SHADOW OPEN MARKET COMMITTEE Policy Statement and Position Papers

March 15-16, 1981

PPS-81-4

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- 2. SOMC Policy Statement, March 16, 1981
- Position Papers prepared for the March 1981 meeting:
 ECONOMIC PROJECTIONS Jerry L. Jordan, University of New Mexico
 - THE IMPACT OF THE REAGAN ADMINISTRATION'S ECONOMIC PROPOSALS Robert J. Genetski, Harris Trust and Savings Bank
 - AT A CRITICAL JUNCTURE H. Erich Heinemann Morgan Stanley & Co., Incorporated
 - REPORT ON FISCAL POLICY FOR THE SHADOW OPEN MARKET COMMITTEE-Rudolph G. Penner, American Enterprise Institute
 - UPDATED FORECASTS OF MONEY MULTIPLIERS James M. Johannes and Robert H. Rasche, Michigan State University
 - POLICYMAKING, ACCOUNTABILITY, AND THE SOCIAL RESPONSIBILITY OF THE FED Karl Brunner, University of Rochester

SHADOW OPEN MARKET COMMITTEE

The Committee met from 2:00 p.m. to 8:00 p.m. on Sunday, March 15, 1981.

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, Dean, 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.
- PROFESSOR WILSON SCHMIDT, Department of Economics, Virginia Polytechnic Institute, Blacksburg, Virginia.
- DR. ANNA J. SCHWARTZ, National Bureau of Economic Research, New York, New York.

POLICY STATEMENT Shadow Open Market Committee March 16, 1981

We welcome the Reagan Administration's proposals for fiscal, monetary, and regulatory policies. If adopted, these will increase saving, investment, productivity, and real growth. They will also serve to reduce inflation, unemployment, tax rates, and the growth of the public sector. The administration's program, which is similar to policies we have advocated for many years, has two main themes: monetary stabilization and reduction in the size of government. We remain confident that these policies will bring the economy closer to its historic real growth path of 2 1/2% to 3 1/2% — and bring the inflation rate down to 3% by 1985.

Success of the program depends very much on the Fedreal Reserve, and Congress should consider means to increase the System's accountability. The administration has indicated that it favors the policy of gradually reducing growth of the monetary base as advocated by this Committee in past statements. The Federal Reserve has affirmed its support for administration policies and has expressed its intention to persist in efforts to reduce monetary growth. However, it has chosen for its current target a measure of the money stock — M-1B adjusted for definitional changes — which cannot be monitored regularly.

We are skeptical about Federal Reserve statements, and others share our skepticism. Commitments to slower money growth have been made many times in the past but have not been kept. Research within and without the Federal Reserve System has demonstrated that comparatively few changes in operating procedures would substantially improve the quality of monetary control, but these changes have not been made. Indeed, the Federal Reserve has within its power the means of improving its operations so as to achieve the targets it sets. The failure to improve control procedures, in the face of continuing inability to achieve announced targets, increases our doubts about the Federal Reserve's commitment to the policies we, and they, agree are required to end inflation.

ACCOUNTABILITY

The central problem is not technical. It is political. The Federal Reserve is an independent agency within government and has wide discretion in the conduct of

monetary policy. Repeated failures to achieve announced targets have not brought reform or encouraged responsibility.

Authority and responsibility are separated, and oversight by Congress thus far has not imposed standards of performance on the Federal Reserve. When shifts inmonetary policy increase inflation, increase unemployment, or cause recessions, voters hold elected officials, not Federal Reserve officials, responsible. More than a decade of destabilizing monetary policies has not spurred improvements.

We believe that the Congress should consider means of increasing the responsibility and accountability of the Federal Reserve. Among the options to achieve this purpose are vesting complete authority for monetary policy in the administration or having Federal Reserve governors serve at the pleasure of the President. On our part, we propose the following approach for discussion:

- (1) The Federal Reserve should choose a single target rate of growth for an observable monetary aggregate of its own selection, and should announce the target publicly.
- (2) If the Federal Reserve misses the annual average target rate of growth by more than one percentage point, each member of the Board of Governors would submit his resignation to the President.
- (3) Governors may accompany their letters of resignation with an explanation of the failure to achieve the target rate of growth. The President may choose to accept the explanations instead of the resignations, and thereby, himself, accept responsibility for the policy. If the President accepts the resignations, new Governors should be chosen to fill the unexpired terms, subject to confirmation by the Senate.

The aim of our proposal is not to force resignations, but to increase accountability of the officials responsible for monetary policy, and to reduce skepticism and uncertainty about future monetary policy. The Federal Reserve would remain independent, within government, but would become more accountable to the President, the Congress and the public. We urge Congress to debate this and other proposals to increase the accountability of the Federal Reserve.

MONETARY POLICY

In three of the past five years, the Federal Reserve has failed to achieve the targets it announced. The table shows the five-year record and makes clear that despite many commitments to sustained reductions of monetary growth, there is no evidence of any reduction.

The table, which is on page 7, greatly understates the uncertainty caused by recent monetary policy. Money growth often varies over a wide range during the year. For example, in 1979, the seasonally adjusted quarterly average growth of M-1—

currency and checking deposits — varied between 4.9% and 10.8%. Quarterly average growth at annual rates for M-1B in 1980 covered a wider range — from -2.4% to 15.5%.

MONEY GROWTH 1975-1980*

Period Fourth Quarter	Percent Change fro Quarter of Previo	
	Target	Actual
1976 (M-1)	4.5%-7.5%	5.8%
1977 (M-1)	4.5%-6.5%	7.9%
1978 (M-1)	4.0%-6.5%	7.2%
1979 (M-1)	3.0%-6.0%	5.5%
1980 (M-1B)	4.0%-6.5%	7.1%

^{*}The table shows the most frequently cited target for currency and checking deposits, formerly denoted M-1 and now denoted M-1B.

If the Federal Reserve achieved its annual targets more frequently, quarterly deviations would be less important. Observers would have greater confidence that quarterly deviations from announced targets were temporary and would act on this belief. The failure to achieve annual targets shifts attention from the targets to the less reliable monthly or weekly reported growth rates. The Federal Reserve is critical of the attention given to weekly announcements of money growth. It does not, however, take the most important step to reduce the attention given to weekly reports; that is, increase the credibility of the pre-announced targets by achieving the targets.

We favor six changes in procedures to improve monetary control by reducing the variability of money and interest rates on credit and debt.

- (1) Revision of the rule under which required reserves depend on deposits held two weeks earlier. Required reserves should be determined in relation to current deposits as was the case prior to 1968.
- (2) Simplification of the complex system of reserve requirements based on type of deposit, location of deposit and size of deposit.
- (3) Prompt adjustment of the discount rate charged on loans to depository institutions to maintain equality with the market rate on short-term credit.
- (4) Introduction of staggered reserve settlements under which one-fifth of the financial institutions settle each day instead of requiring all of them to settle on the same day.

- (5) Elimination of seasonal adjustment of monetary aggregates. Non-seasonally adjusted aggregates should be reported for the most recent period and for the corresponding period of the previous year. To satisfy demands for data on short-term changes, reports of monthly changes for the most recent period available and the corresponding changes for the same period of the previous year should be made available.
- (6) Publication of targets for reserves and the monetary base to enable the public to monitor the Federal Reserve's performance relative to its targets.

Neither technical changes nor increased accountability can reduce inflation. To reduce inflation, the Federal Reserve must reduce the growth of money. For 1981, we favor a 6% rate of increase in the monetary base, as computed by the Federal Reserve Bank of St. Louis. Current institutional changes have less effect on the growth of the base than on most other aggregates, so we continue to specify targets for the base.

A 6% rate of growth of the base would bring the level of the monetary base to \$172-billion in the fourth quarter of 1981. This rate of growth would be a step on the path to lower rates of monetary growth and lower inflation.

THE ADMINISTRATION'S FISCAL POLICY

Many popular accounts of the administration's fiscal policy suggest that the policy is a risky strategy based on some new, untested principles of economics. Such statements are incorrect. The principles on which the success of the program depends are old, established, tested, and reliable. The SOMC has repeatedly favored simultaneous cuts in tax rates and in government spending. An important distinction that all economists recognize is the distinction between marginal and average tax rates. Reductions in the growth of government spending permit the average tax rate to fall, or rise more slowly, and, thereby, consistent with a balanced budget, raise the anticipated average return from work and from investment. Reductions in marginal tax rates with an unchanged average tax rate shift tax burdens from one taxpayer to another and from current to future income. Such programs have smaller and less lasting effects on output and employment than the programs recommended by the administration, and favored by this Committee, to reduce permanently average and marginal tax rates at the same time.

The success of the administration's program will not be achieved quickly. Even in the most favorable environment, people do not instantly adjust prices and reallocate resources in response to new conditions. After fifteen years of promises to end inflation and ten years of promises to increase productivity, none of which were realized, many people will now wait-and-see whether the program survives.

Doubts about the budget and tax rates will not be resolved until Congress approves, or rejects, the proposed cuts in tax rates and the growth of spending. Doubts about the size of the deficit will not be removed even if Congress approves the entire program. The administration's forecasts of the growth of nominal income for 1982-86-appear to us inconsistent with its assumptions about monetary and fiscal policies and the historical record of performance of the American economy. The estimates of real growth are more optimistic and the estimates of the slowing of inflation more pessimistic than we believe the administration's policies will achieve.

We have serious reservations about the compatibility of the administration's forecast for 1981 and current Federal Reserve policy. Currently, the Federal Reserve continues on the slam-bang, stop and go course that is a main cause of stagflation. For the past three months the growth of the monetary base has been 2.5% at an annual rate — far below the rate we recommend. Continuation of this low rate of growth would bring recession in 1981. A recession and steeply rising unemployment would delay the investment in the new plant and equipment required to increase productivity growth in future years.

IMPORT QUOTAS

The administration's fiscal and regulatory program is based on the belief that free markets allocate resources efficiently. Tariffs and quotas on imports from Japan, or other countries, reduce market efficiency, raise prices paid by consumers, provide a safety net for inefficient producers and reduce overall productivity growth.

The administration can show its commitment to market processes and its opposition to bureaucratic processes by reaffirming the principles of open competition and by rejecting current pressures for quotas on imports, "voluntary" or legislated, and other protectionist measures.

ECONOMIC PROJECTIONS

Jerry L. Jordan University of New Mexico

TABLE I (percent changes)

		Projections f	or 1981 as of	September	, 1980 m	neeting	
	GNP	Output	Deflator	<u>M1B</u>	<u>V1B</u>	MB	$\underline{\mathtt{VB}}$
Q4/80- Q4/81	9.6	1.8	7.7	5.0	4.4	7.0	2.5

TABLE II (percent changes)

	Other Troj	S(Z/OZ)					
	GNP	Output	<u>Deflator</u>	<u>M1B</u>	Unempl. (Q4/81)		
Administration:	11.0	1.4	9.4		7.7		
FOMC:	9 to 12	-1.5 to 1.5	9 to 10.5	3.5 to 6	8 to 8.5		
CBO:*	10.4 to 14.6	2.5 to 4.5	7.7 to 9.7		8.4 to 9.4		

Other Projections for 1981 ($\Omega4/80 - \Omega4/81$)

TABLE III (percent changes)

		Projections fo	r 1981 as of	March,	1981 me	eting	
	<u>GNP</u>	Output	Deflator	<u>M1B</u>	<u>V1B</u>	MB	<u>VB</u>
Q4/79- Q4/80 (actual)	9.5	3	9.8	7.1	2.4 ^a	8.3	1.2 ⁸
Q4/80- Q4/81	8 to 9	-1.0 to 1.0	8.5 to 9.5	5 to (3.0	6 to 7	2.0

^aapproximate actual

^{*}First Budget Resolution for fiscal 1981

The sharp acceleration of M1B and the monetary base during the second half of 1980 (13.3% and 10.8%, respectively, versus 1.6% and 5.8%, respectively, during the first two quarters of 1980) provided a strong positive monetary impulse affecting nominal income growth late in 1980 and carrying over to early 1981. A significant deceleration of monetary growth is now expected in 1981. After some lag, a deceleration of nominal income growth is expected. The implications for real output growth are a function of the rate of deceleration of inflation. During the year, a decline of real output for one or two quarters is a high probability. A peak to trough decline of real output in the range of two to four percent would be implied by a sharp contraction of monetary growth in the first half of 1981.

