monetary growth standard credibly initiated by the US authorities would probably produce a lower total risk than either a gold standard or free banking. This issue remains somewhat open and some deeper exploration need be pursued. What is hardly open to serious dispute at this stage is the inferior performance, expressed by a correspondingly high risk, produced by a strategy of discretionary policy-making. A constant monetary growth standard would exclude the high risk potential associated with the Central Bank's preferred strategy.

FISCAL POLICY OUTLOOK - A REPORT TO THE SOMC

Rudolph G. PENNER
American Enterprise Institute

FISCAL 1982

There is one advantage related to having deficits that are very large relative to outlays. The percentage error in my deficit forecasts is likely to be smaller. At least the principle seems to have worked with regard to my fiscal 1982 forecast.

In March, I forecast outlays of $745 billion; receipt of $625 billion; a unified deficit of $120 billion; and an off-budget deficit of $20 billion. The actual outcome for all of these categories is likely to be marginally lower. The current outlook is:

	Fiscal 1982
Outlays	$733 B.
Receipts	620
Unified Deficit	$113
Off-Budget Deficit	19
Total financing requirement	$132 B.

Although fiscal 1982 is almost over, there is still room for substantial error in the above estimates, especially with regard to receipts. September estimated personal and corporate income tax receipts can be quite erratic, and outlays are more likely to be lower than to be higher than the $733 billion estimate.

FISCAL 1983

In March, I forecast that if policies remained unchanged, we were headed for a unified budget deficit of about $170 billion. In fact, policies were changed quite substantially and given the pressures associated with election year politics, this must be considered as something of a triumph for the Congressional budget process. Receipts were raised by slightly over $20 billion and the First Budget Resolution called for outlay savings of over $50 billion including the reduction in debt service payments resulting from the deficit reduction and interest rate effects assumed to follow the translation of the First Budget Resolution into legislation.

Unfortunately, the fact that inflation and real growth are somewhat lower than we earlier expected has offset many of these actions and a $170 billion deficit still cannot be ruled out, although, as will be argued in detail later, something lower is much more likely than something higher.

While recent legislative actions are unlikely to make a large dent in our earlier estimates of the fiscal 1983 deficit, they are crucially important because they will greatly lower the long-run deficit pattern implied by the policies in effect at the time of our last meeting. This is quite an accomplishment since there were times in the early spring when it appeared that the Congressional budget process would collapse without any deficit reductions in place.

I was asked to estimate deficits for two significantly different sets of economic assumptions. The first assumes money growth above target. The real growth rate is virtually identical to that assumed by the Administration in its Midsession Review of the 1983 Budget issued in July 1982. From the fourth quarter of 1981 to the fourth quarter of 1983, the assumed real growth rate is 3.1 percent compared to 3.0 percent in the Administration forecast. Nominal GNP growth is assumed to average 8.8 percent, slightly lower than the Administration's 9.3 percent. Inflation and interest rates are almost 0.5 percentage points lower than in the Administration forecast.

In addition to making adjustments for differences in the economic assumptions which, by themselves, lower receipts and outlays below the levels assumed by the Administration, it is necessary to speculate about the extent of policy slippage and the extent to which technical estimates of outlay savings and the receipts obtained from the tax bill are too optimistic. I shall use CBO revenue estimating procedures which lower receipts a bit and use their technical estimates for outlay figures which adds significantly to estimated program costs. I shall also add $5 billion to outlays for policy slippage as the year unfolds. The results for this path are compared to Administration estimates below:

	FISCAL 1983	
	Administration	SOMC Path I
Outlays	$761.5 B.	$788 B.
Receipts	646.5	643
Unified deficit	$115.0 B.	$145 B.
Off-budget deficit	14.9	15
Total financing requirement	$129.9 B.	$160 B.

The second set of SOMC assumptions assumes that the Fed sticks with its enunciated targets. It is much less ebullient and therefore involves a significantly higher deficit forecast. Nominal GNP is assumed to grow at an average annual rate of 7.2 percent between the fourth quarter of 1981 and the fourth quarter of 1983 while real growth averages 1.8 percent. Making the same policy and technical estimating adjustments as before, the second economic path implies:

FISCAL 1983 - PATH II

Outlays	$788 B.
Receipts	619
Deficit	$161 B.
Off-budget deficit	15
Total financing requirement	$184 B.

It is sheer coincidence that the outlay estimate in Path II is identical to that in Path I and an even more colossal coincidence that both are identical to the CBO estimate. In all these analyses, assumed real growth, inflation, and interest rate assumptions are different but the differences exactly counteract each other.

My own guess is that we shall do better than Path II if the Fed sticks to its enunciated targets. I think it reasonable to hope for a better division between inflation and real growth under these circumstances and that would bring the unified deficit closer to CBO's $155 billion than to the $169 billion implied by Path II.

The unified deficit estimated along Path I is equivalent to 4.4 percent of GNP while that along Path II equals 5.1 percent of GNP. This compares to a ratio of 4.0 in 1976 and an average of about 2 percent during the decade of the 1970's.

LONGER-TERM OUTLOOK

The policy decisions taken so far this year are crucially important. They take us off of an explosive deficit path in which the deficit grew rapidly relative to GNP as far as the eye could see even if one assumed a fairly healthy long-run recovery.

Absent a significant recession in the 1984-85 period and assuming a continued slow deceleration of monetary growth, I believe that current policy now stabilizes the unified deficit at slightly below 5 percent of the GNP in 1984-85. This is still far too high, but deficits verging on $300 billion seemed quite possible only a few months ago, and although it is still possible that we shall break the $200 billion mark in the mid-eighties, it is more likely that we shall remain below that level.

It is, of course, probable that further actions to lower the deficit will be taken in 1984 actions. If the main deficit reductions are to be taken on the spending side and I hope that they will be, it will be essential to examine defense and social security outlays critically. Administration estimates imply that those two functions along with the net interest bill will amount to almost 70 percent of outlays in fiscal 1985 along their assumed policy path. Adding the health function – mainly medicare and medicaid – brings the total proporation close to 80 percent. It will be virtually impossible to find savings in the other 20 percent of outlays sufficient to make a significant dent in the deficit. There are, however, technical and other constraints on the amount by which defense and social security can be lowered. There is a fairly broad consensus among military experts that it would be dangerous to enact major cuts in the operations, maintenance, training, and personnel portions of the defense budget. The procurement of expensive weapons systems such as the B-1, MX missile, and two nuclear carriers is much more controversial, but cutting such items now saves little before 1986.

There are similar time constraints on the ability to cut social security. Even advocates of significant cuts agree that the benefit structure must be changed slowly to allow those near retirement to adjust their retirement plans.

Consequently, some tax increases will probably be necessary in 1984 and 1985, but hopefully, they can be kept to a minimum.

FORECASTING MULTIPLIERS IN THE 80'S:
THE MORE THINGS CHANGE THE
MORE THEY STAY THE SAME

James M. JOHANNES

and

Robert H. RASCHE

Michigan State University

Last spring, in our analysis for the Shadow Open Market Committee meeting, we were caught in the middle of one of the frequent money stock revisions, without any historical data for any of the revised money series or their components. These historical data became available in March 1982, so our current analysis is in three sections: 1) a discussion of our updated estimates which include a significant amount of data from the post October 1979 period for the first time; 2) an analysis of the forecasting performance of our component models in the 1981-82 period; and 3) a forecast for the coming twelve month period.

I.   ESTIMATION OF REVISED DATA

The last set of estimates of our various component models that we reported were constructed from the June 1981 money stock revisions, and were estimated over sample periods that ended in December 1979. These appeared in Table 2 of our September 1981 report. They are reproduced here for easy reference as Table 1. These estimates for all practical purposes reflect the experience under the old Fed funds rate operating procedure. With the data revisions that became available in March 1982, we have extended the sample period through December 1980, but kept the form of the models the same. Thus these estimates reported in Table 2 are influenced by the first fifteen months of the new operating procedures and the credit control period in early 1980, but are not influenced by the legalization of nationwide NOW accounts in January 1981.

On the whole, the models continue to remain very stable, in spite of all the "special" circumstances of the post 1970 period. There appears to be some minor

deterioration in the k and t_1^* models, notably in the χ^2 and s.e.e. statistics from our previous estimates, but this is not surprising given the large forecast errors in March and April 1980 that were noted for these components. Our general conclusion is that there does not appear to be any evidence at this point in time that the structure or the usefulness of the models has been substantially influenced by the change in monetary policy regimes. Whether this conclusion will hold up in the future is an empirical question that can only be answered with the passage of time. In retrospect, it is almost unbelievable that the structure of these simple models has remained essentially unchanged over the four years that we have been preparing forecasts for the Shadow Committee, in spite of all the allegations of financial innovations and "special circumstances." A detailed analysis of the evolution and ex ante forecasting performance of the models is currently in preparation.

II.   AN EX-POST EVALUATION OF 1981-82

We have prepared an ex-post forecasting analysis for each of our component models, using currently available data, for the period January 1981 through June 1982. For five of the component models, k, t_1^*, t_2^*, g and z, we have employed the "ramp" intervention term over the period January 1981 through April 1981 to allow for portfolio shifts between time deposits and transaction accounts, as described in our report to the Shadow in September 1981. This adjustment is meant to approximate, in a simple fashion, a portfolio shift of the magnitude and form implied by the "shift adjustment" developed by the staff of the Board of Governors. The forecasting experiments reported here support our previous conclusion that a portfolio shift of this magnitude, with resulting implications for the behavior of the various multipliers, cannot be ruled out.[1] The one-month forecast errors for this eighteen month period for each of the component models and for various multiplier concepts are presented in Tables 3 - 8.

Casual inspection of these tables reveals a number of desirable properties of the forecasts. First, the mean forecast error of all components, whether considered over the whole 1981-82 period or just over 1982, is very small, indicating that the forecasts are essentially unbiased. The largest forecast errors are concentrated in the first half of 1981, but even here the average errors tend to be quite small. The size of these errors is not a matter of concern, since we have made no attempt to capture the month-to-month magnitude of the portfolio shift associated with nationwide NOW

accounts, but merely attempted to approximate the shift on average with a simple linear function. The approximation seems to have worked better than we had any reason to expect.

A formal test of the forecasting properties of the models is provided by the information in the right hand column of the various tables. This column is the "standardized" forecast error computed by dividing the forecast error by the estimated standard error of forecast, a "t ratio." Given the number of degrees of freedom in the estimation, this variable can be considered as normally distributed under the hypothesis that our models are true. The sum of the squares of these standardized errors are then distributed as χ^2 under our maintained hypotheses. The computed values of the χ^2 statistic for the entire eighteen months (seventeen degrees of freedom) and the last six months (five degrees of freedom) are tabulated for the hypothesis that the variance of the "t ratio" is equal to 1.0. The critical value of the χ^2 statistic at the five percent level is 27.59 for seventeen degrees of freedom and 11.07 for five degrees of freedom. For the whole forecast period, the hypothesis that the variance of the "t ratio" is unity is rejected in five of six cases. This is not surprising given our simple approximation to early 1981. For the first six months of 1982, the hypothesis that the variance of the "t ratio" is unity is not rejected in four of the six cases, including the three components, k, t_i^*, and $r + \ell$ that account for most of the variance in the multiplier forecasts. In one of the remaining two cases, the hypothesis is only marginally rejected for the g ratio. Our overall conclusion is that there is little if any evidence that our component models have been invalidated by the experience of the past two years. The one model that may warrant some further investigation is that for z, the foreign deposit ratio, since it is possible that there has been some change in the underlying behavior associated with this component during the past two years, given the strong showing of the dollar on foreign exchange markets during this period, and the absence of regular intervention by the Federal Reserve in those markets.

Undoubtedly the most encouraging result indicated in these tables is that, contrary to most popular speculation, nothing unusual or unpredictable seems to be occurring with the currenct ratio, at least since the middle of 1981. The mean error of the "t ratio" of the k component forecasts over the last twelve months is only -.07, with a computed standard error of 1.19. The computed value of the χ^2 statistic over this period is 15.63 compared with a critical value of 19.67.