THE IMPACT OF THE REAGAN ADMINISTRATION'S ECONOMIC PROPOSALS (Simulations With the Harris Monetarist-Supply Side Model)

Robert J. Genetski Harris Trust & Savings Bank

SUMMARY AND CONCLUSIONS

The economic package proposed by the Reagan Administration holds the potential to reverse the widespread deterioration in the economy that has characterized the decade of the seventies. If the bulk of the program is adopted, real growth should average 2 1/2% and inflation should be in the 7% vicinity by 1984. Real growth could be rising by 3 1/2% by 1984 with inflation under 5% if the program is augmented by even further reduction in tax rates and government spending, as well as by a more restrictive monetary policy.

Should the Reagan program fail to win Congressional approval or should significant portions of the program become diluted, real growth could be maintained temporarily only through rapid monetary expansion leading to a rapid increase in inflation. Although real growth can occur if monetary growth is sufficiently rapid, this option represents a time bomb waiting to explode. Sooner or later the economic system either will be severely damaged by the acceleration in inflation, or a major downturn will develop as attempts are made to contain inflation by slowing monetary growth. If any attempt were made to contain inflation without the support of lower tax rates and government spending cuts, the result would be a major and extended economic downturn.

All aspects of the Reagan Administration's proposals are important. However, the pivotal factor is the reduction in tax rates rather than the much publicized spending cuts. While failure to cut government spending and regulation <u>could</u> lead to the demise of the economic recovery plan, failure to cut tax rates <u>would</u> lead to its demise. This conclusion is contrary to much of the "conventional wisdom" on the Reagan program and therefore must be supported by empirical analysis. The charts in this report hope to shed some light on historical movements in various tax measures and their relationship to economic performance. While the conclusions are somewhat tentative, there are strong indications that a failure to implement quickly the tax rate

reductions proposed in the Reagan program will result in the program's collapse. Moreover, tax rates and spending cuts will have to be greater than those which have thus far been proposed by the Administration if real growth is to rise as rapidly as the 4%-5% annual rates forecast by the Administration.

THE HARRIS MONETARIST-SUPPLY SIDE MODEL

For purposes of evaluating the results of the Harris model, it is important to understand its structure as well as the historical evidence which supports that structure. The model is similar to the traditional St. Louis monetarist model in the sense that nominal GNP is determined almost exclusively by prior changes in the money supply. Supply-side elements enter the structure by impacting the trade-off between the amount of nominal spending available for real growth and for inflation. In the development of three alternative scenarios — Most Likely, Optimistic, and Pessimistic — an attempt was made to constrain the tax and spending adjustments to what is currently perceived as being politically plausible. Adjustments for the supply-side impact of tax and spending reductions were based on the historical relationships between tax measures and economic performance.

Monetary growth assumptions were made with respect to political considerations. It is assumed that as economic conditions deteriorate, the political pressure for greater monetary growth becomes more intense. In contrast, real progress in reversing the economy's deterioration leads to a political climate which is more conducive to slowing monetary growth. Various combinations of trading more inflation for a temporary boost in real growth or less inflation for a temporary drop in real growth can be obtained with alternative assumptions regarding monetary policy.

DEMAND FOR OUTPUT—DETERMINATION OF NOMINAL SPENDING

Nominal GNP growth is determined by the two-quarter change in the money supply lagged one quarter. For example, the growth in total spending for the first quarter of 1981 is based on the change in money between the second and fourth quarters of 1980. Adjustments are made to reflect average cyclical changes in velocity associated with recessions and recoveries. Charts 1 and 2 compare actual GNP changes to those based on the prior two-quarter change in monetary growth without adjusting for cyclical changes in velocity.

SUPPLY OF OUTPUT—DETERMINATION OF REAL GROWTH

Trade-Off Between Real Output and Inflation-Supply Side Elements

Once nominal GNP is determined by monetary growth, the next objective is to determine how much dollar spending represents real output and how much represents inflation. Prior to the productivity deterioration of the seventies, a change in monetary growth over the previous two years was often sufficient to forecast inflation and thereby, determine the amount of dollar spending left for real growth. Charts 3 and 4 compare actual inflation with inflation projected solely on the basis of two year monetary growth lagged two quarters.

Measures of Secular Economic Performance

During the seventies, as the U.S. economy began to show signs of a secular deterioration, adjustments had to be made to incorporate the fact that in a deteriorating economy a greater proportion of dollar spending is reflected in inflation rather than in real output. To systematically examine this phenomenon it is necessary to quantify secular economic performance. Chart 5 shows two alternative measures of longer-term economic performance. The dashed line shows the change in private nonfarm productivity over a five year period at annual rates.

The dotted line in Chart 5 shows the difference between an inflation forecast based solely on prior monetary growth and the actual inflation rate. When the actual inflation rate is higher than the inflation forecast based on money, as has been the case recently, it suggests that the trade-off between inflation and real growth has become worse and the dotted line moves lower. Incorporating supply-side elements into a monetarist model involves an attempt to explain this trade-off between the amount of spending which is reflected in inflation vis-a-vis real output. One approach to this problem is to attempt to explain movements in the difference between an inflation forecast based on money and actual inflation (the dotted line).

Measures of U.S. Tax Burdens

While there are many possible explanations for the deterioration in economic performance during the seventies, the dominant factor is believed to be related to high and rising tax burdens. There are several alternative ways to quantify the tax burden on an economy. One measure consists of total government related spending as a share of an economy's output. This measure represents the most comprehensive measure of an economy's tax burden. A second measure calculates the proportion of an economy's income that is paid to government in the form of tax receipts. A third measure involves marginal tax rates or the tax on additional income for above average income groups. Theoretically, any one of these three tax measures have the potential to

influence real economic activity. Taken to an extreme, any one of these tax measures could severely damage economic performance. The extent to which any of these tax measures may have contributed to U.S. economic deterioration during the seventies is an empirical question. Charts 6 through 8 represent an attempt to quantify each of these tax measures so that they may then be related to economic performance.

Relating Tax Burdens to Economic Performance

Charts 9 through 11 combine the economic performance measures from Chart 5 with the tax burden measures in Charts 6 through 8. The tax burden measures have been plotted inversely so that an increase in tax burdens is related to a secular decline in economic performance.

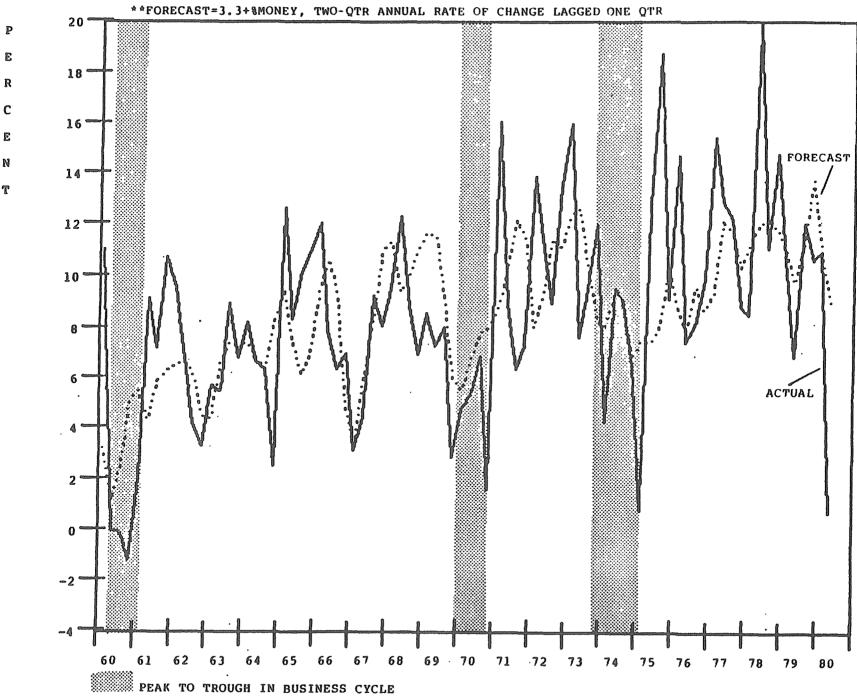
The measure of tax burdens which is most closely related to real economic performance is the marginal tax rate measure. Such a phenomenon should not be surprising when we consider that the marginal rates which are plotted represent the rates on additional income paid by a married couple with income in approximately the 70th to 95the percentile of taxable returns. The income represented by these returns accounts for approximately 40% of the taxable income earned. Decisions by this group to spend a greater portion of their income on vacations, Mercedes, or sailboats, as opposed to saving, will determine whether or not the funds necessary for productivity improvements are becoming more or less available. When additional income for this group is taxed at the rates of recent years, funds available for productivity improvements suffer and the economy deteriorates.

If the present tax structure were to be maintained through 1984, the range on marginal tax rates for this group would be 34% to 51%. The Reagan proposal would lower this range to an estimated 25% to 37% by 1984, approximately where it was in the mid-seventies.

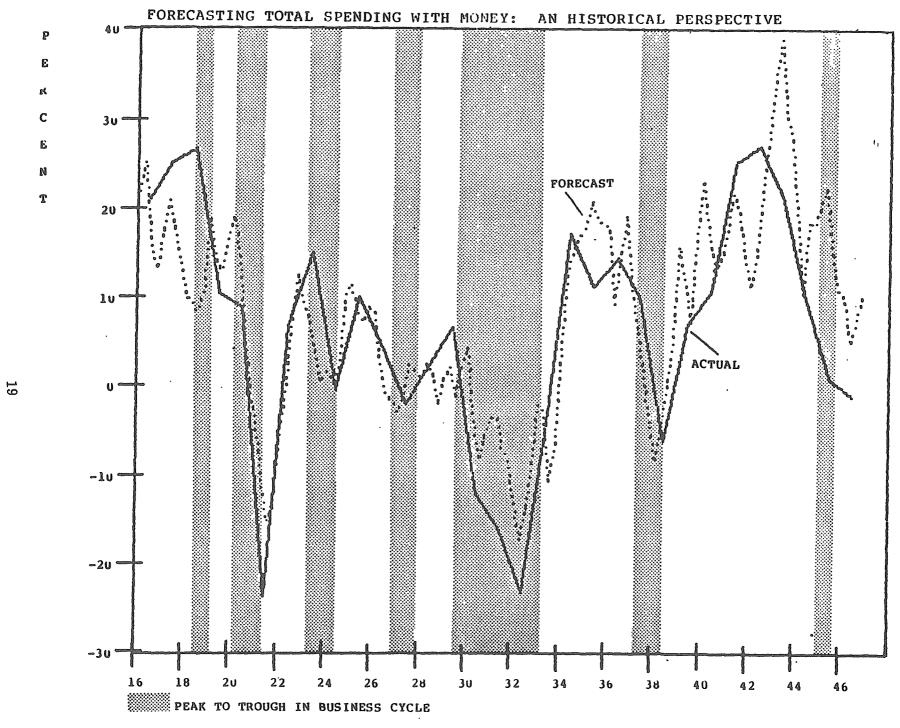
This does not imply that other measures of tax burdens such as the government spending burden are not important. As government confiscates more of the nation's output, the share left for the private economy declines. At some level this share will impede economic progress. Whether or not this share has been reached probably depends more on the nature of government expenditures than on a specific share of output. In any event, since this share shows signs of leveling off in recent years, while the deterioration in the economy has become worse, it appears that either the lags between spending burdens and economic performance are unusually long or the relationship between the two is not as direct as many economists assume. In the event that the lag between the government spending burden and economic performance is unusually long, the effect of the proposed spending reductions is not likely to have a significant positive impact on the economy in the near future.

Given the relationship between the recent increases in marginal tax rates and the recent economic deterioration, the trade-off between real growth and inflation was adjusted in accordance with alternative tax policies for the three scenarios. This adjustment appears in Table 1 through 3 as an "adjustment to inflation forecast." The more marginal tax rates for the target group are lowered, the greater the shift toward real growth and away from inflation. Hence, failure to provide substantial reductions in marginal tax rates for this group implies a continued deterioration in the trade-off between inflation and real growth. Table 1, the Most Likely Case, assumes marginal tax and spending cuts in line with the Reagan proposals. Table 2, the Optimistic Case, assumes tax and spending cuts greater than those proposed by the Reagan Administration. Table 3, the Pessimistic Case, assumes that the Reagan tax cut proposals are not implemented. Should the Reagan tax cuts get scaled back by Congress as many political observers expect, the outcome in the Pessimistic Case would become more likely. Furthermore, should the monetary growth assumptions be altered in either direction, this would provide a temporary trade-off between real growth and the ensuing of inflation.

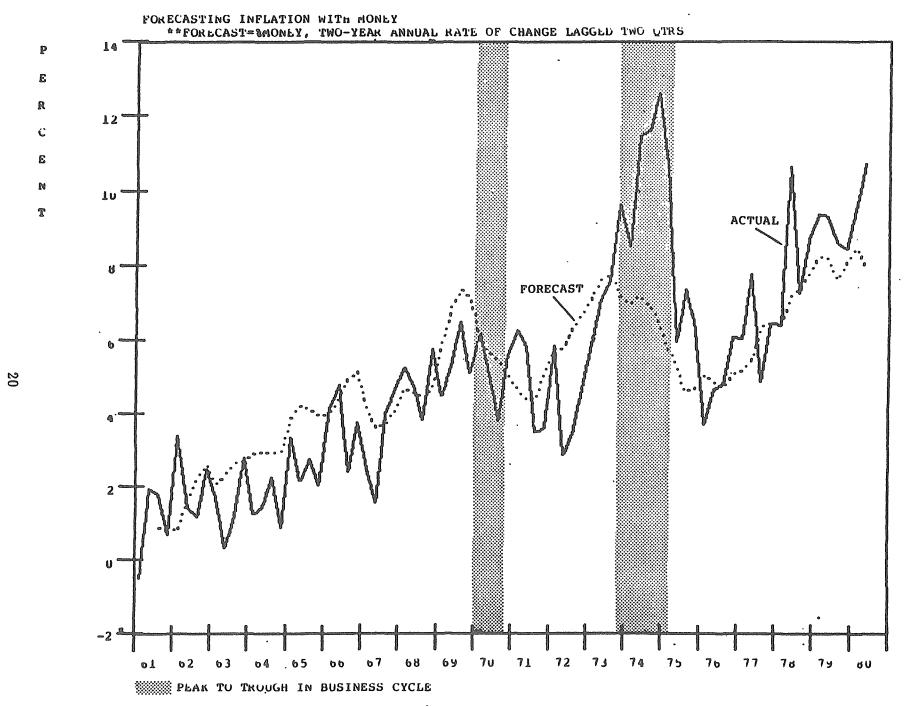
FORECASTING TOTAL SPENDING WITH MUNEY



** EQUATION IN HARRIS ECONOMIC MODEL
MONEY IS DEFINED AS CURRENCY AND ALL CHECKABLE DEPOSITS AT DEPOSITARY INSTITUTIONS (M1B).



FORECAST=%MONEY, TWO-QTR ANNUAL RATE OF CHANGE LAGGED ONE QTR
MONEY IS DEFINED AS CURRENCY PLUS DEMAND DEPOSITS AT ALL COMMERCIAL BANKS (OLD M1).



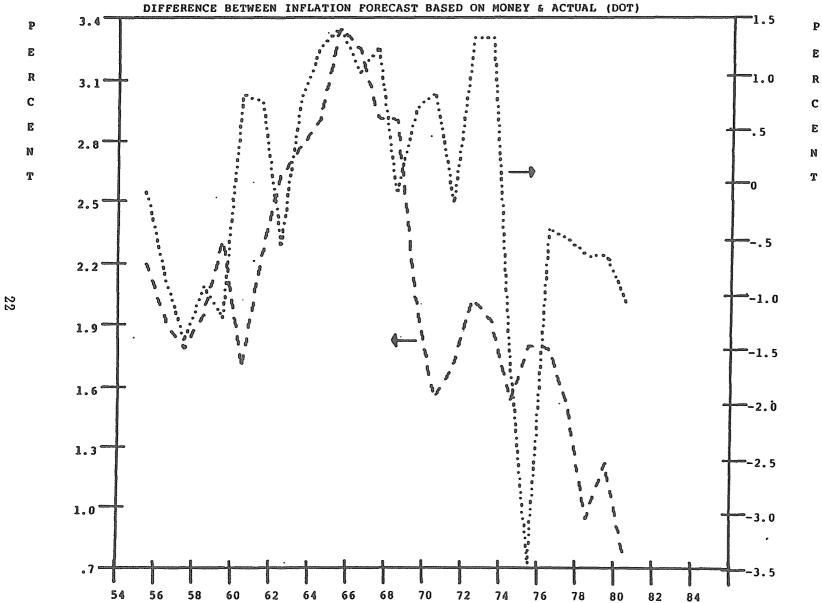
**EQUATION IN HARRIS ECONOMIC MODEL MONEY IS DEFINED AS CURRENCY AND ALL CHECKABLE DEPOSITS AT DEPOSITARY INSTITUTIONS (MIB). INFLATION, AS MEASURED BY GNP DEFLATOR, ARE ONE-QUARTER ANNUAL RATES OF CHANGE.

FURECAST=*MUNEY, TWO-YEAR ANNUAL RATE OF CHANGE LAGGED TWO UTRS
MUNEY IS DEFINED AS CURRENCY PLUS DEMAND DEPOSITS AT ALL COMMERCIAL BANKS (OLD M1).

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MEASURES OF SECULAR ECONOMIC PERFORMANCE:

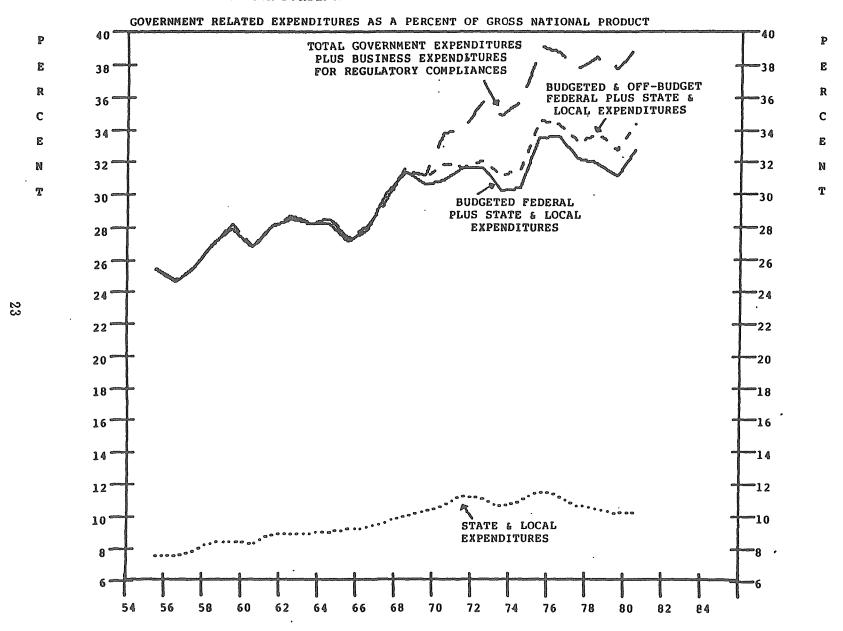
FIVE-YEAR ANNUAL RATE OF CHANGE IN PRODUCTIVITY (DASH)

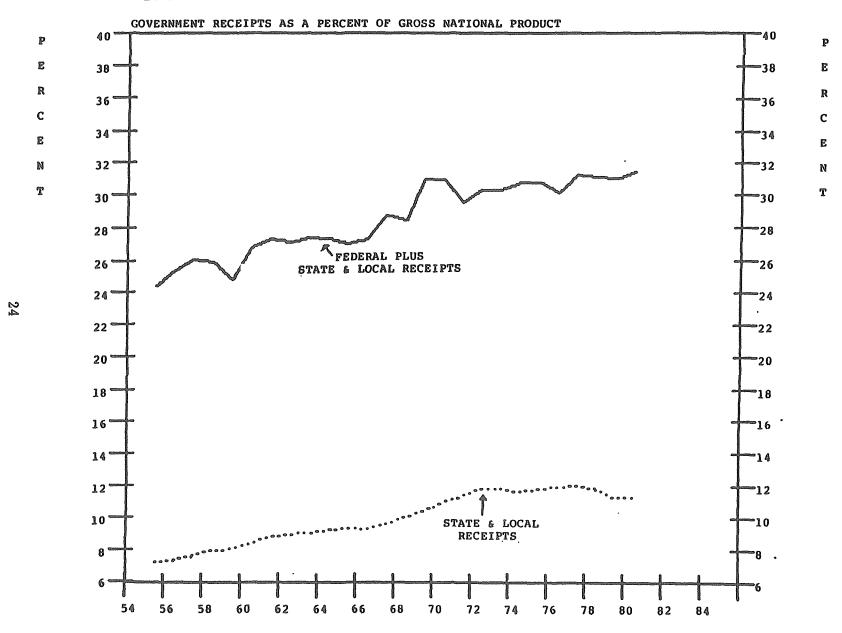


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MEASURES OF U.S. TAX BURDENS:





MEASURES OF U.S. TAX BURDENS:

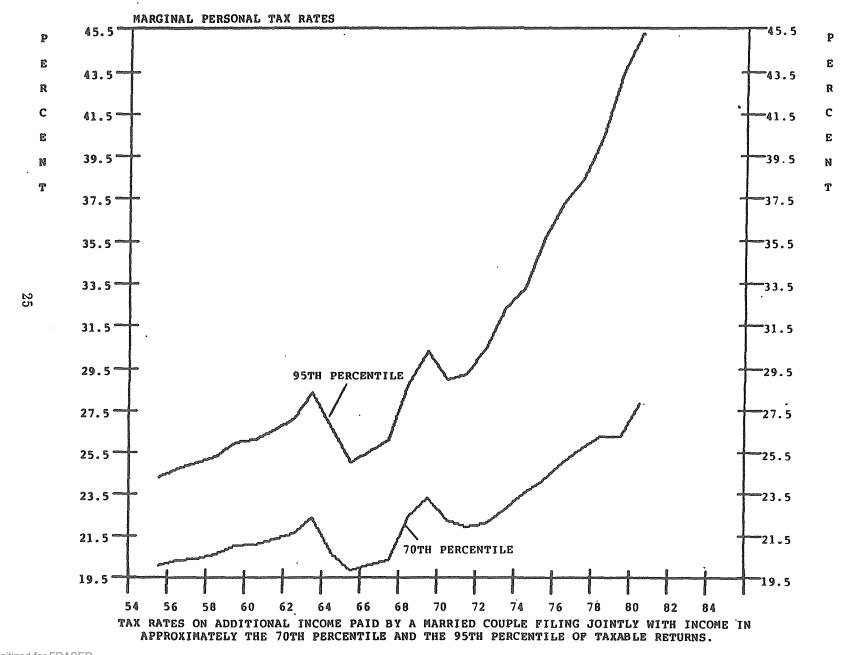
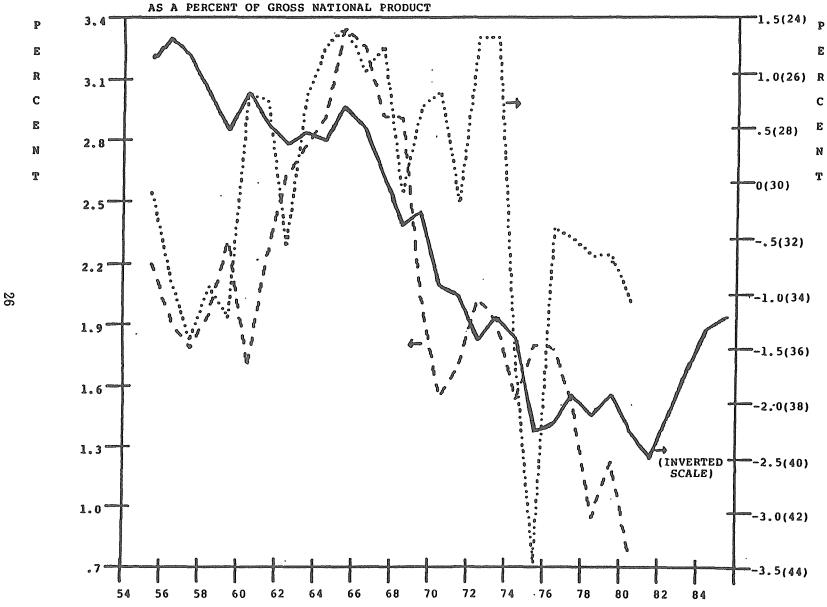