The forecasts of the various components have been assembled to produce forecasts for the monetary base and net monetary base (St. Louis Federal Reserve Bank concepts). In both cases, the mean forecast error is effectively zero for both the eighteen month period and for the first six months of 1982. The root-mean-squared error in each case is comparable to those of our earlier forecasting experiments.[2] The first order autocorrelations over the period July 1981 through June 1982 are .02 and -.12 for the monetary base and net monetary base multipliers, respectively. Thus, while the behavior of the base and M_1 appears to have diverged considerably in recent months, the difference in the growth rates of the two series appears to be completely consistent with the past behavior of the component series.

III. FORECAST FOR AUGUST 1982 - JULY 1983

Given that the tests discussed above overwhelmingly support the proposition that the models that are presented in Table 2 continue to be a valid description of the money supply process, we bravely plunge into another twelve month forecast. This forecast, for both the monetary base and net monetary base multipliers, is presented in Table 11. In brief, we forecast a continuation of the downward drift that we have seen in these multipliers in recent years. Over the course of the next year these multipliers should decrease at an annual rate of roughly two percent, which should give considerable leeway for differential growth of M_1 and the monetary base over the next year.

FOOTNOTES

1. For additional discussion of this portfolio shift see, James M. Johannes, "Testing the Shift Adjustment in the Federal Reserve's New Shift Adjusted M_{1B}," Economics Letters, 8, 1981, pp. 367-72. For another view, that the currency ratio was unaffected by the extension of nationwide NOW accounts see, John A. Tatom, "Recent Financial Innovations: Have They Distorted the Meaning of M_1?", Federal Reserve Bank of St. Louis Review, April 1982, pp. 23-32. Our models do not support this latter conclusion.

2. See James M. Johannes and Robert H. Rasche, "Can the Reserves Approach to Monetary Control Really Work?", Journal of Money, Credit, and Banking, August 1981, Table 4, p. 307.

TABLE 1   Component Models
June, 1981 Revisions

k	$(1-B)(1-B^3)(1-B^{12})\ \ln k = (1 - .7396B^3)(1 - .6239B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\qquad (.0460)\qquad\qquad (.0598)$ $\chi^2 = 36.21 \quad df = 28 \quad s.e.e. = .566 \times 10^{-2} \quad$ SAMPLE: 59.1 - 79.12
g	$(1-B)(1-B^{12})\ \ln g = (1 - .4134B)(1 - .1322B^2)(1 - .6311B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\quad (.0655)\qquad\quad (.0742)\qquad\quad (.0544)$ $\chi^2 = 34.28 \quad df = 27 \quad s.e.e. = .200 \qquad\qquad$ SAMPLE: 59.1 - 79.12
z	$(1 - .3584B)(1-B)(1-B^{12})\ \ln z = (1 - .6912B^{12})\ a_t$ $\quad (.0627)\qquad\qquad\qquad\qquad\qquad\qquad (.0497)$ $\chi^2 = 34.53 \quad df = 28 \quad s.e.e. = .269 \times 10^{-1} \quad$ SAMPLE: 59.1 - 79.12
t_1^*	$(1-B)(1-B^3)(1-B^{12})\ \ln t_1^* = (1 - .6761B^3)(1 - .5738B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\qquad\qquad (.0494)\qquad\quad (.0603)$ $\chi^2 = 33.82 \quad df = 28 \quad s.e.e. = .551 \times 10^{-2} \quad$ SAMPLE: 59.1 - 79.12
t_2^*	$(1-B^{12})[(1-B)\ \ln t_2^* + .00232D_1 + .0474D_2 - .0828D_3]$ $\qquad\qquad\qquad\qquad\quad (.0159)\qquad (.0130)\qquad (.0164)$ $\qquad\qquad = (1 - .5369B)^{-1}\ (1 - .6597B^{12})\ a_t$ $\chi^2 = 30.65 \quad df = 28 \quad s.e.e. = .292 \times 10^{-1} \quad$ SAMPLE: 61.1 - 79.12
r+l	$(1-B)(1-B^{12})\ \ln(r+l) = (1 - .6748B + .2449B^2 - .3713B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\qquad\quad (.0823)\quad (.0834)\quad (.0702)$ $\chi^2 = 35.13 \quad df = 27 \quad s.e.e. = .952 \times 10^{-2} \quad$ SAMPLE: 68.10 - 79.12
r+l-v	$(1-B)(1-B^{12})\ \ln(r+l-v) = (1 - .3114B - .5220B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\qquad\qquad (.0734)\quad (.0745)$ $\chi^2 = 27.93 \quad df = 28 \quad s.e.e. = .712 \times 10^{-2} \quad$ SAMPLE: 68.10 - 79.12
tc	$(1-B)(1-B^{12})\ \ln tc = (1 - .5432B - .1730B^3 + .1770B^9 - .6038B^{12})\ a_t$ $\qquad\qquad\qquad\qquad\quad (.0540)\quad (.0490)\quad (.0405)\quad (.0507)$ $\chi^2 = 39.27 \quad df = 26 \quad s.e.e. = .330 \times 10^{-1} \quad$ SAMPLE: 69.1 - 79.12

TABLE 2   Component Models
March, 1982 Revisions

k	$(1-B)(1-B^3)(1-B^{12}\ln k = (1 - .7862B^3)(1 - .6633B^{12})a_t$ $\chi^2 = 39.91 \quad df = 28 \quad s.e.e. = .629 \times 10^{-2} \quad$ SAMPLE: 59.1-80.12
g	$(1-B^{12})\ln g = (1 - .4203B)(1 - .1533B^2(1- .6198B^{12})a_t$ $(.0640)(.0701)(.0533$ $\chi^2 = 41.38 \quad df = 27 \quad s.e.e. = .199 \quad$ SAMPLE: 59.1-80.12
z	$(1 - .3513B)(1-B)'(1-B^{12})\ln z = (1 - .7093B^{12})a_t$ $(.0611)(.0469)$ $\chi^2 = 36.33 \quad df = 28 \quad s.e.e. = .273 \times 10^{-1} \quad$ SAMPLE: 59.1-80.12
c_1^*	$(1-B)(1-B^3)(1-B^{12})\ln c_1^* = (1 - .7352B^3)(1 - .6363B^{12})a_t$ $(.0452)(.0566)$ $\chi^2 = 43.10 \quad df = 28 \quad s.e.e. = .606 \times 10^{-2} \quad$ SAMPLE: 59.1-80.12
c_2^*	$(1-B^{12}) [(1-B)\ln c_2^* + .0092D_1 + .0465D_2 - .0848D_3]$ $(.0178)(.0123)(.0170)$ $= (1 - .4737B)^{-1}(1 - .6594B^{12})a_t$ $(.0609)(.0524)$ $\chi^2 = 29.09 \quad df = 28 \quad s.e.e. = .305 \times 10^{-1} \quad$ SAMPLE: 61.1-80.12
$r+\ell$	$(1-B)(1-B^{12})\ln(r+\ell) = (1 - .7186B + .2477B^2 - .3429B^{12})a_t$ $(.0797)(.0811)(.0666)$ $\chi^2 = 37.16 \quad df = 27 \quad s.e.e. = .979 \times 10^{-2} \quad$ SAMPLE: 68.10-80.12
$r+\ell-v$	$(1-B)(1-B^{12})\ln(r+\ell-v) = (1 - .2516B - .5733B^{12})a_t$ $(.0732)(.0771)$ $\chi^2 = 42.68 \quad df = 28 \quad s.e.e. = .693 \times 10^{-2} \quad$ SAMPLE: 68.10-80.12
cc	$(1-B)(1-B^{12})\ln cc = (1 - .5966B - .0910B^3 + .1754B^9 - .6340B^{12})a_t$ $(.0452)(.0103)(.0258)(.0392)$ $\chi^2 = 31.85 \quad df = 26 \quad s.e.e. = .316 \times 10^{-1} \quad$ SAMPLE: 69.1-80.12

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TABLE 3
Ex-Post Forecast for k

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Ratio"[*]
January 1981	.38228	.38577	.00249	-1.40
February 1981	.39828	.39140	.00252	2.73
March 1981	.39426	.39725	.00256	-1.17
April 1981	.37723	.38360	.00247	-2.58
May 1981	.39733	.39458	.00254	1.08
June 1981	.39453	.39018	.00252	1.73
July 1981	.39615	.39273	.00253	1.35
August 1981	.39849	.40053	.00258	-.79
September 1981	.39439	.39311	.00253	.51
October 1981	.39223	.39271	.00253	-.19
November 1981	.39303	.39681	.00256	-1.48
December 1981	.38980	.39172	.00253	-.76
January 1982	.37811	.38442	.00248	-2.54
February 1982	.39690	.39512	.00255	.70
March 1982	.39680	.39750	.00156	-.27
April 1982	.38606	.38430	.00248	.71
May 1982	.40548	.40466	.00261	.31
June 1982	.40422	.40009	.00758	1.60

	January 1981-June 1982	January 1982-June 1982
mean Error	.00028	.00025
Standard deviation of forecast error	.00366	.00358
standard diviation of "t"	1.48	1.42
χ^2	37.24	10.08

*(Actual-Forecast)/(Standard Error of Forecast)

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TABLE 4

Ex-Post Forecasts for t_1^*

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Raito"[*]
January 1981	4.13393	4.15356	.0265	-.74
February 1981	4.34492	4.23867	.0271	3.92
March 1981	4.32466	4.32979	.0277	-.19
April 1981	4.12341	4.19420	.0268	-2.64
May 1981	4.33533	4.30387	.0275	1.14
June 1981	4.32235	4.26326	.0272	2.17
July 1981	4.32365	4.29623	.0274	1.00
August 1981	4.38995	4.37791	.0277	.43
September 1981	4.38818	4.36188	.0279	.94
October 1981	4.39676	4.36907	.0279	.99
November 1981	4.37992	4.40159	.0281	-.77
December 1981	4.28411	4.33476	.0277	-1.83
January 1982	4.28028	4.37200	.0279	-3.29
February 1982	4.53630	4.52533	.0289	.38
March 1982	4.55737	4.56407	.0292	-.23
April 1982	4.39926	4.40157	.0281	-.08
May 1982	4.60249	4.61549	.0295	-.44
June 1982	4.58633	4.55749	.0291	.99

	January 1981-June 1982	January 1982-June 1982
mean error	.00269	-.0123
standard deviation of forecast error	.0460	.0417
standard deviation of "t"	1.68	1.48
χ^2	47.98	10.95

[*](Actual-Forecast)/(Standard Error of Forecast)

TABLE 5

Ex-Post Forecasts for t_2^*

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Ratio"[*]
January 1981	.93166	.94969	.0282	-.64
February 1981	.92163	.92584	.0275	-.15
March 1981	.93317	.92581	.0275	.27
April 1981	.98622	.98626	.0293	-.001
May 1981	.99059	.99330	.0295	-.09
June 1981	.97788	.95231	.0283	.90
July 1981	1.03533	1.04647	.0310	-.36
August 1981	.99100	1.01510	.0301	-.80
September 1981	.96790	.98526	.0292	-.59
October 1981	.97972	.99334	.0295	-.46
November 1981	.96520	.97369	.0289	-.29
December 1981	.96782	.96064	.0285	.25
January 1982	.99234	.97890	.0290	.46
February 1982	1.03010	.99338	.0295	1.24
March 1982	1.06713	1.06152	.0315	.18
April 1982	1.13211	1.14011	.0338	-.24
May 1982	1.10507	1.14135	.0339	-1.07
June 1982	1.03189	1.05754	.0314	-.82

	January 1981-June 1982	January 1982-June 1982
mean error	-.0041	-.0024
standard deviation of forecast error	.0183	.0267
standard deviation of "t"	.604	.854
χ^2	6.21	4.61

[*](Actual-Forecast)/(Standard Error of Forecast)

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TABLE 6
Ex-Post Forecasts for g

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Ratio"[*]
January 1981	.026455	.038660	.00806	-1.40
February 1981	.028571	.028456	.00593	.02
March 1981	.035135	.024248	.00505	2.16
April 1981	.038903	.029011	.00605	1.64
May 1981	.041667	.034651	.00722	.97
June 1981	.041529	.045486	.00948	-.42
July 1981	.035271	.038097	.00794	-.36
August 1981	.024957	.032762	.00683	-1.14
September 1981	.036892	.040665	.00847	-.45
October 1981	.044013	.033551	.00699	1.50
November 1981	.031340	.027929	.00582	.59
December 1981	.034815	.039292	.00819	-.55
January 1982	.044465	.037383	.00779	.91
February 1982	.064860	.042170	.00879	2.58
March 1982	.050000	.049888	.01040	.01
April 1982	.042383	.049054	.01022	-.65
May 1982	.049091	.049501	.01031	-.04
June 1982	.034026	.056481	.01177	-1.91

	January 1981-June 1982	January 1982-June 1982
mean error	.00040	.00006
standard deviation of forecast error	.01019	.01493
standard deviation of "t"	1.23	1.51
χ^2	25.85	11.42

[*](Actual-Forecast)/(Standard Error of Forecast)

TABLE 7

Ex-Post Forecasts for z

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Ratio"[*]
January 1981	.089947	.092766	.00265	-1.06
February 1981	.095353	.089534	.00255	2.28
March 1981	.088514	.095673	.00273	-2.62
April 1981	.084184	.083307	.00239	.37
May 1981	.086333	.088395	.00254	-.81
June 1981	.087343	.083829	.00239	1.47
July 1981	.082299	.087677	.00250	-2.15
August 1981	.082457	.079707	.00228	1.21
September 1981	.084558	.081906	.00234	1.13
October 1981	.078317	.085446	.00244	-2.92
November 1981	.076751	.077478	.00221	-.33
December 1981	.076469	.077469	.00221	-.45
January 1982	.070837	.074306	.00211	-1.64
February 1982	.072281	.071867	.00205	.20
March 1982	.071154	.077244	.00201	-3.03
April 1982	.065418	.068853	.00197	-1.74
May 1982	.070131	.067264	.00192	1.49
June 1982	.069313	.069997	.00200	-.34

	January 1981-June 1982	Janaury 1982-June 1982
mean error	.00117	.00173
standard deviation of forecast error	.00385	.00322
standard deviation of "t"	1.63	1.61
χ^2	45.24	13.00

[*](Actual-Forecast)/(Standard Error of Forecast)

TABLE 8

Ex-Post Forecasts for r + ℓ

Period Forecast	Actual (Aug., 1982)	Forecast	Standard Error of Forecast	"t-Ratio"[*]
January 1981	.025352	.025621	.000265	-1.02
February 1981	.023928	.024313	.000251	-1.53
March 1981	.023582	.024075	.000249	-1.98
April 1981	.023719	.023977	.000248	-1.04
May 1981	.023553	.023542	.000243	.05
June 1981	.023567	.023399	.000242	.74
July 1981	.023600	.023663	.000245	-.26
August 1981	.023442	.023430	.000243	.05
September 1981	.023150	.023468	.000243	-1.31
October 1981	.022853	.023321	.000241	-1.94
November 1981	.022999	.023470	.000244	-1.93
December 1981	.023162	.022975	.000238	.79
January 1982	.023571	.023168	.000239	1.69
February 1982	.022758	.022138	.000229	2.71
March 1982	.022471	.022240	.000230	1.00
April 1982	.022544	.022672	.000234	-.55
May 1982	.022372	.022532	.000233	-.69
June 1982	.022726	.022410	.000232	1.36

	January 1981-June 1982	January 1982-June 1982
mean error	-.00005	-.00021
standard deviation of forecast error	.00032	.00031
standard deviation of "t"	1.37	1.32
χ^2	31.91	8.71

[*](Actual-Forecast)/(Standard Error of Forecast)

TABLE 9
M1 Monetary Base Multiplier, NSA

	Predicted	Actual	Error
January 1981	2.56413	2.58904	-.02491
February 1981	2.58151	2.56181	.01969
March 1981	2.56164	2.58427	-.02262
April 1981	2.61272	2.64727	-.03455
May 1981	2.58009	2.56853	.01155
June 1981	2.60779	2.57983	.02796
July 1981	2.57992	2.57105	.00886
August 1981	2.56157	2.56803	-.00646
September 1981	2.58374	2.58858	-.00484
October 1981	2.58740	2.60038	-.01297
November 1981	2.56935	2.59700	-.02766
December 1981	2.60577	2.61092	-.00515
January 1982	2.61633	2.63048	-.01415
February 1982	2.59863	2.56640	.03224
March 1982	2.57556	2.57168	.00388
April 1982	2.60956	2.61130	-.00174
May 1982	2.53442	2.54240	-.00798
June 1982	2.56580	2.54774	.01805

	January 1981-June 1982	January 1982-June 1982
mean error	-.0023	.0051
RMSE	.0188	.0166
Avg. multiplier	2.5854	2.5783

TABLE 10

M1 Net Monetary Base Multiplier, NSA

	Predicted	Actual	Error
January 1981	2.58961	2.61120	-.02159
February 1981	2.60375	2.58190	.02185
March 1981	2.58170	2.60017	-.01847
April 1981	2.62887	2.66910	-.04023
May 1981	2.60117	2.60223	-.00105
June 1981	2.64209	2.61156	.03053
July 1981	2.61186	2.59802	.01384
August 1981	2.58837	2.58948	-.00111
September 1981	2.60549	2.61124	-.00575
October 1981	2.61008	2.61812	-.00804
November 1981	2.58657	2.60751	-.02094
December 1981	2.61629	2.62051	-.00422
January 1982	2.62615	2.65379	-.02765
February 1982	2.62196	2.59214	.02982
March 1982	2.60168	2.59595	.00573
April 1982	2.63447	2.63537	-.00090
May 1982	2.55757	2.55851	-.00094
June 1982	2.58206	2.56508	.01698

	January 1981-June 1982	January 1982-June 1982
mean error	-.0018	.0038
RMSE	.0191	.0182
Avg. multiplier	2.6068	2.6001

TABLE 11
Predicted M1 Multipliers[a]

	Monetary Base		Net Monetary Base	
July 1982[*]	2.5410		2.5505	
August 1982	2.5132	2.5277[b]	2.5228	2.5374
September 1982	2.5290		2.5388	
October 1982	2.5402		2.5500	
November 1982	2.5201	2.5290	2.5298	2.5388
December 1982	2.5268		2.5365	
January 1983	2.5356		2.5455	
February 1983	2.4825	2.5022	2.4923	2.5121
March 1983	2.4885		2.4984	
April 1983	2.5363		2.5464	
May 1983	2.4594	2.4874	2.4691	2.4972
June 1983	2.4664		2.4762	

[*]Actual based on preliminary estimates from St. Louis Federal Reserve and August 13, 1982 H.6.

[a]
 July 1982 origin.

[b]Three month average.

August 13, 1982

ECONOMIC PROSPECTS THROUGH 1983

A renewed slowdown in money growth between January and July will postpone a rapid recovery until 1983. However, the recent increased stability in month-to-month movements in the money supply should reinforce a trend toward a lower prime rate in the near-term. While a cyclical recovery in 1983 remains a likely development, long-term prospects have deteriorated considerably as a result of the Administration's push for higher taxes. If the tax increase is approved, significant economic problems will continue through 1984 and the Administration may lose control of economic policy.

The Latest Money Squeeze

As the chart below indicates, the latest six month squeeze on money (M1) was not accompanied by a similar dramatic squeeze on the monetary base. Hence, although the Federal Reserve was supplying reserves to the system, a larger proportion of these reserves was held by the public in the form of currency and used to support time deposits. This preference for holding currency is similar to the pattern which developed in the early 1930s. During that period, the economy responded not to the rapid creation of reserves, but to the sharp drop in money.

Personal Income and Adjusted Monetary Base
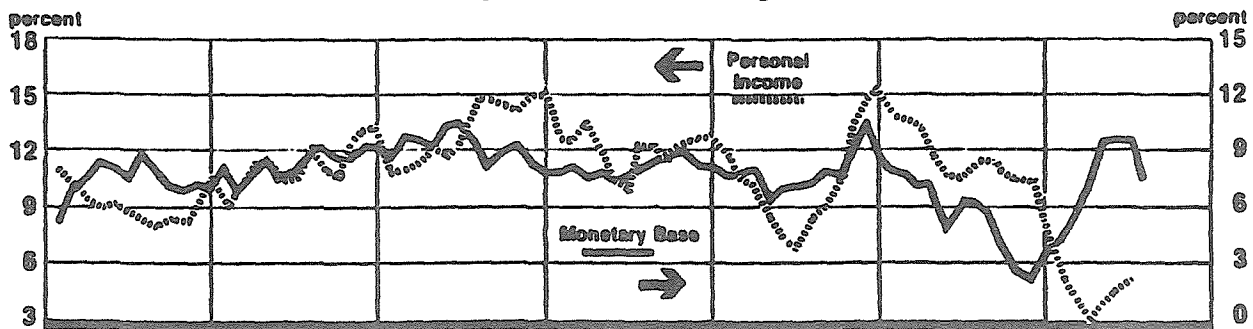
Personal Income and Money 1(1)
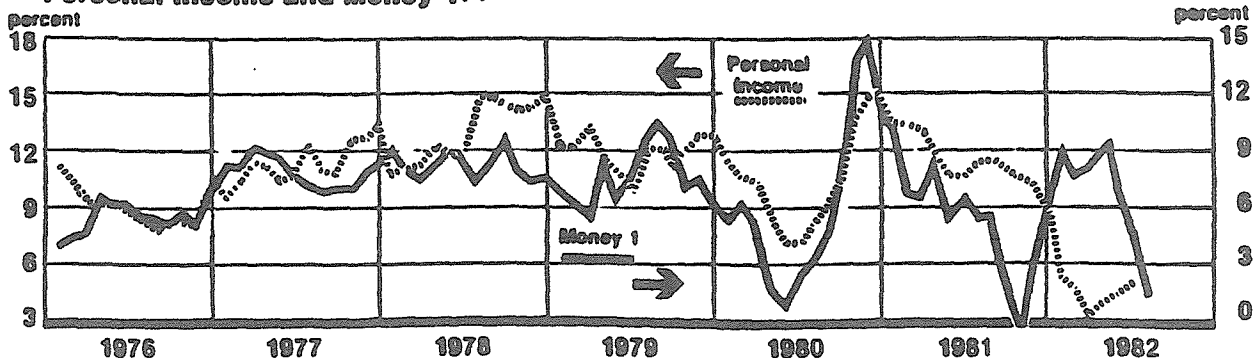
(1) Currency and all checkable deposits at depository institutions
All data are seasonally adjusted six month compound annual rates of change
Source: Board of Governors of the Federal Reserve System,
Federal Reserve Bank of St. Louis, Harris Bank

With the economy already in the throes of a severe recession, the latest bout of tight money will prevent any significant signs of recovery during the balance of the year. Although the forecast calls for a 6% annual rate of monetary growth and a $3\frac{1}{2}$% rate of real economic growth during the last half of 1982, increases in money during recent weeks have been below the forecast assumption. Consequently, the odds of even weaker economic performance than indicated in the attached forecast have been increasing.

Tighter money means a weaker economy in the short run yet signals further progress on inflation. While our forecast calls for a 5% increase in consumer prices for 1983, the odds are rising that inflation could be below the 5% vicinity.

A further encouraging sign can be found in recent productivity performance. During the past two quarters private nonfarm productivity has increased at an average annual rate of $2\frac{1}{2}$% in spite of a downward trend in real output. This is the first indication that U.S. productivity, which has been in a state of secular deterioration since the late 1960s, may be improving.

The Administration Abandons Supply-Side Economics

For the moment, supply-side economics has been put aside by the Reagan Administration. As details of the recommended three-year, $100 billion tax increase become available, our analysis shows that it completely eliminates the cuts in effective corporate tax rates enacted last year. As a result, the only element of supply-side economics that remains is an extremely modest cut in individual tax rates. Standing alone, these small cuts are not expected to boost productivity sufficiently to assure an explosive period of growth over the next few years. Without rapid growth, a growing disillusionment with economic policy will continue.

Given the ongoing uncertainties surrounding the nature and shape of the proposed tax bill, the present forecast was developed under the assumption that only a part of the tax increase would be approved. Should the tax bill be implemented in full, it would have the effect of reducing the prospects for productivity increases and hence, real growth in 1983. Ironically, the success of the Reagan Administration's economic policy now rests on its losing the current battle to increase taxes.