CHART 9 SECULAR ECONOMIC PERFORMANCE & GOVERNMENT RELATED EXPENDITURES

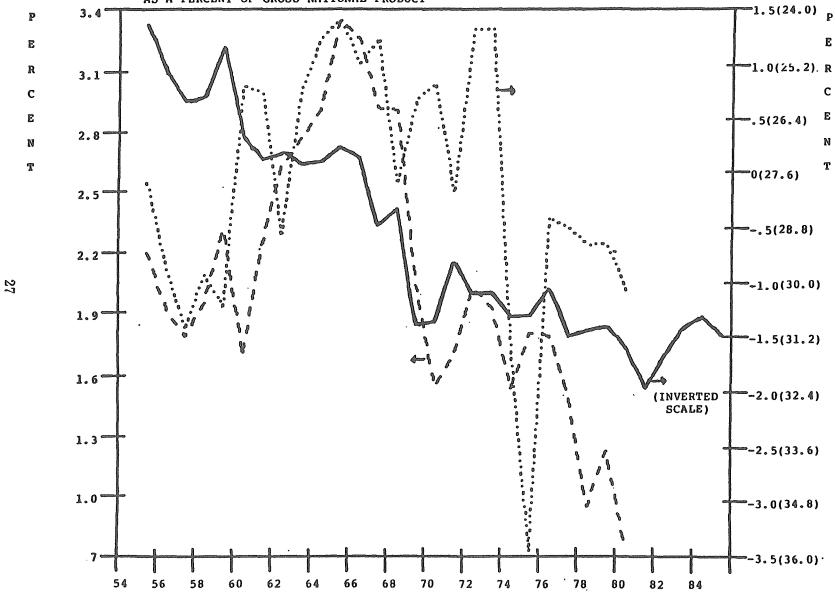


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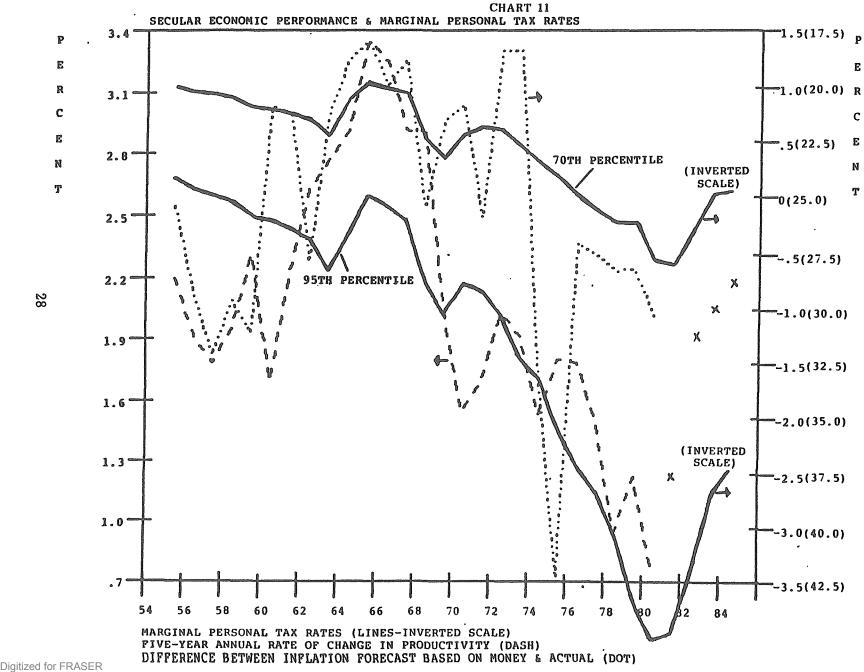
GOVERNMENT RELATED EXPENDITURES AS A PERCENT OF GROSS NATIONAL PRODUCT (LINE-INVERTED SCALE) FIVE-YEAR ANNUAL RATE OF CHANGE IN PRODUCTIVITY (DASH)
DIFFERENCE BETWEEN INFLATION FORECAST BASED ON MONEY & ACTUAL (DOT)

CHART 10

SECULAR ECONOMIC PERFORMANCE & GOVERNMENT RECEIPTS AS A PERCENT OF GROSS NATIONAL PRODUCT



GOVERNMENT RECEIPTS AS A PERCENT OF GROSS NATIONAL PRODUCT (LINE-INVERTED SCALE) FIVE-YEAR ANNUAL RATE OF CHANGE IN PRODUCTIVITY (DASH) DIFFERENCE BETWEEN INFLATION FORECAST BASED ON MONEY & ACTUAL (DOT)



	ACTUAL				FORECASŢ .												
	1980:4	1981:1	1981:2	1981:3	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1984:1	1984:2	1984:3	1984:4
GROSS NATL PRODUCT %CH		2814.8 12.6		2905.4 8.5	2991.1 12.3												
CONSTANT DOLLAR GNP 8CH	1486.5 4.0		1474.9 -5.3	1473.2 -0.5						1521.7 2.0				1555.0 2.3		1573.4 2.4	1582.6 2.4
PRICE DEFLATOR %CH	1.8380 10.7		1.9300 - 10.5	1.9722 9.0		_						_	2.3192 7.3	2.3582 6.9	2.3970 6.8		
M1-B ADJUSTED 1) %CH	413.0	414.5 1.5			434.1 7.0	440.5 6.0		453.5 6.0		467.0 6.0			487.8 6.0	495.0 6.0	502.2 5.9	509.6 6.0	
ADJUSTMENT TO INFLATION PORECAST 2)		3.000	3.000	2.000	2.000	1.500	1.500	1.500	0.500	1.000	1.000	1.000	1.000	0.750	0.750	0.750	0.750

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	YEARS										
	1980	1981	1982	1983	1984						
GROSS NATL PRODUCT	2626.5	2889.5	3173.2	3469.8	3792.4						
%CH	8.8	10.0	9.8	9.3	9.3						
CONSTANT DOLLAR GNP	1480.9	1482.5		1534.7	1568.8						
%CH	-0.1	° 0.1		1.9	2.2						
PRICE DEFLATOR	1.7737	1.9492		2.2607	2:4171						
%CH	9.0	9.9		7.3	6.9						
M1-B ADJUSTED 1)	398.3	423.8	450.3	477.3	506.0						
%CH	6.4	6.4	6.3	6.0	6.0						
ADJUSTMENT TO INFLATION FORECAST 2)		2.500	1.250	1.000	0.750						

NOTE

¹⁾ MI-B ADJUSTED BY HARRIS BANK FOR INSTITUTIONAL CHANGE AFFECTING REPORTED MI-B DATA

²⁾ ADJUSTMENT TO INFLATION FORECAST BASED ON MONEY

TABLE 2 ECONOMIC OUTLOOK OPTIMISTIC CASE

	ACTUAL								FOR	ECAST							
	1980:4	1981:1	1981:2	1981:3	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1984:1	1984:2	1984:3	1984:4
GROSS NATL PRODUCT VCH		2814.8 12.6				3040.6 9.8			3212.9 7.3								36431 no 6.3
Constant dollar CNP &CH	1486.5 4.0				.1476.4 1.3				1498.8 0.9								1567.4 2.9
PRICE DEFLATOR SCH	1.8380 10.7		1.9300 10.5				2.0783 6.7				2.1964 4.6		2.2466 4.5	_	_	_	2.3245
M1-B ADJUSTED 1) %CH	413.0 11.3	414.5 1.5	419.6 5.0						447.1 4.0		453.8 3.1	457.1 2.9	460.5 3.0	463.9 3.0		470.8 2.9	
ADJUSTMENT TO INFLATION FORECAST 2)		3.000	3.000	2.000	2.000	1.000	1.000	1.000	0.000	0.500	0.500	0.500	0.500	0.000	0.000	0.000	0.000

	YEARS											
	1980	1981	1982	.1983	1984							
GROSS NATL PRODUCT	2626.5	2883.5	3128.0	3349.4	3561.3							
%CH	8.8	9.8	8.5		6.3							
Constant dollar cmp	1480.9	1479.5	1493.4	1516.0	1550.9							
&CH	-0.1	-0 ₄ 1	0.9	1.5	2.3							
PRICE DEPLATOR	1.7737	1.9492	2.0945		2.2961							
%CH	9.0	9.9	7.5		3.9							
M1-8 ADJUSTED 1)	398.3	422.2	440.6	455.4	469.1							
%CH	6.4	6.0	4.4	3.4	3.0							
ADJUSTMENT TO INFLATION FORECAST 2)		2.500	0.750	0.500	0.000							

¹⁾ M1-B ADJUSTED BY HARRIS BANK FOR INSTITUTIONAL CHANGE AFFECTING REPORTED M1-B DATA
2) ADJUSTMENT TO INFLATION FORECAST BASED ON MONEY

TABLE 3 ECONOMIC OUTLOOK PESSIMISTIC CASE

	ACTUAL	ACTUAL FORECAST .															
	1980:4	1981:1	1981:2	1981:3	1981:4	1982:1	1982:2	1982:3	1982:4	1983:1	1983:2	1983:3	1983:4	1984:1	1984:2	1984:3	1984:4
GROSS NATL PRODUCT %CH		2814.8 12.6			2998.7 9.8		3161.2 11.5										
CONSTANT DOLLAR GNP %CH	1486.5 4.0				1490.0 1.3			1516.4 2.8						1586.8 2.4		1605.9 2.4	
PRICE DEPLATOR %CH	1.8380 10.7				2.0126 8.5			2.1460 9.3		2.2561 11.2		2.3872 12.7	2.4645 13.6				
M1-B ADJUSTED 1) %CH	413.0 11.3	414.5 1.5	420.6 6.0		436.0 7.9	445.0 8.5	455.2 9.5			493.9 12.5	509.8 13.5	527.4 14.5	546.7 15.5			615.7 17.5	641.0 17.5
ADJUSTMENT TO INPLATION FORECAST 2)		3.000	3.000	2.000	2.000	2.500	2.500	2.500	1.500	3.500	3.500	3.500	3.500	4.500	4.500	4.500	4.500

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	YEARS												
	1980	1981	1982	1983	1984								
GROSS NATL PRODUCT %CH	2626.5 8.8	2905.7 10.6	3212.2 10.5										
Constant dollar GNP 8CH	1480.9 -0.1	1490.7 0.7	1512.0 1.4	1558.3 3.1	1600.7 2.7								
PRICE DEFLATOR %CH	1.7737 9.0	1.9493 9.9			2.7141 15.2								
M1-B ADJUSTED 1) %CH	398.3 6.4	424.7 6.6		519.5 12.5									
ADJUSTMENT TO INFLATION FORECAST 2)		2.500	2.250	3.500	4.500								

Digitized for FRANCER TO INFLATION FORECAST BASED ON MONEY http://fraser.stlouisfed.org/

¹⁾ MI-B ADJUSTED BY HARRIS BANK FOR INSTITUTIONAL CHANGE AFFECTING REPORTED MI-B DATA



Harris Economics

February 20, 1981

ADDENDUM

ECONOMIC PROSPECTS THROUGH 1982 (Detail to Forecast of 1/27/81)

The economy is poised for a relatively sharp decline in the spring as a result of continued slow growth in money. By late spring or early summer, monetary growth is expected to be rising more rapidly, leading to a recovery in the economy later in the year.

While the economy has continued to exhibit more strength in the first quarter than previously anticipated, monetary growth has also been slower than expected. This should lead to somewhat faster economic growth in the first quarter of 1981, followed by a somewhat sharper decline in the second quarter than is suggested in the accompanying tables. However, these developments essentially offset each other by mid-year. Neither President Reagan's recently announced economic program nor recent developments in the economy significantly alter the forecast and interest rate projections dated January 27. This report presents a more detailed view of that forecast.

Consumer Expenditures and Housing

Expenditures on autos, furniture and appliances, and other discretionary items are expected to drop sharply in the spring as the impact of slower monetary expansion sends the economy down. Unit housing starts and auto sales are both expected to fall 10%-15% in the spring quarter. Given our assumption of faster monetary growth beginning in late spring or early summer, both housing and auto sales will begin to recover by the third quarter. Housing starts are expected to turn up by mid-year in response to declining mortgage rates this spring.

The relatively subdued recovery in auto sales and other consumer expenditures by late 1982 results primarily from the relatively slow increase (6% at an annual rate) in monetary growth which is assumed for next year.

Plant and Equipment Expenditures

Business capital expenditures are traditionally a lagging indicator of business activity. The relatively high rates of unutilized capacity over the past year, combined with the extraordinarily high cost of capital, are expected to provide downward pressure on real capital expenditures through the remainder of this year. By 1982, real spending on new capital goods is forecast to begin a prolonged expansion resulting from the combination of tax reductions, lower interest rates and improved profit performance.

Government Expenditures

President Reagan has proposed spending cuts of approximately \$8 billion in fiscal '81 and \$44 billion in fiscal '82 from the spending plans submitted by President Carter. Reagan has also proposed cuts in off-budget outlays of \$.7 billion and \$5.7 billion in fiscal '81 and '82 respectively. The latest proposals for reducing federally related expenditures represent a reversal of the upward trend in the federal government's share of output. This share rose from 22% of GNP in the early 1970s to 30% in fiscal 1981. If all of President Reagan's proposals are accepted, federally related expenditures (including government sponsored, off-budget, and regulatory compliance expenditures) will drop to 28.6% of GNP in fiscal 1982.

Corporate Profits

The corporate profit figures are being influenced by many diverse factors. For one, the U.S. Department of Commerce has revised the corporate profits measures to include profits earned by foreign affiliates of U.S. companies. Before the revision GNP figures included such profits only when they were repatriated to the U.S. in the form of dividends. The new method of reporting profits makes the figures more comparable to the concept of profits presented in the Standard and Poor's earnings reports. The effect of this revision has been to raise the profit figures as reported in the GNP accounts. Since the historical series for the latest revision in profits were not immediately available, we have not been able to incorporate this new concept into our forecasting procedures. As a result, the basic forecast for profits assumes behavior consistent with the old series and, therefore, the profit forecast should be viewed with caution.

Second, profits for 1981 and 1982 are affected by the expected tax cuts. Specific assumptions concerning these cuts have changed continually during the course of recent months. Future changes with respect to the type and timing of these cuts could have a major impact on the profit forecasts. The present forecast assumes depreciation allowances are liberalized in line with the so-called 2-4-7-10 proposal advanced in 1980 by the Senate Finance Committee. These changes are assumed to be effective January 1, 1981 and have the effect of lowering reported profits in the GNP accounts (since depreciation allowances increase). However, the actual impact on profits is seen in the series "after-tax profits adjusted." This series is expected to show a substantial 15% increase in profits for 1981 and a further 23% increase the following year.

Personal Tax Cuts

Personal tax cuts are assumed to be phased in at a different rate than President Reagan has recommended. A cut in personal tax rates of 5% is assumed to occur effective July 1, 1981. This is followed by successive 10% cuts in January, 1982, and January, 1983, and a final 5% cut in January, 1984. Since dollar taxes are actually soaring in 1981 owing to tax increases already enacted, delaying the "tax cuts" in the Kemp-Roth proposal leaves both the average and marginal tax burdens substantially higher in 1981 than in 1980.

DETAILED PORECAST FOR ECONOMIC OUTLOOK DATED 1/27/81 (BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES)

	ACTUAL				POR		years						
	1980:4	1981:1	1981:2	1981:3	1981:4	1902:1			1982:4	1979	1980	1981	1982
GROSS HATL PRODUCT 9CH		2015.6	2051.2 5.2		2998.3 12.3		3145.7 9.8	3216.3 9.3		2413.9 12.0	2620.0 0.9		
Constant Dollar Gnp BCH	1490.1 5.0	1494.6	1476.4 -4.8	1475.7 -0.2	1489.0 3.7		1505.0 1.9	1511.2	1516.2	1403.0 3.2	1491.9 -0.1	1403.9	1500.0 1.6
PRICE DEPLATOR 9CH	1.0390	1.0039	1.9312	1.9736 9.1	2.0136 6.4	2.0504 7.5	2.0090 7.7	2.1203 7.7		1.6276 8.5	1.7742 9.0	1.9906	
CONSUMPTION EXPENDITURES	1744.4	1794.3	1020.4 5.9		1910.9 12.6	1969.0 10.9	2017.3 10.2	2063.8 9.5	2112.5 9.0	1510.9 12.0	1671.1 10.6	1049.2 10.7	
durad les 8 cm	222.1	230.0 15.0	221.9 -13.4	226.7 8.9	240.0 25.6	248.5 14.9	255.1 11.1	261.1 9.7	266.2 8.0	212.3 6.5	211.6 -0.4	229.7 8.6	
nondurables sch	697.8 14.7	716.2 11.0	720.4 7.0	742.6 0.0	760.5 10.0	778.0 10.0	796.7 9.5	913.5 0.7	9.0	602.2 13.7	674.3 12.0	736.9 9.3	005.1 9.2
Bervices BCM	024.5 13.3	840.1 11.9	970.1 10.9	093.7 11.3	918.4 11.5	941.7 10.5	965.5 10.5	909.2 10.2	1015.1	696.3 12.4	705.3 12.0	002.6 12.4	977.9 10.8
Investment expenditures ach	403.7 31.3	429.5 20.1	432.0 2.3	431.5 -0.5	434.1	449.5 15.0	474.7 24.4	494.1 17.4	305.5 9.6	415.0	396.8 -4.6	431.0	401.0 11.4
och Oches blued exbend	297.3 4.6	302.9 7.0	305.7 3.7	300.4 3.6	314.7	323.0 11.0	331.0 11.4	339.5 9.6	346.9 9.0	279.7 15.6	294.7 5.4	307.9 4.5	335.3 8.9
Producers dur equip Ich	100.0 2.7	191.4 7.4	192.0 3.0	194.0 4.2	200.0 11.1	205.5 11.5	211.2	216.1 9.6	220.8 9.0	103.4	106.5	194.0 4.4	213.4 9.6
OUSINESS STRUCTURES OCH	109.3 7.0	111.5	112.9	113.6	114.7 3.9	117.5 10.1	120.6	123.4 9.6	126.1	96.3 22.4	100.3 12.5	113.2 4.5	121.9 7.7
res fired expend och	112.2 63.7	116.6 16.6	108.9 -23.9	108.9	117.4 35.1	129.5 40.0	140.9	149.6 27.1	156.6 20.1	110.6 6.6	105.0 -11.4	113.0	144.2 27.6
INVENTORY CHANGE	-5.7	10.0	17.4	14.2	2.0	-3.0	2.0	5.0	2.0	17.5	-2.9	10.9	1.5
wer exponts	34.5	21.5	15.1	19.1	26.1	20.3	5.0	-4.9	-12.6	13.4	26.1	20.4	2.0
GOVT FUNCHASES SCH	550.0 20.4	570.3 8.5	503.7 9.7	598.8 10.8	619.2 14.3	634.1	648.7 9.5	663.3 9.3	603.1 12.5	473.8 9.5	534.0 12.9	593.0 10.9	657.3 10.8
Pederal OCH MILFPARY OCH OTHER	213.3 43.5 142.7 70.6	216.5 6.1 147.5 69.0	222.2 11.0 152.5 69.7	220.9 12.6 150.2 70.7	240.8 22.5 168.3 72.5	247.9 11.6 174.9 72.6	254.1 11.1 101.7 72.4	261.0 11.3 188.8 72.2	273.5 20.6 200.1 73.4	167.9 9.5 111.2 11.3 56.7	199.2 18.7 132.0 18.7 67.3	227.1 14.0 156.6 10.7 70.5	259.0 14.1 186.4 19.0 72.7
STATE & LOCAL BCH	345.5 0.4	353.0 10.0	361.5 9.0	369.9 9.6	370.4 9.5	386.6 9.0	394.6 8.5	402.3	409.6 7.5	305.9 9.6	335.5 9.7	365.9 9.0	398.3 8.8

NOTE: PERCENTAGE CHANGES AT ANNUAL RATES; PRELIMINARY DATA POR 80:4

NOTE: A detailed analysis of government tax and spending burdens and their likely impact on the economy will be presented in a forthcoming report on the federal budget. Specifically, this report will analyze the Reagan proposals and their likely impact on inflation and productivity trends in the period ahead.