An interesting and disturbing factor in the move to boost tax burdens is that it parallels a similar move 50 years ago when the economy was also in a serious recession. In 1932 the federal deficit was $2.7 billion and there was widespread concern that this huge deficit would crowd out private investors. (It should be noted that relative to the size of the economy, a deficit of $2.7 billion in 1932 is equivalent to well over $100 billion in today's economy.) This concern led President Hoover to shift his economic policy from cutting taxes to increasing taxes. The end result was the largest peacetime tax increase up to that point in U.S. history, followed by a decade of economic misery.

Interest Rates to Continue Erratic Downtrend

While only a month ago our prime rate forecast of 14% by year-end was viewed as too low, now it appears that it may be too high. Whether or not our forecast overstates the level of interest rates at the end of the year depends on

Fed policy. We have assumed a return to the large erratic month-to-month swings in money which have caused concern in financial markets over the past two years. This assumption implies the continuation of relatively high real interest rates, which in turn serves to dampen the expected recovery in housing and autos. It is important to note that more recently the Fed has done a better job of stabilizing month-to-month swings. If this relative stability continues, year-end interest rates would be lower than our present forecast, and consumer durables and housing would experience a more rapid recovery in 1983.

Money Volatility and Real Short Term Rate
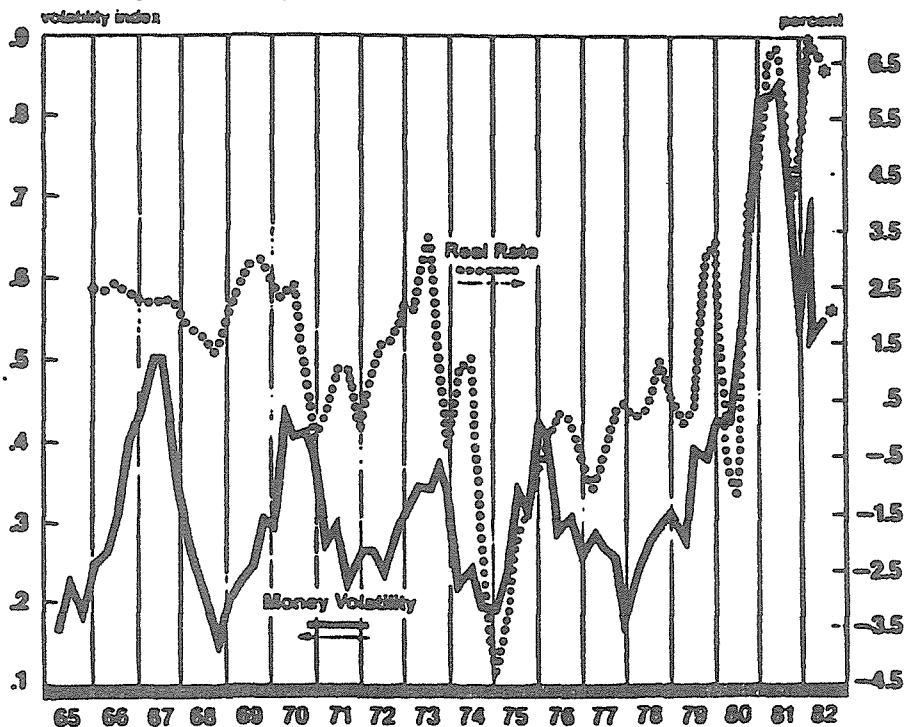
Money volatility index represents average deviation over twelve months from two year trends in M1

Real rate is four month commercial paper minus one year of average inflation

Data are quarterly

○ Third quarter estimate provided by Harris Bank

Source: Board of Governors of the Federal Reserve System. Harris Bank Economic Research Office

HARRIS BANK

Summary

While a few favorable factors such as decreased month-to-month monetary volatility, lower interest rates, and improved productivity provide some encouragement, the key economic developments of recent months have been negative. Six months of restrictive monetary growth in an already fragile economic environment combined with efforts to boost tax burdens has cast a pall on the outlook for the immediate future as well as prospects for a vigorous and sustained recovery.

Robert J. Genetski
Vice President and Economist

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
GROSS NATL PRODUCT	3003.2	2995.5	3047.4	3122.8	3199.5	3289.9	3380.6	3490.3	3560.7	2633.1	2937.7	3091.3	3434.4
%CH	3.0	-1.0	7.1	10.3	10.2	11.8	12.6	12.6	9.3	8.9	11.6	5.2	11.1
REAL GNP	1490.1	1470.7	1476.8	1489.2	1502.0	1521.4	1546.0	1571.3	1587.0	1474.0	1502.6	1484.7	1556.4
%CH	-5.3	-5.1	1.7	3.4	3.5	5.2	6.6	6.7	4.1	-0.4	1.9	-1.2	4.8
PRICE DEFLATOR	2.0155	2.0368	2.0635	2.0969	2.1301	2.1625	2.1919	2.2213	2.2408	1.7865	1.9552	2.0818	2.2061
%CH	8.8	4.3	5.3	6.6	6.5	6.2	5.6	5.5	5.0	9.3	9.4	6.5	6.0
CONSUMPTION EXPENDITURES	1884.5	1919.4	1950.8	1991.3	2040.9	2099.8	2163.5	2231.7	2289.5	1667.2	1843.1	1975.6	2196.1
%CH	3.4	7.6	6.7	8.6	10.4	12.0	12.7	13.2	10.8	10.6	10.6	7.2	11.2
DURABLES	229.6	237.9	242.6	247.4	255.1	264.4	275.8	289.2	298.1	214.3	234.5	245.7	281.9
%CH	-17.9	15.3	8.1	8.1	13.1	15.5	18.3	21.0	12.8	0.4	9.4	4.8	14.7
NONDURABLES	746.5	749.1	756.5	772.5	789.8	808.7	827.8	848.8	866.2	670.4	734.5	767.0	837.9
%CH	2.8	1.4	4.0	8.7	9.3	9.9	9.8	10.5	8.5	11.7	9.6	4.4	9.2
SERVICES	908.3	932.4	951.6	971.4	996.0	1026.7	1059.9	1093.8	1125.2	782.5	874.1	962.9	1076.4
%CH	10.3	11.0	8.5	8.6	10.5	12.9	13.6	13.4	12.0	12.8	11.7	10.2	11.8
INVESTMENT EXPENDITURES	468.9	414.8	429.1	452.4	469.5	489.4	517.6	538.0	554.0	402.3	471.5	441.5	524.7
%CH	-13.3	-38.8	14.5	23.6	16.0	18.0	25.1	16.7	12.4	-4.9	17.2	-6.4	18.9
NONRES FIXED EXPEND	360.2	357.0	354.0	355.0	360.1	367.6	376.1	386.4	396.2	309.2	346.1	356.5	381.6
%CH	8.4	-3.5	-3.3	1.1	5.9	8.7	9.6	11.4	10.5	6.5	12.0	3.0	7.0
PRODUCERS DUR EQUIP	220.6	215.6	210.8	209.7	212.5	217.1	222.4	228.9	234.8	198.6	216.4	212.2	225.8
%CH	0.7	-8.8	-8.5	-2.0	5.4	9.0	10.1	12.2	10.6	3.5	8.9	-2.0	6.4
BUSINESS STRUCTURES	139.6	141.4	143.2	145.2	147.6	150.5	153.7	157.5	161.5	110.5	129.7	144.4	155.8
%CH	22.3	5.3	5.3	5.9	6.5	8.3	8.8	10.2	10.4	12.5	17.4	11.3	7.9
RES FIXED EXPEND	95.5	93.4	94.7	96.3	98.3	102.7	109.3	116.9	122.9	103.2	105.0	95.7	112.9
%CH	-20.7	-8.5	5.7	6.8	8.5	19.4	20.2	30.9	22.0	-12.9	1.7	-8.9	18.1
INVENTORY CHANGE	13.2	-35.6	-19.7	1.2	11.2	19.0	32.2	34.7	34.9	-10.0	20.4	-10.7	30.2
NET EXPORTS	23.5	31.3	35.6	31.9	19.8	15.8	10.9	11.0	0.7	25.2	26.1	29.6	9.6
GOVT PURCHASES	626.3	630.1	631.9	647.3	669.3	684.9	696.6	709.6	724.5	538.4	597.0	644.6	703.9
%CH	10.6	2.4	1.1	10.1	14.3	9.7	7.0	7.7	8.7	13.5	10.9	8.0	9.2
FEDERAL	250.5	249.7	244.1	252.3	266.9	275.3	280.2	286.4	295.2	197.2	228.9	253.3	284.3
%CH	40.7	-1.3	-8.7	14.1	25.2	13.2	7.3	9.1	12.9	17.1	16.1	10.6	12.3
MILITARY	166.9	166.2	172.2	176.9	190.6	199.7	205.6	211.9	222.1	131.3	153.7	176.5	209.8
OTHER	83.6	83.5	71.9	75.4	76.3	75.6	74.6	74.5	73.1	65.8	75.2	76.8	74.5
STATE & LOCAL	375.7	380.4	387.8	395.0	402.4	409.6	416.4	423.2	429.3	341.2	368.0	391.4	419.6
%CH	6.2	5.1	8.0	7.6	7.7	7.4	6.8	6.7	5.9	11.5	7.8	6.4	7.2

NOTE: PERCENTAGE CHANGES AT ANNUAL RATES

ECONOMIC OUTLOOK

(BILLIONS OF DOLLARS—SEASONALLY ADJUSTED ANNUAL RATES)

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
PRETAX PROFITS 1)	216.5	171.6	168.2	177.4	188.4	197.7	211.5	226.0	229.8	242.5	232.1	176.4	216.3
%CH	-25.8	-60.5	-7.6	23.8	27.2	21.2	31.0	30.3	6.9	-4.0	-4.3	-24.0	22.6
PRETAX PROFITS ADJ 2)	183.9	157.1	156.0	162.1	168.6	181.9	198.9	216.7	225.2	181.6	190.6	161.0	205.7
%CH	-17.7	-46.7	-2.7	16.4	17.1	35.5	42.9	41.0	16.5	-6.8	4.9	-15.6	27.8
TAX LIABILITY	71.6	55.8	54.0	56.4	65.0	69.2	75.1	81.1	83.2	84.7	81.2	57.8	77.1
%CH	-43.0	-63.1	-12.3	19.2	76.2	20.4	38.6	36.4	10.5	-3.3	-4.1	-28.8	33.5
AFTER TAX PROFITS	144.9	115.9	114.2	121.0	123.4	128.5	136.4	144.9	146.6	157.8	150.9	118.6	139.1
%CH	-14.8	-59.1	-5.7	25.9	8.2	17.6	27.0	27.2	4.9	-4.4	-4.4	-21.4	17.3
AFTER TAX PROFITS ADJ 2)	112.3	101.3	102.0	105.7	103.6	112.7	123.8	135.6	142.0	97.0	109.5	103.1	128.5
%CH	5.9	-33.8	2.8	15.2	-7.7	40.1	45.7	43.7	20.4	-9.6	12.9	-5.8	24.6
PERSONAL INCOME	2494.6	2510.5	2549.5	2597.4	2652.1	2721.0	2802.9	2887.4	2952.3	2160.4	2415.9	2577.4	2840.9
%CH	6.1	2.6	6.4	7.7	8.7	10.8	12.6	12.6	9.3	10.7	11.8	6.7	10.2
TAX & NONTAX PAYMENT	393.2	393.4	397.5	379.9	394.5	409.4	426.5	406.5	417.6	336.3	386.7	391.3	415.0
%CH	-4.8	0.2	4.2	-16.6	16.3	16.0	17.0	-17.5	11.4	11.7	15.0	1.2	6.0
DISPOSABLE INCOME	2101.4	2117.1	2151.9	2217.5	2257.6	2311.6	2376.4	2480.9	2534.7	1824.1	2029.1	2186.0	2425.9
%CH	8.3	3.0	6.7	12.8	7.4	9.9	11.7	18.8	9.0	10.5	11.2	7.7	11.0
PERSONAL OUTLAYS	1942.7	1977.9	2009.9	2052.0	2103.2	2164.0	2229.5	2299.2	2358.3	1717.9	1898.9	2035.8	2262.8
%CH	3.6	7.4	6.6	8.6	10.4	12.1	12.7	13.1	10.7	10.6	10.5	7.2	11.2
PERSONAL SAVINGS	158.6	139.1	142.0	165.5	154.4	147.6	147.0	181.6	176.3	106.2	130.2	150.2	163.1
%CH	93.9	-40.8	8.6	84.4	-24.2	-16.6	-1.6	133.1	-11.2	9.9	22.6	15.4	8.6
SAVING RATE ($)	7.5	6.6	6.6	7.5	6.8	6.4	6.2	7.3	7.0	5.8	6.4	6.9	6.7
EMPLOYMENT	100.0	99.6	99.7	99.9	100.4	101.1	101.9	102.7	103.4	99.3	100.4	99.9	102.3
%CH	-2.4	-1.9	0.7	0.8	2.2	2.8	3.2	3.2	2.5	0.5	1.1	-0.5	2.4
LABOR FORCE	109.2	109.1	110.2	110.7	111.2	111.7	112.1	112.5	112.9	107.0	108.7	110.3	112.3
%CH	1.8	-0.1	3.9	1.9	1.8	1.6	1.6	1.5	1.5	1.9	1.6	1.5	1.8
UNEMPLOYMENT RATE ($)	8.4	8.8	9.5	9.8	9.7	9.4	9.1	8.7	8.5	7.2	7.6	9.4	8.9
PRODUCTIVITY-NONFARM	0.991	0.997	1.003	1.008	1.013	1.021	1.030	1.040	1.046	0.985	0.999	1.005	1.034
%CH	-3.6	2.4	2.4	2.0	2.0	3.0	3.7	3.9	2.5	-0.9	1.4	0.6	2.9
INDUSTRIAL PRODUCTION	1.463	1.418	1.393	1.401	1.415	1.442	1.480	1.519	1.539	1.470	1.509	1.407	1.495
%CH	-16.5	-11.7	-6.7	2.4	4.3	8.1	11.2	11.2	5.6	-3.6	2.6	-6.8	6.3

1) PROFITS FOR 82:2 ARE ESTIMATES. DUE TO THE ECONOMIC RECOVERY TAX ACT OF 1981, PRETAX PROFITS HAVE BEEN REDUCED TO REFLECT HIGHER TAX ALLOWANCES FOR CAPITAL CONSUMPTION.
... ARE ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
INTEREST RATES													
NEW ISSUE AA INDUS BONDS	15.7	15.8	15.3	15.3	15.2	15.0	14.8	14.3	13.5	12.3	15.1	15.4	14.4
NEW ISSUE AA UTIL BONDS	16.9	16.8	16.2	16.1	16.0	15.8	15.6	15.1	14.3	13.3	16.2	16.3	15.2
PRIME RATE	17.0	16.3	16.5	15.6	14.3	13.6	13.4	13.0	12.7	15.3	18.9	15.7	13.2
COMMERCIAL PAPER 4 MOS 1)	13.0	13.8	13.7	12.6	11.8	11.6	11.4	11.0	10.9	12.6	15.2	13.0	11.2
3 MONTH T-BILLS	11.8	12.8	12.4	11.1	10.8	10.7	10.6	10.2	10.1	11.4	14.0	11.8	10.4
PRIMARY 90 DAY CDS	13.1	13.9	14.2	13.1	12.2	11.8	11.6	11.2	11.1	12.9	15.7	13.4	11.4
MONEY AND VELOCITY													
MONETARY BASE-(MB)	168.6	172.8	176.6	179.0	182.1	185.2	188.3	191.5	194.8	156.5	166.6	177.6	190.0
%CH	1.9	10.3	9.1	5.5	7.1	7.0	6.9	7.0	7.1	8.0	6.4	6.6	6.9
VELOCITY OF MB 2)	18.055	17.848	18.071	18.072	18.117	18.379	18.608	18.846	18.952	17.491	18.097	18.027	18.697
%CH	-4.1	-4.5	5.1	0.0	1.0	5.9	5.1	5.2	2.3	0.8	3.5	-0.4	3.7
MONEY SUPPLY-(M1)	436.7	448.1	451.7	456.7	463.4	470.2	477.1	484.1	491.2	401.3	429.5	455.0	480.7
%CH	5.9	10.8	3.3	4.5	6.0	6.0	6.0	6.0	6.0	6.3	7.0	5.9	5.6
VELOCITY OF M1 2)	6.979	6.957	6.978	6.969	7.083	7.204	7.312	7.423	7.480	6.771	7.032	6.997	7.355
%CH	-6.0	-1.3	1.2	-0.5	6.7	7.0	6.2	6.2	3.1	1.9	3.9	-0.5	5.1
MONEY SUPPLY-(M2)	1807.4	1851.5	1895.3	1932.1	1974.2	2017.2	2061.1	2106.0	2151.8	1591.7	1747.3	1913.3	2084.0
%CH	9.2	10.1	9.8	8.0	9.0	9.0	9.0	9.0	9.0	8.3	9.8	9.5	8.9
VELOCITY OF M2 2)	1.734	1.694	1.686	1.687	1.688	1.703	1.716	1.730	1.731	1.725	1.759	1.689	1.720
%CH	-8.5	-8.8	-1.9	0.1	0.4	3.5	3.3	3.3	0.3	0.6	2.0	-4.0	1.9
CPI-ALL URBAN	2.814	2.836	2.868	2.914	2.956	2.997	3.034	3.074	3.112	2.469	2.724	2.894	3.054
%CH	7.8	3.2	4.6	6.6	5.9	5.7	5.0	5.4	5.0	13.5	10.3	6.2	5.6
AUTO SALES 3)	7.34	8.27	7.47	7.90	8.64	9.53	9.81	10.15	10.31	8.98	8.59	8.07	9.95
DOMESTIC	5.18	5.97	5.47	5.70	6.31	6.96	7.16	7.41	7.52	6.60	6.27	5.86	7.26
IMPORTS	2.22	2.30	2.00	2.20	2.33	2.57	2.65	2.74	2.78	2.41	2.33	2.21	2.69
HOUSING STARTS 3)	0.865	0.920	0.956	1.090	1.140	1.221	1.335	1.439	1.500	1.298	1.100	1.027	1.374

1) PRIOR TO NOVEMBER 1979, COMMERCIAL PAPER 4-6 MONTHS
2) VELOCITY IS MEASURED AS GNP DIVIDED BY MONEY SERIES LAGGED TWO QUARTERS
3) IN MILLIONS OF UNITS-SEASONALLY ADJUSTED ANNUAL RATES

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ECONOMIC OUTLOOK: ALTERNATIVE FORECASTS

A moderate economic recovery is expected during the second half of 1982, followed by more robust growth in 1983. The recovery should be accompanied by consolidation of recent gains against inflation, moderate declines in interest rates, and a restoration of corporate profitability. However, interest rates after adjustment for inflation are expected to remain unusually high by historical standards.

The Economy

The recession appears to have ended during the second quarter, as preliminary statistics indicate that real GNP advanced at a 1.7% annual rate. Real disposable income increased 0.8% per annum during the same period, supporting gains in real personal consumption and boding well for future advances in spending and personal savings as the recovery progresses. Moreover, real investment rose for the first time since the third quarter of 1981, although the increase was attributable mainly to reduced inventory depletion.

However, the recovery is off to a feeble start, and economic indicators at the end of the second quarter are less than encouraging. Consumer prices rebounded to a 12.7% annual rate for May and June, industrial production and new orders for durable goods declined throughout the quarter, and total auto sales in June fell to the lowest level in 12 years. In addition, the leading economic indicators were unchanged in June after posting gains from March through May.

The slow economic recovery is a direct effect of money growth rates that have been restrictive since January and the persistence of unusually high real interest rates. As a result, the recovery is expected to advance at an uninspiring rate of 3%-3 1/2% during the second half of 1982, or about 2% slower than previous Harris Economics forecasts predicted in April and May. Growth is expected to accelerate to a 5% rate during 1983 in response to greater monetary stimulus, declining interest rates, and increased utilization of the huge reservoir of excess productive capacity.

Monetary Policy

During the last year money growth rates have followed an erratic course for periods of 6 months. These variations were partly in response to shifting patterns in the Federal Reserve's sale and purchase of government securities, which changed the growth rate of bank reserves. Patterns in the public's use of these reserves also changed as deposit holding preferences have been altered by the severe recession and high interest rates. Because spending in the current period is closely related to changes in money during the preceding 6 to 9 months, an adequate understanding of M1 behavior is essential for accurate economic forecasting.

Changes in the M1 measure of money result primarily from changes in currency and bank reserves, together called the monetary base. The Federal Reserve has direct control over the monetary base, and M1 growth rates seldom deviate from base growth rates for periods lasting as long as 6 months. Consequently, by controlling the monetary base the Fed should be able to generate the desired level of money growth and total spending in the economy. However, the last 6 months have witnessed substantial deviations between base growth and M1 growth. The recent shortfall in M1 growth occurred because time deposits became more attractive and because precautionary holdings of currency were increased by the public, which reduced the growth of bank reserves as a proportion of the monetary base.

Swings in M1 growth can have a significant impact on economic growth patterns, even though money growth meets the policy targets on an annual average. The spurt of money growth between October and January was largely responsible for the improved second quarter economic performance. And, despite M1 growth at a 5.2% annual rate since the 2.5%-5.5% targets were established in the middle of the fourth quarter, the growth of only 1% in M1 over the last 6 months presages a subdued second half recovery. Moreover, the danger exists that continued slow money growth will delay the recovery until 1983.

Interest Rates and Money Volatility

Interest rates have remained at unprecedented levels relative to inflation since the end of 1980, and this situation is expected to persist throughout the coming 18 months. Most explanations for these high rates have centered on the large federal deficit, and rates have undoubtedly been biased upwards due to greater government credit demands and fears that the Federal Reserve might finance part of the deficit through inflationary money creation. However, the impact of the deficit, at least for the case of shorter term interest rates, appears to be less important than uncertainty premiums that have been generated by volatile monetary policies.

As the chart on the facing page illustrates, money volatility closely correlates with changes in real interest rates. Record levels of volatility have been matched by record real yields. When this factor is combined in a multivariate statistical analysis with other factors affecting interest rates, the volatility factor emerges as the dominant cause of the current interest rate dilemma. Furthermore, the recent decline in money volatility coincides with substantial declines in short-term rates recorded in July that have not yet been captured by the chart's quarterly data.

Interest rates should decline substantially if monetary policy follows a more stable course over the coming year, but a more stable policy is not assured, even if the Federal Reserve money targets are met on average. Consequently, assumptions regarding future volatility have a major impact on our interest rate forecasts, and each of the attached forecast scenarios depend on differing money volatility assumptions as indicated.