Robert J. Genetski Vice President and Economist

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

	ACTUAL					ecast			· · · · · · · · · · · · · · · · · · ·		yei	ARS	
									1902:4	1979	1980	1981	1982
PRETAX PROPITS 1) 9CH	246.1 15.1	233.9 -18.4		211.7 -16.6			206.9 -1.9	206.2 -1.3	207.7 2.9	255.3 14.4	244.7 -4.2		207.2 ~5.5
tan liability BCH	83.4 27.6	79.3 . ~16.4	75.1 -19.6	71.0 -16.6	71.2 -3.4	70.5 -3.0	70.1 -1.9	69.9 -1.3	70.4 2.9	87.6 5.6	01.9 -6.5	74.3 -9.3	70.2 -5.5
APTER TAX PROFITS OCH				139.9 -16.6		137.4 -3.8	136.0 -1.9	136.3 -1.3	137.3	167.8 19.5		144.9 -11.0	136.9 -5.5
APT TAX PROP ADJ 2) 9CH	105.7 27.2			116.5 19.7			143.8 21.2		153.4 12.0	109.2 6.5	102.2 -6.4	118.0 15.5	145.0 23.5
PERSONAL INCOME 9CH	2259.1 14.9	2310.0			2473.1		2507.4 9.0	2646.8 9.5	2707.5 9.5	1943.0 12.9	2161.0 11.2	2307.0 10.5	2617.3 9.7
TAR 6 NONTAR PAYMENT 3) 8CH	360.0 23.5		301.7 11.9	377.5 ~4.3		371.3 -19.3	303.2 13.4	395.2 13.1	407.2 12.7	302.0 16.7	338.7 12.2	380.5 12.3	389.2 2.3
Disposable income ach	1099.1 13.3	1930.9	1975.3 7.7		2001.4 10.5		2204.2 9.2	2251.6 0.9	2300.3 8.9	1641.7 12.2	1022.2 11.0		2220.1 11.0
Personal Outlays 9CH	1792.5 15.5		1868.9 5.8	1912.0 9.5	1968.9 12.4		2069.5 10.2	2117.1 9.5	2167.0 9.8	1555.5 12.2	1718.6 10.5	1098.2 10.4	
Personal Savings 9CH	106.6 -16.2		106.4 50.3	118.3 52.8		136.3 115.5	134.7 -4.6	134.5 -0.6	133.3 -3.5	06.2 12.9	103.6 20.2	100.3 4.6	134.7 24.3
SAVING RATE(%)	5.6	5.0	5.4	5.8	5.4	6.3	6.1	6.0	5.0	5.3	5.7	5.4	6.1
employment 9ch	97.3 0.9	97.8 2.0	97.5 -1.1	97.7 0.9	98.1 1.6	90.6 2.1	99.1 2.0	99.6 2.0	100.1	96.9 2.7	97.3 0.3	97.0 0.5	99.3 1.6
LABOR FORCE 9CH	105.2 0.7	105.6 1.8	106.1	106.4 1.1	106.7	107.0	107.5	100.0	108.5	102.9 2.5	104.9	106.2	107.7 1.4
unemployment rate(4)	7.5	7.5	8.1	0.2	0.1	7.9	7.0	7.0	7.7	5.0	7.1	8.0	7.8
PRODUCTIVITY-NONPARM 8CH	0.985 -1.2	0.985 -0.2	0.976 -3.5	0.973 -1.0	0.976 1.2	0.979 0.9	0.960 0.4	0.900 0.2	0.981 0.2	0.990 -0.8	0.985 -0.5	0.978 -0.7	0.980 0.2
INDUSTRIAL PRODUCTION 8CH	1.491 21.1	1.520 8.1	1.487 -8.4	1.476	1.505 8.1	1.527 6.0	1.536	1.544 2.1	1.552 2.1	1.525 4.4	1.471 -3.6	1.497	1.540 2.9

¹⁾ PROPITS FOR 80:4 ARE ESTIMATES. PROPITS FOR 1981 ASSUME CORPORATE TAX CUTS EPPECTIVE JANUARY 1,1981.
2) APTER TAX PROPITS ARE ADJUSTED TO EXCLUDE INVENTORY PROPITS AND ALLOW FOR DEPRECIATION AT REPLACEMENT COST.
3) FORECAST ASSUMES A 5% PERSONAL TAX RATE CUT EFFECTIVE JULY 1,1981 AND A FURTHER 10% RATE CUT EFFECTIVE THE POLLOWING JANUARY.

ECONOMIC OUTLOOK

	ACTUAL					ecasp						ARS	
									1902:4	1979	1980	1981	1902
interest rates													
new 188U2 aa Iwdus Bonds	13.3	13.3	11.9	11.3	11.0	10.6	10.4	10.3	9.0	9.7	12.3	11.9	10.3
new issue aa upil bonds	14.6	14.4	12.9	12.2	11.9	11.5	11.3	11.2	10.7	10.3	13.3	12.9	11.2
PRIME RATE	16.7	18.7	15.3	12.6	11.4	10.5	10.2	9.7	9.5	12.7	15.3	14.5	10.0
COMMERCIAL PAPER 4 NOS 1)	15.0	15.2	12.3	10.6	9.4	0.7	0.4	8.0	7.8	11.0	12.6	11.9	0.2
) wonth T-BILLS	13.6	14.2	11.0	10.1	0.9	0.3	0.0	7.6	7.4	10.1	11.4	11.3	7.0
PRIMARY 90 DAY COS	15.6	16.0	12.7	10.0	9.6	0.0	8.5	0.1	7.9	11.1	12.9	12.3	0.3
NONEY AND VELOCITY													
Nowether Base-(PB) OCH	162.2 10.7		166.6 6.0	169.0 7.9	173.1 0.0	176.1 7.1	179.1 7.0	182.1 6.9	185.2 7.0	145.0 0.3	156.6 0.0	160.4 7.5	186.6 7.2
ACH ACTOCIAL OS MBO	17.790 10.4	17.001 0.3	17.575 -5.0	17.737 3.7	17.997 6.0	10.097	10.173	10.264	10.361 2.1	17.322	17.457 0.8	17.770 1.6	10.224
Nomey Supply-(M1-9) OCM	413.0	421.5 0.5	426.7 5.0	434.0 7.0	443.4	447.9 6.0	454.4 5.9	461. Å 6.0	467.9 6.0	374.S 7.0	398.3 6.4	430.9 6.2	457.8 6.2
VELOCITY OF MI-B *	7.067 19.7	7.003 -1.6	6.904 -5.5	6.910 0.3	7.027 7.0	7.000 3.1	7.127 2.6	7.101 3.1	7.237 3.2	6.699 3.7	6.013	6.961 2.2	7.156 2.0
m1-0 adjusted 2) 8cm	413.0	414.5 1.5	419.6 5.0	426.8 7.0	434.1 7.0	440.5 6.0	446.9 5.9	453.5 6.0	460.2 6.0	374.5 7.0	398.3 6.4	423.0 6.4	450.3 6.3
velocity of MI-A Adjo	7.067 19.7		6.904 -5.5	7.026 7.3	7.146 7.0	7.200 J.1	7.246 2.6	7.301 3.1	7.350 3.2	6.699 3.7	6.013 1.7	7.020 3.0	7.277 3.7
CPI-ALL UMAN OCH	2.564 12.2	2.646 13.5	2.724 12.3	2.703 8.9	2.846 8.4	2.095 0.0	2.951 8.0		3.063 7.8		2.460 13.4	2.740 11.3	2.979 8.4
auto sales))	9.130	9.400	8.300	8.500	9.500	9.000	10.100	10.300	10.300	10.559	9.064	8.925	10.175
DOMESTIC	6.660	6.900	6.100	6.300	7.100	7.400	7.700	7.900	0.100	0.230	6.644	6.600	7.775
imports	2.464	2.500	2.200	2.200	2.400	2.400	2.400	2.400	2.400	2.316	2.418	2.325	2.400
Housing Starts))	1.556	1.300	1.100	1.300	1.400	1.600	1.700	1.000	1.900	1.722	1.321	1.275	1.750

NOTE: VELOCITY IS MEASURED AS GNP DIVIDED BY MONEY SERIES LAGGED TWO QUARTERS
1) PRIOR TO NOVEMBER 1979, COMMERCIAL PAPER 4-6 MOS
2) M1-B ADJUSTED BY MARRIS BANK POR INSTITUTIONAL CHANGE APPECTING REPORTED M1-B DATA
3) IN MII! "IS OF UNITS-SEASONALLY ADJUSTED ANNUAL RATES

AT A CRITICAL JUNCTURE

H. Erich Heinemann Morgan Stanley & Co., Incorporated

The Federal Reserve System has reached a critical juncture in its current effort to stabilize monetary expansion, reduce inflationary expectations, and thereby lower interest rates. If the central bank is successful, this should pave the way for implementation of the Reagan Administration's program for economic renewal; failure could well expose the American economy to the threat of a serious financial crisis. Here are the considerations that lead me to this conclusion:

Since last fall, the monetary authorities have reduced expansion in the money stock to a crawl by placing a tight clamp on the growth of the monetary base, which they control directly. (The principal source of the base is the Federal Reserve's own portfolio of securities.) However, over the last week or so it has become evident that the Federal Reserve has made a significant tactical change in its stance and is now supplying high-powered money to the marketplace much more readily than was the case only a short while ago. As a case in point, despite a \$900-million drop in the week of March 11, the monetary base — as calculated and adjusted by the Federal Reserve Bank of St. Louis — averaged \$163.8-billion per day during the four weeks ended on that date, up at a 12.3% seasonally adjusted compound annual rate from the average of \$162.4-billion in the four weeks ended on February 11. By contrast, the base was essentially unchanged between early December and mid-February.

It has been clear all along that the extreme restraint imposed by the Federal Reserve during December, January, and February (including a 7% annual rate of decline in total adjusted bank reserves) would prove to be unsustainable. Indeed, I warned in Money and the Economy on January 16 that the danger in the Federal Reserve's course was that it could lead to a "severe overtightening of monetary policy, which, in turn, would set the stage for the next round of excessive growth in the money supply." This sentiment was echoed a month later in the White House Report that spelled out President Reagan's economic program: "At times in the past, abruptly restrictive policies have prompted excessive reactions toward short-term monetary ease." At this point, I do not think that the Federal Reserve can be properly accused of a "severe overtightening" of policy — in large part because the slowdown in money

growth has been of such short duration. Nonetheless, the abruptness of the restraint makes it hardly surprising that the authorities are beginning to be somewhat more accommodative. What will be crucial is the manner in which they do so.

For some time now, financial markets have been exhibiting some of the initial-beneficial effects of the Federal Reserve's current resolve that inflation, after all, does seem to be a problem. As the monetary growth rate has dropped, and the eloquence of Mr. Volcker's antiinflationary rhetoric has improved, short-term interest rates have fallen. The Federal funds rate, for instance, has averaged about 15 1/2% over the last four weeks, down almost 500 basis points from the peak that was posted in the first week of January. It is important to recognize that this trend has developed in the following context:

- As already noted, growth in the money stock has been brought virtually to a halt. Over the period from November through February, M-1B increased at an annual rate of 2.1%, in contrast to the 12.8% rate of expansion from August through October. Moreover, the Federal Reserve said today that, when proper account is taken of the transfer of funds into interest-bearing NOW accounts, the M-1B growth rate was overstated in relation to its underlying trend in January by approximately \$3.6-billion and in February by about \$1.7-billion.
- The demand for funds by the United States Treasury has been exceptionally strong. I estimate that the seasonally adjusted annual rate of Treasury financing in the current quarter is running between \$85-billion and \$95-billion, which is close to the postwar record established in 1975.
- The level of aggregate business activity in the private sector has been stronger than anticipated (real GNP in the first three months of 1981 may increase at an annual rate close to 4%). The level of corporate borrowing in the capital markets has been surprisingly high see the Statistical Supplement to this issue of Money and the Economy for details.

This is precisely the context that many analysts have assuumed would produce record increases in interest rates. The fact is the opposite has occurred, and short-term rates have declined, while long-term rates have changed very little from last December. There is a lesson here, so far as I can see, about the way the world works. Tight monetary policy has lowered short-run inflationary expectations, and at the same time has contributed to the 25% annual rate of decline in sensitive spot commodity prices over the last three months. In this environment, business demand for short-term credit has been tempered. The Morgan Stanley proxy for total short-term business credit outstanding averaged \$299.4-billion in the four weeks ended on March 4, up at an annual rate of about 8% over the last three months. In mid-December, the three-month growth rate in our credit proxy was 18.7%. Furthermore, business and consumer

expectations about the future course of the economy have clearly become more cautious, despite superficial signs of strength. The reduction in <u>aggregate</u> borrowing demand and inflationary expectations, it seems to me, has more than offset the upward pressures on rates from a reduced growth rate in the money supply and an exceptional - Treasury borrowing calendar.

It seems obvious that the Federal Reserve will in due course seek some reacceleration of monetary growth — whether or not I am correct in my judgment that such a reacceleration is already under way today. In so doing, Mr. Volcker and his colleagues will find themselves under enormous pressure to lift the rate of growth in the money stock to a level consistent with continued disinflation in the economy, but not so much as to reignite inflationary fears. In other words, provide just enough, but not too much money. In practice, this will mean that the authorities will have to stay close to the tracking path for monetary expansion that they have laid out for 1981. A repetition of last year's pattern — with the first part of the year far below the desired growth path, and the second part far above — would most likely produce short— and long-term interest rates far above the levels that were reached at the peaks in 1980. This, in turn, could well seriously undermine large numbers of already weakened financial institutions. In truth, the Federal Reserve has no alternative to actions that will lower inflationary expectations and interest rates.

Unfortunately for Mr. Volcker, the margin for error is very small. As the Federal Reserve chairman told the Senate Banking Committee last month, "swings in the money and credit aggregates over a month, a quarter, or even longer should not be disturbing (and indeed in some situations may be desirable), provided there is understanding and confidence in our intentions over more significant periods of time." (Emphasis in the original.) This is correct, and it is the core of the Federal Reserve's dilemma. The central bank has destroyed any vestige of the confidence it once enjoyed by its own actions. That confidence will be rewon, if ever, only through arduous and sustained actions.

To the extent that market participants seek to position themselves to benefit from a coming disinflation, in my judgment they should take action on the basis of their confidence in the political commitment of the Reagan Administration — not the rhetoric of the Federal Reserve.

	MONETARY	DATA			
(M	eckly Averages of Daily Figur	es in Millions of Dollar	s)		
	Latest Week	Change From Previous Week	Rates 3 Months	of Change (6 Months	
Money Supply (M-1A)*(1)	\$365,700	\$+1,100	-21.5%	- 7.1%	- 2.09
Money Supply (M-1B)*(1)	419,700	+3,200	+ 2.4	+ 7.5	÷ 6.8
Expanded Money*(1)	504,400	+6,600	+ 9.4	÷ 9.7	+11.1
Adjusted Monetary Base*(2)	163,400	- 900	+ 2.5	+ 5.7	+ 7.3
Adjusted Federal Reserve Credit*(2)	142,200	- 900	+ 5.1	+ 8.1	÷ 8.4
Total Adjusted Reserves*(1)	46,600	+ 400	- 5.0	÷ 3.1	+ 4.3
Member Bank Borrowing(2)	768	- 531	NA	NA	NA
	Wednesday F	ïgures			
Short-Term Business Credit*(1)	300,467	+1,392	+ 8.1	+13.0	÷ 6.9
Total Commercial Paper Outstanding*(1)	132,165	+1,181	+19.0	+12.6	+10.9
Business Loans All Large Banks*(1)	169,815	- 177	+ 0.8	+11.1	+ 6.4
New York City Banks* ***(1)	48,549	÷ 82	- 5.5	+11.1	+ 6.0
Chicago Banks*(1)	18,525	→ 94	+ 2.1	+11.0	+ 7.5

^{*}Seasonally Adjusted

Rates of change are compound annual rates. Expanded money consists of M-1B plus overnight RPs and Eurodollars, and 50% of money market mutual fund shares. Short-term business credit includes commercial and industrial loans at large banks plus loans sold to a affiliates less bankers' acceptances and commercial paper held in portfolio plus loans at large banks to finance companies and nonbank financial institutions plus nonbank commercial paper.

NA = Not Applicable

^{**1.}xcludes bankers' acceptances and commercial paper

⁽¹⁾ March 4

⁽²⁾ March 11

MONTHLY SUPPLEMENT MONETARY DATA (Monthly Averages of Daily Figures in Billions of Dollars)Rates of Change Over-----Change From Latest Month Previous Month 3 Months 6 Months 1 Year Money Stock Measures and Liquid Assets: M-1A* (1) M-1B* (1) -21.2% + 2.1 + 7.7 366.0 \$- 6.8 - 7.0% - 2.0% 417.2 + 1.1 + 6.1 + 7.3 + 8.8 + 6.6 495.2 Expanded Money* (1) +10.5 + 5.2 M-2* (1) 1,692.2 +10.9 + 7.5 + 9.3 1,993.2 +14.5 +10.0 +11.3 +10.4 M-3° (1) 2,373.5 +27.0 +12.0 +10.3 L* (2)

Rates of change are compound annual rites

M-1 V consists of currency plus demand deposits. M-1B consists of M-1A plus other checkable deposits at banks and thrift institutions. I xpanded money consists of M-1B plus overnight RPs and I woodollars, and 50% of money market mutual fund shares. M-2 consists of M-1B plus overnight RPs and Lurodollars, shares of money market mutual funds and savings and small time deposits at commercial banks and thrift institutions. M-3 consists of M-2 plus large time deposits and term RPs at commercial banks and thrift institutions. I mally, L consists of M-3 plus other liquid assets.

(1) February (2) December

^{*}Seasonally Adjusted

<u>-</u>	ECONOMI	IC DATA		
	Latest Week	Change From Previous Week	Rates of Change (3 Months 6 Months	
OUTPUT				
Goods Production:				
Auto* (Units)	117,804	-7,519 -	35.7% - 8.9%	-19.3% 3/7
Trucks* (Units)	29,620	+ 943 -	53.8 + 36.7	-17.2 3/7
Lumber* ** (Millions of Board Feet)	174.500	+7.510 -	1.4 + 25.2	- 5.3 2/21
Paper* (Thousands of Tons)	581	- 7 -	15.1 + 5.9	- 1.9 2/28
Paperboard* (Thousands of Tons)	617.6	+ 8.3 +	14.8 + 11.9	+ 1.6 2/28
Raw Steel* (Thousands of Short Tons)	2,495	- 68 +	6.2 +123.0	+ 1.2 3/7
Energy Production.		~		
Bituminous Coal* (Thousands of Short Tons)	21,276	+1,230 +	+202.3 + 62.2	+14.9 2/21
Crude Oil Refinery Runs* (Daily Average; Thousands of BBLs)	12,976	_ 95 -	- 3.4 + 6.5	-10.4 3/7
Electric Output Index* (1967=100)	190	+ 13 -	- 5.6 - 9.4	- 1.1 2/28
TRANSPORTATION Revenue Ton-Miles, Class I Railroads* (Billions)	19.8	+ 0.7 -	+ 54.1 + 22.1	+ 1.6 2/28
PRICES				
Spot Price Index, All Commodities (1967=100)	273.8	÷ 1.7	- 25.1 - 11.0	- 7.2 3/10
Spot Price Index, Foodstuffs (1967=100)	253.1		- 31.3 - 17.7	- 0.1 3/10
Spot Price Index, Raw Industrials (1967=100)	288.9	÷ 2.9	- 20.8 - 6.1	-11.7 3/10
EMPLOYMENT				
Initial Unemployment Claims* (Thousands)	416.2	- 12.5	- 2.8 - 32.3	÷ 2.7 3/7
Claimant Level* (Thousands)	2,849	- 10	- 50.3 - 43.5	+ 4.1 2/28

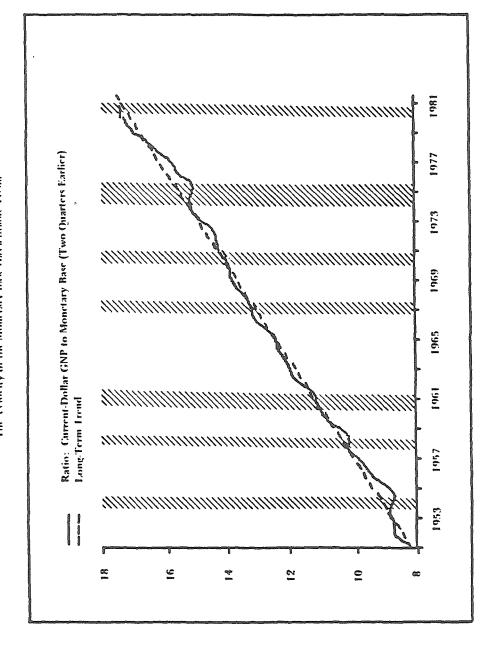
^{*}Seasonally Adjusted

All data are reported for the week ending Saturday except price data which are for the week ending on Tuesday.

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

^{**}Data subject to final revision

Figure 1 The Velucity of the Monetary Base Has a Stable Trend



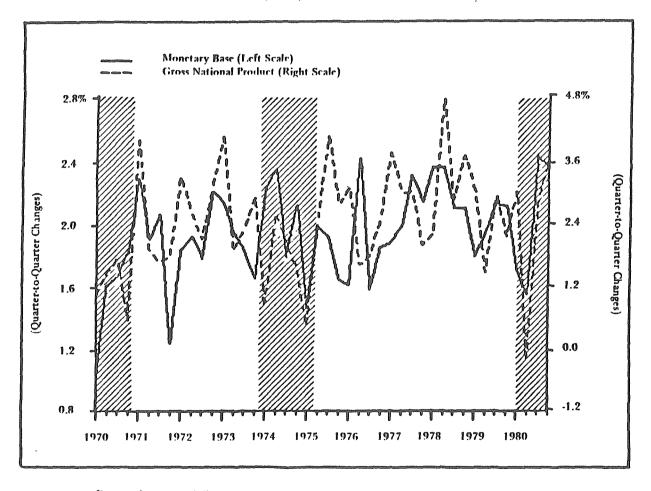
Data are four-quarter moving averages.

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

Sources: Econalyst Data Base; Morgan Stanley Research

Figure 2

Erratic Monetary Policy Contributes to Economic Instability



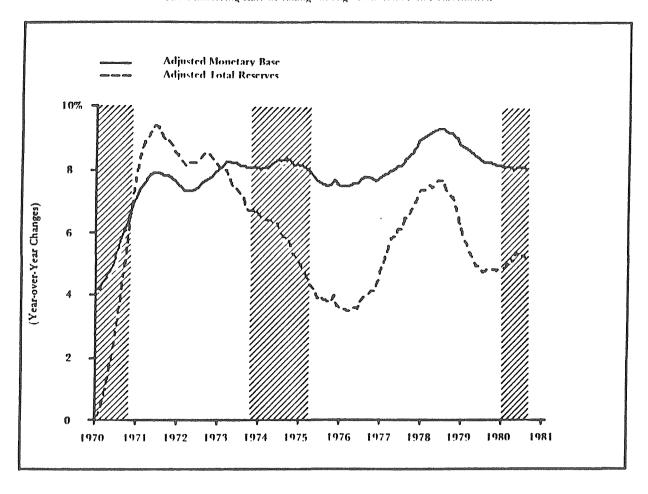
Data are in current dollars.

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

Sources: Econalyst Data Base; Morgan Stanley Research

Figure 3

The Underlying Rate of Change in High-Powered Money Has Slowed



Data are 12-month moving averages.

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

Sources: Econalyst Data Base; Morgan Stanley Research

Rudolph G. Penner American Enterprise Institute

REAGAN PLAN

President Reagan has proposed a dramatic plan to cut the growth of Federal spending and to lower the overall tax burden on the American people. The following table illustrates the details through fiscal 1984. Projections for 1985 and 1986 can be obtained from the budget documents released on February 18, 1981.

Table 1

Outlay and Receipts Impact of the Reagan Budget Plan (dollar amounts in billions)

	•	Fiscal	Years	
	<u>1981</u>	1982	1983	1984
Outlays				
Current policy base Added defense	\$657.8 1.3	$\begin{array}{r} \$729.7 \\ \phantom{00000000000000000000000000000000000$	\$792.1 	$\begin{array}{r} \$849.0 \\ \underline{27.0} \end{array}$
Sub-total	659.1	736.9	812.8	876.0
Less:				
Identified outlay cuts Cuts to be proposed	4.4	41.4	58.5	73.7
subsequently			. 21.2	30.7
Proposed budget outlays	654.7	695.5	733.1	771.6
Outlays as a % of GNP	23.0	21.8	20.4	19.3
Addendum:				
Off-budget cuts	.7	5.7	7.4	9.2
	<u>1981</u>	1982	1983	1984
Tax policy				
Current law receipts	\$609.0	\$702.4	\$807.6	\$917.2
Less: Depreciation reform	2.5	9.7	18.6	30.0
Individual tax cuts	6.4	44.2	81.4	118.1
Added: User charges		$\underline{2.0}$	$\underline{2.6}$	3.0
Proposed receipts	600.2	650.5	710.2	772.1
Receipts as a % of GNP	21.1	20.4	19.7	19.3
Budget deficit (-) or surplus	-54.5	-45.0	-22.9	+0.5

The outlay and receipts estimates in Table 1 are based on the economic assumptions in Table 2.