Robert R. Davis
Vice President and Economist

Money Volatility and Real Short Term Rate
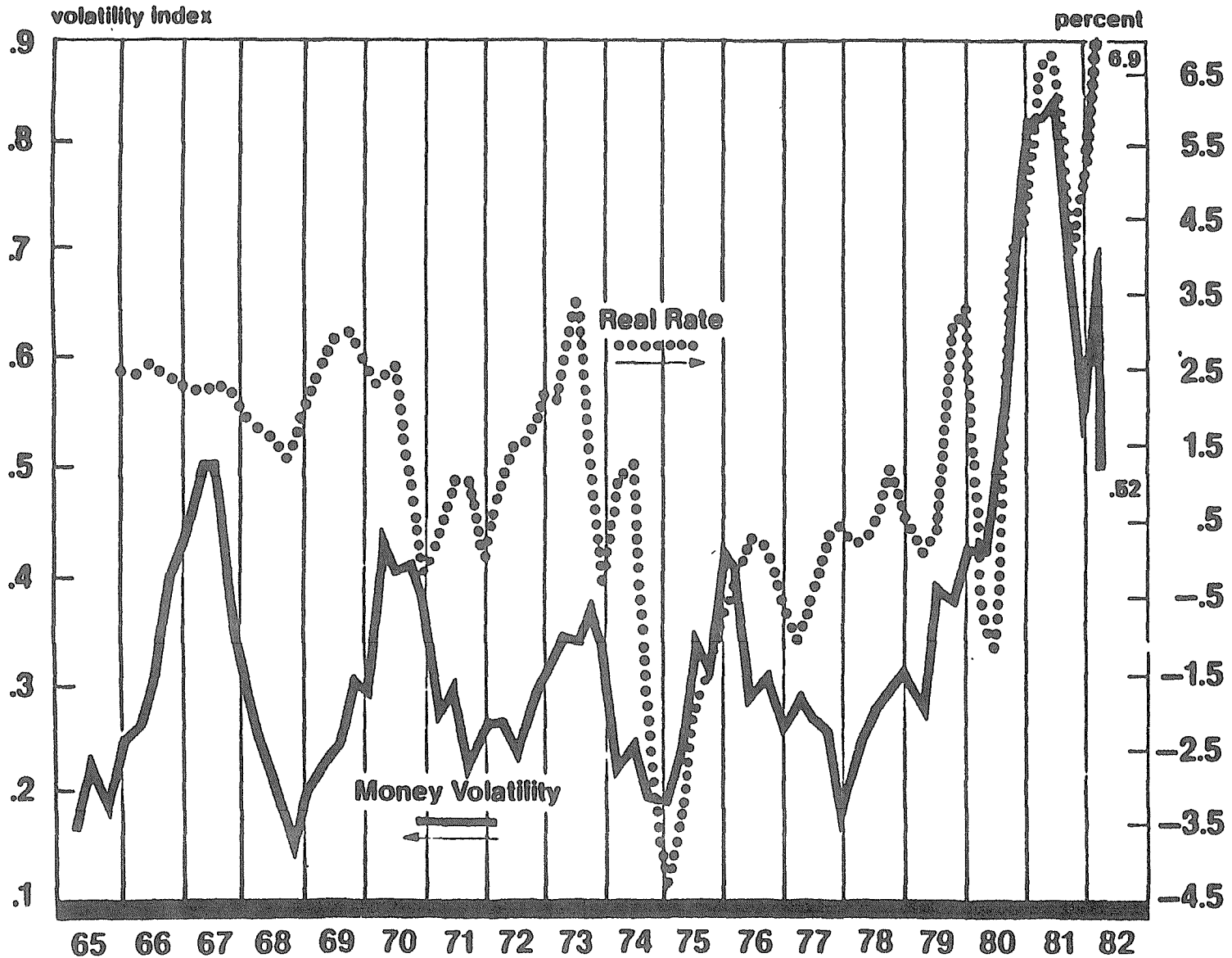
Money volatility index represents average deviation over twelve months from two year trends in M1.

Real rate is four month commercial paper minus one year of average inflation.

Data are quarterly.

Source: Board of Governors of the Federal Reserve System; Harris Bank Economic Research Office

HARRIS BANK

Most Likely Forecast (65% Probability)

Money growth is expected to resume during the third quarter in response to increased reserve levels, and is expected to approach the top of the Federal Reserve target range for the remainder of 1982 and all of 1983. M1 growth of 5-6% since last November will be sufficient to maintain the recovery process in spite of high interest rates, although restrictive money growth between January and July will generate a relatively weak recovery in the second half of 1982.

Although money growth stays near the target ranges on average, little progress is expected in achieving greater short-run stability. Consequently, money volatility is assumed to be near the past 2 year average at 0.67, and real interest rates show little improvement. Both short-term and long-term rates decline moderately in nominal terms, but real commercial paper rates decline only 120 basis points by the end of 1983, and real AA corporate bond rates increase 80 basis points. The economy's potential for growth, indicated by record post-war levels of excess capacity, is dampened by interest rates remaining at historically high levels. However, as interest rates trend down and productive factors are returned to operation, the economy will experience the highest sustained growth rates in 5 years.

ECONOMIC OUTLOOK

MOST LIKELY SCENARIO (65% PROBABILITY)

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
GROSS NATL PRODUCT	3003.2	2995.5	3047.4	3122.8	3199.5	3289.9	3388.6	3490.3	3568.7	2633.1	2937.7	3091.3	3434.4
%ch	3.0	-1.0	7.1	10.3	10.2	11.8	12.6	12.6	9.3	8.9	11.6	5.2	11.1
REAL GNP	1490.1	1470.7	1476.8	1489.2	1502.0	1521.4	1546.0	1571.3	1587.0	1474.0	1502.6	1484.7	1556.4
%ch	-5.3	-5.1	1.7	3.4	3.5	5.2	6.6	6.7	4.1	-0.4	1.9	-1.2	4.8
PRICE DEFLATOR	2.0155	2.0368	2.0635	2.0969	2.1301	2.1625	2.1919	2.2213	2.2488	1.7864	1.9551	2.0818	2.2061
%ch	8.8	4.3	5.3	6.6	6.5	6.2	5.6	5.5	5.0	9.3	9.4	6.5	6.0
CPI-ALL URBAN	2.818	2.836	2.868	2.914	2.956	2.997	3.034	3.074	3.112	2.469	2.724	2.894	3.054
%ch	7.8	3.2	4.6	6.6	5.9	5.7	5.0	5.4	5.0	13.5	10.3	6.2	5.6
MONEY SUPPLY-(M1)	436.7	448.1	451.7	456.7	463.4	470.2	477.1	484.1	491.2	401.3	429.5	455.0	480.7
%ch	5.9	10.8	3.3	4.5	6.0	6.0	6.0	6.0	6.0	6.3	7.0	5.9	5.6
PRETAX PROFITS 1)	216.5	171.6	168.2	177.4	188.4	197.7	211.5	226.0	229.8	242.5	232.1	176.4	216.2
%ch	-25.8	-60.5	-7.6	23.8	27.2	21.2	31.0	30.3	6.9	-4.0	-4.3	-24.0	22.6
PROFITS ADJ 2)	183.9	157.1	156.0	162.1	168.6	181.9	198.9	216.7	225.2	181.6	190.6	161.0	205.7
%ch	-17.7	-46.7	-2.7	16.4	17.1	35.5	42.9	41.0	16.5	-6.8	4.9	-15.6	27.8
INTEREST RATES													
AA INDUS BONDS 3)	15.7	15.8	15.3	15.3	15.2	15.0	14.8	14.3	13.5	12.3	15.1	15.4	14.4
PRIME RATE	17.0	16.3	16.5	15.6	14.3	13.6	13.4	13.0	12.7	15.3	18.9	15.7	13.1
COMML PAPER 3)	13.0	13.8	13.7	12.6	11.8	11.6	11.4	11.0	10.9	12.6	15.2	13.0	11.2

1) PROFITS FOR 82:2 ARE ESTIMATES. DUE TO THE ECONOMIC RECOVERY TAX ACT OF 1981, PRETAX PROFITS HAVE BEEN REDUCED TO REFLECT HIGHER TAX ALLOWANCES FOR CAPITAL CONSUMPTION.
2) PROFITS ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.
3) AA INDUSTRIALS ARE NEW ISSUE. COMMERCIAL PAPER 4 MONTHS, 4-6 MONTHS PRIOR TO NOVEMBER 1979.

First Alternative: Slow Money Growth (20% Probability)

The first alternative scenario assumes that the subdued money growth of the last 6 months is continued through the third quarter, followed by money growth rates near the middle of the Fed's target range for the remainder of the forecast period. Such continued monetary restraint in the third quarter will yield very little growth during the remainder of 1982, although higher money growth, improved productivity, and falling interest rates will generate a robust recovery in 1983.

Lower interest rates are realized because of both falling inflation rates and reduced volatility of money growth. Lower money growth and improved productivity lower inflation from 6.1% at an annual rate in the third quarter of 1982 to 3.2% at an annual rate in the fourth quarter of 1983, and a decline in money volatility to 0.5 reflects declining financial uncertainty. As a result, interest rates decline substantially in nominal terms and moderately in real terms.

ECONOMIC OUTLOOK

FIRST ALTERNATIVE (20% PROBABILITY)

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
GROSS NATL PRODUCT	3003.2	2995.5	3047.4	3108.6	3153.7	3228.2	3312.1	3398.1	3482.4	2633.1	2937.7	3076.3	3355.2
%ch	3.0	-1.0	7.1	8.3	5.9	9.8	10.8	10.8	10.3	8.9	11.6	4.7	9.1
REAL GNP	1490.1	1470.7	1476.8	1484.2	1484.0	1501.0	1525.0	1549.7	1575.6	1474.0	1502.6	1478.9	1537.9
%ch	-5.3	-5.1	1.7	2.0	-0.1	4.7	6.6	6.6	6.8	-0.4	1.9	-1.6	4.0
PRICE DEFLATOR	2.0155	2.0368	2.0635	2.0944	2.1251	2.1507	2.1718	2.1927	2.2102	1.7864	1.9551	2.0800	2.1814
%ch	8.8	4.3	5.3	6.1	6.0	4.9	4.0	3.9	3.2	9.3	9.4	6.4	4.9
CPI-ALL URBAN	2.814	2.836	2.868	2.914	2.949	2.977	2.998	3.023	3.043	2.469	2.724	2.892	3.010
%ch	7.8	3.2	4.6	6.6	4.9	3.9	2.9	3.4	2.7	13.5	10.3	6.2	4.1
MONEY SUPPLY-(M1)	436.7	448.1	451.7	453.9	458.4	462.9	467.5	472.1	476.8	401.3	429.5	453.0	469.8
%ch	5.9	10.8	3.3	2.0	4.0	4.0	4.0	4.0	4.0	6.3	7.0	5.5	3.7
PRETAX PROFITS 1)	216.5	171.6	168.2	174.5	176.6	181.4	192.0	204.7	216.4	242.5	232.1	172.7	198.6
%ch	-25.8	-60.5	-7.6	15.8	4.9	11.4	25.4	29.2	24.8	-4.0	-4.3	-25.6	15.0
PROFITS ADJ 2)	183.9	157.1	156.0	159.2	157.1	166.9	181.5	197.8	214.2	181.6	190.6	157.3	190.1
%ch	-17.7	-46.7	-2.7	8.3	-5.2	27.5	39.9	41.0	37.5	-6.8	4.9	-17.5	20.8
INTEREST RATES													
AA INDUS BONDS 3)	15.7	15.8	15.3	15.0	14.8	14.1	13.4	12.4	11.3	12.3	15.1	15.2	12.8
PRIME RATE	17.0	16.3	16.5	15.1	12.7	12.0	11.4	10.4	10.0	15.3	18.9	15.2	11.0
COMML PAPER 3)	13.0	13.8	13.7	12.1	10.2	10.0	9.7	8.9	8.5	12.6	15.2	12.5	9.3

1) PROFITS FOR 82:2 ARE ESTIMATES. DUE TO THE ECONOMIC RECOVERY TAX ACT OF 1981, PRETAX PROFITS HAVE BEEN REDUCED TO REFLECT HIGHER TAX ALLOWANCES FOR CAPITAL CONSUMPTION.
2) PROFITS ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.
3) AA INDUSTRIALS ARE NEW ISSUE. COMMERCIAL PAPER 4 MONTHS, 4-6 MONTHS PRIOR TO NOVEMBER 1979.

Second Alternative: Fast Money Growth (15% Probability)

The second alternative assumes a return to rapid monetary growth which spurs economic growth in the short-run, but produces deteriorating business conditions in the longer term. Money growth exceeds the target range throughout 1983, and the volatility of money growth remains high at 0.8. Consequently, real economic growth slows from a rapid pace by mid-1983, inflation rates return to near double digit levels, and interest rates advance in nominal and real terms at all maturity levels.

ECONOMIC OUTLOOK

SECOND ALTERNATIVE (15% PROBABILITY)

	ACTUAL			FORECAST						YEARS			
	81 IV	82 I	82 II	82 III	82 IV	83 I	83 II	83 III	83 IV	1980	1981	1982	1983
GROSS NATL PRODUCT	3003.2	2995.5	3047.4	3129.9	3219.3	3332.3	3445.5	3546.9	3651.2	2633.1	2937.7	3098.0	3494.0
%ch	3.0	−1.0	7.1	11.3	11.9	14.8	14.3	12.3	12.3	8.9	11.6	5.5	12.8
REAL GNP	1490.1	1470.7	1476.8	1492.6	1511.3	1533.1	1554.5	1567.4	1580.6	1474.0	1502.6	1487.9	1558.9
%ch	−5.3	−5.1	1.7	4.3	5.1	5.9	5.7	3.4	3.4	−0.4	1.9	−1.0	4.8
PRICE DEFLATOR	2.0155	2.0368	2.0635	2.0969	2.1301	2.1736	2.2164	2.2629	2.3100	1.7864	1.9551	2.0818	2.2407
%ch	8.8	4.3	5.3	6.6	6.5	8.4	8.1	8.7	8.6	9.3	9.4	6.5	7.6
CPI-ALL URBAN	2.814	2.836	2.868	2.917	2.970	3.037	3.103	3.175	3.248	2.469	2.724	2.898	3.141
%ch	7.8	3.2	4.6	7.0	7.5	9.3	9.0	9.6	9.5	13.5	10.3	6.4	8.4
MONEY SUPPLY-(M1)	436.7	448.1	451.7	458.3	468.3	478.5	488.9	499.6	510.5	401.3	429.5	456.6	494.4
%ch	5.9	10.8	3.3	6.0	9.0	9.0	9.0	9.0	9.0	6.3	7.0	6.3	8.3
PRETAX PROFITS 1)	216.5	171.6	168.2	180.4	196.6	209.3	223.9	231.5	237.4	242.5	232.1	179.2	225.5
%ch	−25.8	−60.5	−7.6	32.2	41.0	28.5	31.0	14.3	10.5	−4.0	−4.3	−22.8	25.9
PROFITS ADJ 2)	183.9	157.1	156.0	164.3	175.1	189.9	205.0	214.2	223.1	181.6	190.6	163.1	208.1
%ch	−17.7	−46.7	−2.7	23.0	29.0	38.4	35.7	19.3	17.6	−6.8	4.9	−14.4	27.5
INTEREST RATES													
AA INDUS BONDS 3)	15.7	15.8	15.3	15.4	15.6	16.3	16.8	17.2	17.7	12.3	15.1	15.5	17.0
PRIME RATE	17.0	16.3	16.5	15.9	14.7	15.7	16.7	16.9	17.3	15.3	18.9	15.9	16.7
COMML PAPER 3)	13.0	13.8	13.7	12.9	12.7	14.0	14.9	14.9	15.3	12.6	15.2	13.3	14.8

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1) PROFITS FOR 82:2 ARE ESTIMATES. DUE TO THE ECONOMIC RECOVERY TAX ACT OF 1981, PRETAX PROFITS HAVE BEEN REDUCED TO REFLECT HIGHER TAX ALLOWANCES FOR CAPITAL CONSUMPTION.
2) PROFITS ADJUSTED TO EXCLUDE INVENTORY PROFITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.
3) AA INDUSTRIALS ARE NEW ISSUE. COMMERCIAL PAPER 4 MONTHS, 4-6 MONTHS PRIOR TO NOVEMBER 1979.

ECONOMIC PROJECTIONS

Burton ZWICK*

Prudential Insurance Company of America

Though still quite high by historical standards, interest rates have fallen quite sharply since the end of June. Rates on 3-month treasury bills have fallen from almost 13 percent to about 8 percent, and 30-year government bond rates have declined from 14 percent to around 12 percent. Just as economists were divided in their explanation of the unusually high rates of the past 2 years, they have been divided in explaining the recent decline. The factors that divide them are important, because the differing views imply quite different scenarios for the economy over the next four to six quarters.

One view — which emphasizes the "supply and demand" for new flows of credit — is that high rates reflect large credit demands, including those resulting from large federal deficits. High rates may also reflect the level of money supply targets relative to inflation and nominal GNP. In this view, rates have fallen so sharply only because the economy is so weak. As soon as recovery leads to higher credit demands, rates will rise, particularly if the Federal Reserve holds money growth within the target range. The rise in rates will be sufficient to constrain or even completely choke off a recovery by the middle of 1983.

The opposing view — which emphasizes desired holdings of the stocks of assets — is that high rates reflect concern that the recent deceleration in inflation may be temporary. This view acknowledges that economic slack has contributed to recent rate declines, particularly in short term rates, but emphasizes the beneficial effects of declining inflation as well. As with the supply-and-demand view, deficits contribute to high rates in the expectations view, but less through an immediate effect on the balance between supply and demand than by undermining confidence that monetary and fiscal policy can be focussed on controlling inflation over the longer term. In this

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view, a recovery will not lead to a sharp rise in rates despite budget deficits unless investors believe that inflation will reaccelerate. Should inflationary expectations remain under control as the economy recovers, the trend toward more normal interest rates can continue and the recovery can extend throughout 1983 and even beyond.

Since inability to observe expectations directly precludes any clear cut discrimination between the alternative views of interest rate behavior, choosing between the pair of economic scenarios requires an analysis of other developments in the economy. One unmistakable development is the decline in inflation from the 10-12 percent area two years ago to the 6-7 percent range today. The degree of economic slack and the moderation in money growth over the past two years suggest that inflation could slow to the 5-5 1/2 percent area over the period from 1982:2 to 1983:4.

Disinflation is never painless, and this most recent decline in inflation rates has created serious adjustment problems for many households and firms. Firms have been unable to increase prices and revenues as rapidly as anticipated, and their profits and cash flow have been severely squeezed by the extremely high cost of servicing their debt. However, as recovery begins, the decline in inflation will be extremely important in enabling the recovery to be sustained. Assuming annual M1 growth of 5 percent and velocity growth of 4 percent (slightly above the long-term trend growth of 3-3 1/2 percent), personal income should begin to rise at a 9 percent annual rate. Personal tax cuts in 1982 and 1983 of about $60 billion will further increase disposable income growth -- over the period from 1982:2 to 1983:4 -- to about 11 percent per year. With inflation running at 5 1/2 percent, real disposable income is likely to grow around 5 1/2 percent per year, compared with annual growth of about 3 1/2 percent over the 1970-78 period and less than 2 percent during the 1979-81 period.

An annual increase in real disposable income of 5 1/2 percent over the next 6 quarters can support real outlay and consumption growth of about 4.5 percent per year and a 1 1/2 percentage point increase in the savings rate -- from 6.6 percent in 1982:2 to 8.1 percent in 1983:4. A 1 1/2 point increase in the savings rate would enable households to raise their net financial investment by about $35 billion over the next year and a half.

Until mid-1983, low capacity utilization and still higher than normal interest rates will prevent business and inventory investment from performing as well as consumption. In nominal terms, business fixed investment will rise about $25 billion over the next 6 quarters, and inventory investment will rise about $25 billion. With after-tax profits rising by about $30 billion and depreciation (aided by the tax cut provisions) rising by about $35 billion, corporations -- though still a net user of credit

market funds — will be able to improve their net financial investment position by about $15 billion over this period.

This $50 billion improvement in the net financial positions of households and firms should make the increase in federal credit demand — estimated at about $40 billion — more manageable. Even within a supply-and-demand framework, there seems little reason why recovery cannot proceed amidst a continuing trend toward more normal interest rate levels.

The greatest risk to this forecast of sustainable recovery (which is presented in detail in Table 1) is that interest rates will not continue their recent move toward more normal levels. Higher than projected deficits could lead to higher rates, either by destroying the balance between the supply and demand for funds or by undermining confidence that monetary and fiscal policy will be focussed on controlling inflation over the longer term. Apart from excessive budget deficits, any actions by the Federal Reserve that investors either rightly or wrongly interpret as abandoning the fight against inflation will also cause rates to rise. The continued dependence of recovery on lower rates — and the tendency of rates to rise whenever investors question the commitment to control inflation over the longer term — continue to justify the long standing policy recommendations of this Committee, namely, to reduce budget deficits (as much as possible from the spending side) and to carry out monetary policy operations in a manner that fosters confidence in the Federal Reserve's intention and capability to control the growth of money and credit over the longer term.

TABLE 1

Economic Projections
(Percent Changes, S.A.A.R.)

	Q482/Q282	Q283/Q482	Q483/Q283
Real GNP	2.5	3.8	4.0
Final Sales	1.5	3.3	3.7
Non-Durables Consumption (Incl. Services)	2.3	4.2	4.0
Durable Consumption	5.1	10.2	7.0
Business Fixed Investment	-4.4	0.0	8.7
Residential Fixed Investment	19.8	24.0	10.0
Federal Government	5.0	0.9	4.0
State & Local Government	-1.0	-1.0	-1.5
Inventory Investment (Bill 72$)	0.4	4.0	6.0
Net Exports (Bill 72$)	31.9	28.0	25.0
Nominal GNP	8.5	9.3	9.4
Deflator	5.9	5.3	5.2
Monetary Base	4.5	6.0	6.0
Velocity of Monetary Base	3.8	3.1	3.2
M1	3.0	5.0	5.0
Velocity of M1	5.3	4.1	4.2

	Q482	Q283	Q483
Savings Rate (Percent)	7.6	7.8	8.1
Unemployment Rate (Percent)	10.0	9.6	8.8
Profits After Tax (Bill $)	120.0	134.0	140.0
Auto Sales (Million Units)	7.5	8.2	9.2
Housing Starts (Million Units)	1.1	1.25	1.35
3-Month Bill Rate (Percent)	9.0	9.5	9.0
30-Year Gov't Bond Rate (Percent)	12.0	11.5	10.75

MONEY AND THE ECONOMY

September 10, 1982

THE MORE THINGS CHANGE...

By tradition, August should be a quiet time in financial markets.
The world is on vacation, the weather is hot and lazy, and things
generally are dull. August 1982, of course, was anything but tra-
ditional. In a few dramatic weeks, there has been a sharp revaluation
of financial assets, even as further evidence surfaced of spreading
weakness in the credit structure and continued lethargy (or worse) in
the real sectors of the economy. Now with the holidays ended and
some of the excitement dying down, portfolio managers must grapple
once again with the fundamentals. Most particularly, they have to
answer the nagging question: Does the surge in both stock and bond
prices represent a harbinger of a sustained cyclical recovery in the
economy? While such has often been true in the past, my best judgment
ment would be that in this case it is not. Notwithstanding the like-
lihood of an ephemeral increase in real economic activity this fall,
it is probable that 1983 will again be a year of little or no economic
growth, weak profits (at best), rising unemployment, and an uncomfor-
tably high level of financial risk.

The root of this malaise, plainly, is the ongoing social and politi-
cal stalemate over Federal budgetary policy and the prospect that
this means that the Treasury's deficit will press inexorably toward
$200-billion in the quarters immediately ahead. It seems to me that
so long as this is the predominant pattern, market participants will
doubt the feasibility of long-term monetary stabilization (giving all
due regard to the tenacity and wisdom of the present members of the
Federal Reserve Board).

This suggests that the real risk
premium in interest rates will re-
main at an historically high level,
which is likely to lead next year
to a sharp increase in personal
saving, sluggish consumption, and
declining investment. Unhappily,
the rise in savings (obviously a
product not only of the incentive
of high real returns, but also of
general uncertainty in the economy)
will most likely be fully absorbed
in financing the Federal deficit
and not in financing expansion of
the private capital stock. In
broad outline, this has been the
thesis of my short-term economic
forecast for some time, and nothing
has happened in the last few weeks

to make me want to change that opinion. To dig beneath this conclu-
sion, let's consider some of the factors that seem to lie behind the
surge in the financial markets over the last few weeks. As is now
well known, at its meeting in early July, the Federal Open Market
Committee -- apparently alarmed by the growing number of business
failures in the economy -- decided to pursue a more accommodative

MONETARY DATA

(Weekly Averages of Daily Figures in Millions of Dollars)

	Latest Week	Change From Previous Week	Rates of Change Over 3 Months	6 Months	1 Year
Money Supply (M-1)*(1)	$457,100	$+ 900	+ 2.9%	+ 3.7%	+ 5.7%
Expanded Money*(1)	592,600	- 300	+ 9.4	+ 8.2	+10.3
Adjusted Monetary Base*(2)	180,400	+1,100	+ 5.8	+ 7.5	+ 6.9
Adjusted Federal Reserve Credit*(2)	158,000	+ 700	+ 6.3	+ 7.9	+ 7.2
Total Adjusted Reserves*(1)	49,200	- 800	+ 5.0	+ 5.9	+ 4.8
Member Bank Borrowing(2)	944	+ 437	NA	NA	NA
Wednesday Figures					
Short-Term Business Credit*(1)	381,606	+ 24	+12.5	+13.4	+14.2
Total Commercial Paper Outstanding*(1)	177,413	-1,415	+10.6	+13.4	+15.0
Business Loans: All Large Banks*(1)	214,691	+1,827	+ 9.6	+15.0	+14.8
New York City Banks* **(1)	58,567	+ 123	+ 9.6	+19.5	+10.3
Chicago Banks*(1)	23,575	- 375	+ 1.0	+10.1	+17.7

*Seasonally Adjusted

**Excludes bankers' acceptances and commercial paper   NA = Not Applicable

Rates of change are compound annual rates based on four-week moving averages. Expanded money consists of M-1 plus overnight
RPs and Eurodollars and 50% of noninstitutional money market mutual fund shares. Short-term business credit includes commer-
cial and industrial loans at large banks plus loans sold to affiliates less bankers' acceptances and commercial paper held in portfolios
plus loans at large banks to finance companies and nonbank financial institutions plus nonbank commercial paper.

(1) September 1   (2) September 8

Figure 1
Slower Growth in High-Powered Money, Lower Interest Rates
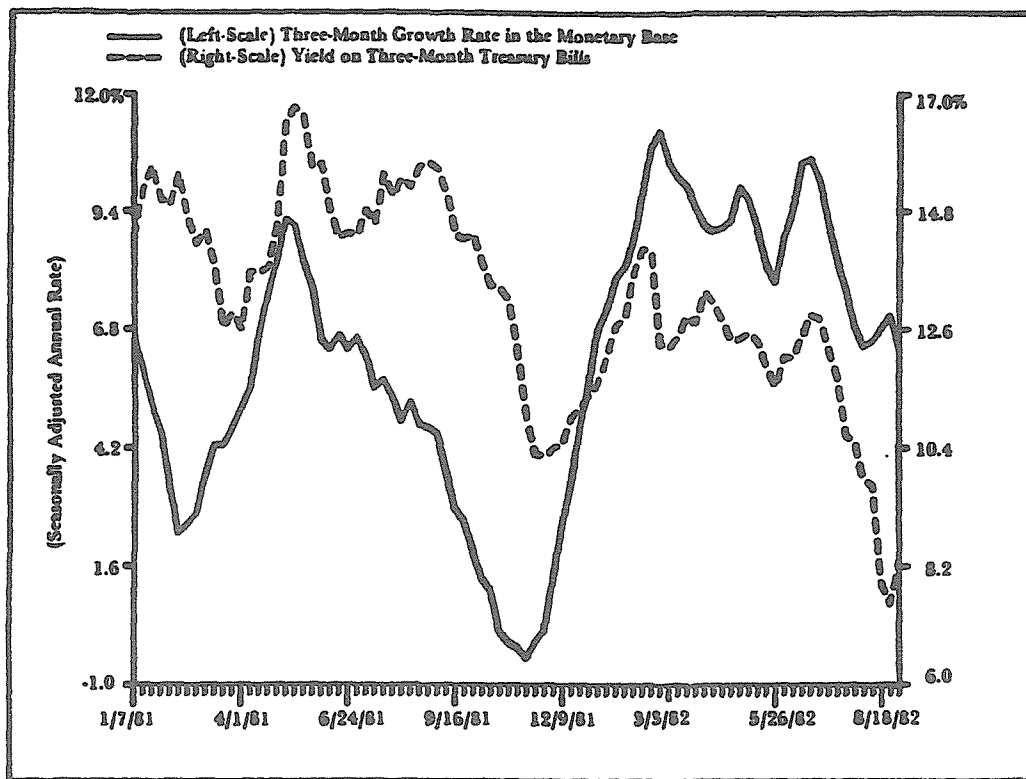
Underlying monetary base data are four-week moving averages.

Sources: Econalyst Data Base; Morgan Stanley Research

monetary policy. But while the authorities may have wanted easier money (a prospect that led to a sharp dissent from three members of the Committee), the fascinating thing is that in the short run they have achieved just the opposite.

Figure 1 above shows the pattern clearly. The rate of growth of the monetary base -- which I maintain is the best single indicator of what the central bank is actually doing, as opposed to what its managers may intend -- has slowed significantly since mid-June. At the same time, short-term interest rates (shown here by the three-month Treasury bill rate) have dropped sharply, which eventually triggered the surge in the values of longer term financial assets. My interpretation of this pattern has been as follows:

- Aggregate demand for credit has dropped materially, reflecting the weakness in the overall economy. The rate of increase in my proxy for total short-term business credit outstanding, as one example, was only about 3% at an annual rate in August, down from roughly 20% in June and July.

- At the same time, the reduced rate of increase in the central bank's balance sheet (which is measured by the change in the

ECONOMIC DATA

	Latest Week	Change From Previous Week	Rates of Change Over— 3 Months	6 Months	1 Year	Week Ended
OUTPUT						
Goods Production:						
Auto° (Units)	124,651	-11,171	+ 65.8%	+105.9%	- 15.9%	9/ 4
Truck° (Units)	41,018	- 7,546	- 22.7	+ 49.6	+ 54.3	9/ 4
Lumber° (Millions of Board Feet)	291.850	- 5.725	- 5.4	+ 62.6	- 2.2	8/28
Paper° (Thousands of Tons)	572	- 7	+ 2.0	- 6.6	- 4.8	8/28
Paperboard° (Thousands of Tons)	560.2	- 11.2	- 0.0	- 14.5	- 8.7	8/28
Raw Steel° (Thousands of Short Tons)	1,267	+ 48	- 23.6	- 46.7	- 48.2	9/ 4
Energy Production:						
Bituminous Coal° (Thousands of Short Tons)	13,938	- 626	- 50.5	- 47.0	- 14.8	8/28
Crude Oil Refinery Runs° (Daily Average; Thousands of BBLs)	11,567	+ 128	- 17.1	+ 4.3	- 9.3	9/ 4
Electric Output Index° (1967=100)	196	+ 12	- 1.6	- 1.8	- 1.8	9/ 4
TRANSPORTATION						
Revenue Ton-Miles, Class I Railroads° (Billions)	14.6	- 0.3	- 31.7	- 25.3	- 15.6	8/28
BUSINESS ACTIVITY						
Commercial and Industrial Failures° (Number of Firms)	759	+ 22	+321.5	+ 79.6	+ 82.2	9/ 2
PRICES						
Spot Price Index, All Commodities (1967=100)	239.7	+ 0.4	- 10.5	- 8.1	- 11.2	9/ 7
Spot Price Index, Foodstuffs (1967=100)	237.8	- 1.0	- 19.4	+ 0.9	- 2.2	9/ 7
Spot Price Index, Raw Industrials (1967=100)	240.9	+ 1.4	- 3.8	- 13.9	- 16.9	9/ 7
World Crude Oil Price (Dollars per Barrel)	33.11	--	- 1.6	- 4.7	- 3.1	9/ 1
Trade-Weighted Value of the Dollar (March 1973=100)	119.49	- 0.08	+ 27.9	+ 15.8	+ 7.7	9/ 8
EMPLOYMENT						
Initial Unemployment Claims° (Thousands)	629.0	+ 8.5	+ 6.7	+ 37.5	+ 40.3	8/28
Claimant Level° (Thousands)	4,097.6	+ 55.8	- 4.9	+ 32.1	+ 42.5	8/21

Rates of change are compound annual rates based on four-week moving averages.

°Seasonally Adjusted

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

monetary base) helped to lower inflationary expectations, by demonstrating that the money managers were (quite correctly) pursuing a course of monetary stabilization.

- Thus, for much of the summer interest rates have been declin-ing for the right reason -- namely, because of a drop in the

demand for credit, not because the Federal Reserve has been pumping up the supply of high-powered money.

But can this favorable course of events be expected to continue? I am fearful that it cannot. Not only do the authorities intend to follow an easier (or at least less restrictive) course, but also they seem to be committed to keeping short-term interest rates down. This is fine so long as the demand for short-term credit continues to decline. However, what would happen if the aggregate demand for credit were to turn up again, for whatever reason? Under such circumstances, it seems. clear, the Federal Reserve would be forced to add rapidly to its hold- ings of Government securities, in what would amount to a futile rear- guard action to hold down rates. In fact, if there should be a sus- tained reacceleration of the monetary base, interest rates would rise, and rise rapidly. As I argued in Money and the Economy on July 16, the "Keynesian Option" of trying to use easy money to induce lower interest rates is an illusion. "Attempts of this sort [tc pump up the money supply] have always backfired in the past and have produced the opposite result from those intended." Interestingly, Henry C. Wallich the senior member of the Federal Reserve Board in point of service, made exactly this point in an important address early this summer.

MONTHLY SUPPLEMENT

MONETARY DATA

(Monthly Averages of Daily Figures in Billions of Dollars)

	Latest Month	Change From Previous Month	Rates of Change Over 3 Months	6 Months	1 Year
Money Stock Measures and Liquid Assets:					
M-1°(1)	$ 455.2	$+ 4.0	+ 3.3%	+ 3.6%	+ 5.6%
Expanded Money° (1)	589.9	+ 9.6	+ 9.6	+ 7.8	+10.2
M-2° (1)	1,946.1	+22.8	+10.7	+10.9	+ 9.8
M-3° (1)	2,355.3	+35.1	+14.0	+13.1	+10.8
L° (2)	2,752.3	+35.5	+13.4	+12.1	+12.1

°Seasonally Adjusted

Rates of change are compound annual rates.

M-1 consists of currency, demand deposits, travelers checks, plus other checkable deposits at banks and thrift institutions. Expanded money consists of M-1 plus overnight RPs and Eurodollars and 50% of non-institutional money market mutual fund shares. M-2 consists of M-1 plus overnight RPs and Eurodollars, shares of non-institutional money market mutual funds, and savings and small time deposits at commercial banks and thrift institutions. M-3 consists of M-2 plus institutional money market mutual funds, large time deposits, and large-denomination term RPs at commercial banks and thrift institutions. Finally, L consists of M-3 plus other liquid assets.

(1) August   (2) April

In fact, I have some concern that actual Federal Reserve policy (again, as opposed to the central bank's expressed intentions) has already turned in a truly expansionary direction. The monetary base rose more than $1-billion in the week ended September 8 to a total of $180.4-billion. Over the last four weeks, the monetary base has averaged $179.8-billion, which represents an 8.5% seasonally adjusted compound annual rate of gain from four weeks earlier. However, this increase was not part of a sustained pattern; the critical three-month growth rate of the base, which is traced in Figure 1, was about 5.8% in the most recent week, which was the lowest since last December. Meanwhile, the money supply (M-1) surged up at an 11.2% annual rate in August, in part reflecting the lagged impact of the large-scale injection of reserves into the banking system between November 1981 and mid-June 1982.

In trying to judge the likely trend of credit demand in the months ahead, keep in mind that since 1978, the volume of credit extended in the United States market to all nonfinancial sectors has been little changed in nominal terms and has declined very substantially in real terms. To put the matter simply, a very large drop in real credit extended to the household sector has more than offset the increased credit needs of the corporate community and, more recently, the Federal treasury. In my opinion, it is very unlikely that the real credit needs of the economy can continue to decline for much longer, assuming, that is, that they have not already started to rise. (The Federal Reserve's estimates of the flow of funds in the economy, which should have been published in mid-August, have been delayed and are still not available.) Most important, obviously, is the explosive surge in Federal borrowing. The Treasury calendar is likely to be close to $60-billion this fall, almost double the amount raised in the comparable period last year. Furthermore, the drop in rates that has already occurred is likely to generate a modest if temporary gain in the demand for autos and housing, with concommitant increases in household credit needs. Improved corporate cash flow should ease company needs for credit somewhat, but the extent of this improvement is likely to be limited. Add to this the risk that a reacceleration of monetary growth may reignite inflationary expectations, and the prospects for a further decline in interest rates seem to be limited.

To summarize, so long as the Federal Treasury remains as a disproportionate demander of credit in the marketplace, moves toward lower interest rates are likely to be self-limiting. Not only will the Treasury be the critical force driving the real demand for credit skyward, but in addition there is the ever-present threat that the Federal Reserve -- despite its excellent intentions -- will be forced into a reflationary course. In my opinion, the prospects for a sustained improvement in bond prices from present levels are quite limited, as are the prospects for a similarly sustained gain in real economic activity.

Plus que ca change, c'est le meme chose.

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The interest rates regularly monitored by the Federal Reserve were as follows:

Rate	Daily Average Week Ended		
	Aug. 25	Sept. 1	Sept. 8
Federal Funds	9.04%	10.15%	10.14%
90-Day Treasury Bills	7.43	8.00	8.31
90-Day Commercial Paper	9.01	9.72	10.28
90-Day CDs (Secondary Market)	9.59	10.17	10.53
90-Day Eurodollars	10.36	11.26	11.53
20-Year Governments	12.32	12.56	12.31

H. Erich Heinemann
(212) 974-4410
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