Table 2

Economic Assumptions Underlying Reagan Budget Estimates

	Calendar Years				
	1981	1982	1983	1984	
GNP (% change 4th quarter over 4th quarter)					
Current dollars Constant (1972) dollars	11.0 1.4	13.3 5.2	11.8 4.9	10.1 4.2	
GNP deflator (% change 4th quarter)	9.5	7.7	6.6	5.7	
Unemployment rate (percent, 4th quarter)	7.7	7.0	6.5	6.3	

The budget cuts outlined in Table 1 are broad based, but for the most part Reagan has tried to minimize benefit cuts affecting the poverty population. The tax cuts involve a depreciation reform similar to the Conable-Jones 10-5-3 proposal and the enactment of the Kemp-Roth, three-year, 30 percent cut in marginal tax rates starting July 1, 1981.

In general, the Shadow Open Market Committee should be pleased with the Reagan budget strategy since it has been advocating a similar strategy for years.

The budget documents also specify a monetary strategy. The rate of growth of money and credit aggregates is to be smoothly reduced to one-half of its 1980 level by 1986.

Unfortunately, the monetary plan and fiscal plan are not consistent in that double-digit rates of growth for nominal GNP between 1980 and 1984 are to be financed with an implied average growth of M-1B of less than 5 1/2 percent per annum. The implied growth of velocity is between 5 1/2 and 6 percent or far higher than any number which can be based on recent historical experience.

In this respect, the Reagan plan is not unusual. Nominal GNP growth projected in the Carter budget, by CBO, and the House and Senate budget committees have over the last year been inconsistent with what Chairman Volcker has been saying about monetary policy.

The issue is important because high assumed growth rates for nominal GNP imply that deficits fall rapidly. Lowering nominal GNP growth by one percentage point per year between 1980 and 1984 would lower 1984 receipts by \$30 to \$40 billion. If the

reduction were due solely to a lower inflation rate, the matter would not be too serious because outlays would fall by only a slightly lower amount. But to the extent that real growth is lower, outlays will be on a higher path because of higher income maintenance outlays. If the monetary targets are to be taken seriously, we may be basing budget plans on far too rosy an economic outlook.

SHORT-RUN DEFICIT OUTLOOK

It has become fashionable to list all of the things that could go wrong with the Reagan plan and to conclude that he has embarked on a very risky budget path. Such fears should be tempered by the fact that, with a rapidly growing defense burden, current policy toward non-defense programs and current tax law also place us on a very risky path. Along the current path, deficits can only be reduced by letting inflation rapidly raise marginal tax rates on labor and capital income. That is not a path that makes one sanguine about future economic efficiency.

Of course, many things could go wrong with the Reagan plan. A significant recession this year would substantially raise the 1981 and 1982 deficits. They would be raised further if Congress adopts the Reagan tax cuts while forgetting the Reagan outlay cuts. However, the latter is very unlikely. The voters, and therefore Congressmen, are very concerned about deficits and Congress will not pass more than a one-year personal income tax cut. In my view, that tax cut probably will not be effective before October 1, 1981 and may be postponed to January 1, 1982.

I was asked to specify a "best" case and a "worst" case for the 1981 and 1982 budget deficit. Clearly, "best" and "worst" are not words to be taken literally for they allow one's imagination to roam more freely than is useful. I shall instead describe "good" and "bad" outcomes which are plausible, but not intended to bracket the entire range of possibilities. A "good" outcome is one that follows the Reagan plan. The unified budget deficit would be \$54.5 billion in 1981 and \$45.0 billion in 1982. Off-budget outlays would be \$22.5 billion in 1981 and \$12.6 billion in 1982. Implied financing requirements are then \$77 billion in 1981 and \$57.6 billion in 1982.

Some might protest that the "good" outcome could be made better by delaying the Reagan tax cuts, thus lowering the deficit numbers slightly. On the other side, it is hard for me to believe that the outlay cuts can be made as rapidly as in the Reagan plan, so it is reasonable to believe that the two delays would approximately offset each other in this "good" outcome.

For the "bad" scenario, I shall assume the following:

1. An economic growth rate of 0.7 percent between the fourth quarters of 1980 and 1981 with 2.5 percent economic growth during 1982. This implies a significant

recession during the second and third quarters of 1981 with a sluggish recovery the next year. Needless to say, the assumption regarding 1982 growth is strongly biased in a pessimistic direction.

- 2. The GNP deflator rises 10.4 percent during 1981 and 8.8 percent during 1982. (This was Carter's assumption.)
- 3. The Carter spending path with Reagan's defense addition. (This assumes \$9.5 billion in legislated non-defense cuts in fiscal 1982 which may be too optimistic for a "bad" scenario, but I cannot believe that there will not be some budget cutting.)
- 4. A net tax cut costing \$45 billion on a static basis in fiscal 1982. The individual tax cuts would be effective October 1, 1981. Fiscal 1981 would only be affected by a depreciation reform costing \$2.5 billion.

Under this dire scenario, the unified budget deficit would be about \$65 billion in 1981 and between \$100 and \$110 billion in 1982. With Carter's off-budget additions, total financing requirements soar to roughly \$90 billion in 1981 and to between \$120 and \$130 billion in 1982.

For 1982, the tax cut assumed in the "bad" scenario is about \$5 billion less than is assumed by Reagan, but the main differences involve the economic assumptions and the assumed failure to cut from President Carter's budget recommendations. Very roughly speaking, one-third of the 1982 deficit increase above Reagan's \$45 billion is the result of lower assumed real growth and two-thirds is due to the failure to accept the excess of Reagan's budget cuts above Carter's.

It should be emphasized that I think it extremely unlikely that the "bad" outcome will emerge. If we appear to be on the "bad" path, it is probable that the Congress will become less enthusiastic about tax cutting and more enthusiastic about outlay cutting.

UPDATED FORECASTS OF MONEY MULTIPLIERS

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

I. Changes Since our Last Report

The one thing that appears to be certain in trying to work with monetary aggregates is that nothing stays constant long enough to avoid the problems of reworking all of our models for each of these semiannual meetings. Last time we reported to you the changes that were required to adjust to the new definitions of the monetary aggregates. In a working paper that is forthcoming in the Journal of Money, Credit and Banking, we discuss the forecasting performance of our models, using both the St. Louis and Board of Governors monetary base and adjusted reserves concepts, during two different regimes: November, 1978 - September, 1979 and October, 1979 through October, 1980. Unfortunately, the results presented in the paper cannot be extended beyond that period without adjusting our models. The reason is that the Financial Institutions Deregulation and Monetary Control Act of 1980 necessitated a reconstruction of the St. Louis reserve adjustments starting in November, 1980 (for details see St. Louis Federal Reserve Bank Review, December, 1980). As usual the changes in reserve requirements result in a reconstruction of recent history as pictured by the Board of Governors concepts. In addition, recent revisions of the monetary aggregates data have been released that incorporate benchmarks to the December 1979 and March, 1980 call reports. Since we had to reestimate some of our component models anyway (i.e. the models involving RAM), we chose to reestimate all of the models using the revised data and updating the sample period through the end of 1979. These reestimated models are presented in Table II. Table I is a reproduction of the same table that appeared in our last report so that you can make comparison if you choose.

There do not appear to be any major surprises in the two tables. The structure of all the models appears to remain valid for the updated sample; indeed in most cases the changes in the point estimates of the various coefficients are very small. This should be expected given that the forecasting experience for the various multipliers over the past two years appears to be very stable, with the possible exception of April,

1980. The redefinition of the reserve adjustment for the St. Louis monetary base and adjusted reserves has also had little impact on the two component models in which these series are involved.

At the present time, there is another potential problem arising from the Financial Institutions Deregulation Act: namely, the legalization of NOW accounts nationwide effective January 1, 1981. You may recall that at the beginning of 1979, we adopted the working assumption that ATS balances came exclusively out of what were formerly demand balances. Given the old M_1 concept, that assumption necessitated the introduction of a dummy variable into our various models to measure the magnitude of the shift, since ATS balances were not included in the M_1 definition. We found that a shift of approximately 1.5 percent (which we measured from independent sources) occurred over a period of about three months and after that no further adjustments were necessary. Our tentative assumption at this point is that a similar portfolio adjustment has occurred with nationwide NOW accounts. presumption is that, as a first approximation, all of the new NOW balances came out of former demand balances, and at this point, we feel that the transition has been largely accomplished. Note that the latest data available (February 18, 1981) indicate on a seasonally adjusted basis that the precipitous decline in M_{1-A} , which began at the first of the year, has now halted. This assumption suggests a faster adjustment than occurred with the ATS accounts, but given the extensiie advertising of the new NOW accounts in the last quarter of 1980, such a result seems quite plausible.

If this working assumption is reasonable, then the conclusion is that no adjustments need be made to our component models to account for the nationwide NOW's. In the new aggregates, both demand balances and NOW accounts are included in the $\rm M_{1-B}$ construction. Consequently, a shift between the two just alters the composition of the D component, but would leave the total unchanged. Other than secondary impacts as a result of deposits moving among institutions with different marginal reserve requirements, nothing should be affected.

To attempt to verify the usefulness of this assumption, we have constructed forecasts of January, 1981 based on the current data available through December, 1980. The results are presented in Table III, which includes a decomposition of the sources of the multiplier forecast error. The forecast error for the M_{1-B} net monetary base multiplier for January at 1.17 percent is a relatively large one, given our past experience, but not highly unlikely. The consistency of the signs of the individual component error suggests that our operating assumption that all of the new NOW accounts came out of demand balances is probably something of an overstatement, but

it does not appear that this institutional change should cause a major source of problems in either the interpretation or control of monetary aggregates over the coming year.

II. Current Forecasts

Our current forecasts for the $\rm M_{1-B}$ net monetary base multiplier over the coming year (not seasonally adjusted) are presented in Table IV. We have chosen a somewhat different format for the presentation than we have used in the past, to try to avoid the problem of having to deal with forecasts of seasonal factors, which are really not a part of our models at this point. Table IV contains our predictions of the $\rm M_{1-B}$ net monetary base multiplier for the next 11 months, as well as the actual values of the multiplier over 1980 and the seasonal difference in percentage terms. With the exception of the first quarter of 1981 relative to the first quarter of 1980, there does not appear to be any consistent or persistent trend implicit in the forecasts. In particular, the forecast of the average change for the fourth quarter 1981 over the fourth quarter 1980, which is important for the Federal Reserve's current monetary growth targets is for a decline in the multiplier of less than one percent. Our conclusion is that at this point in time, the path of the net monetary base over the next year will be the dominant influence on the growth of $\rm M_{1-B}$.

As usual, we have predictions of multipliers for $\rm M_2$ and $\rm M_3$, as well as predictions for multipliers based on total reserves, unborrowed reserves and the monetary base. To avoid overburdening you with details we will not present those here, with the exception of the $\rm M_{1-B}$ unborrowed reserves multiplier (Table V), which is the one that appears to be implicit in the present Federal Reserve control procedure. You should note our conclusion in the discussion paper that we distributed, which suggests this approach to multiplier forecasting is considerably less accurate in dealing with reserve multipliers than in dealing with monetary base multipliers.

Table I Component Models

k
$$(1-B)^3(1-B^{-2})$$
 $(1-B^{-12})$ $1nk = (1^2.70581B^3)$ $(1-.66907B^{-12})a$
 $\chi^2 = 37.8$ $df = 28$ S.E.E. .556 X 10^{-2} SAMPLE 59.1-78.12
g $(1-B)^3(1-B^{-12})$ $1ng = (1-.38067B)$ $(1-.21252B^2)$ $(1-.50131B^{-12})a$
 $(.0675)$ $(.0734)$ $(.0632)$
 $\chi^2 = 31.6$ $df = 27$ S.E.E. .181 SAMPLE 59.1-78.12
z $(1-.36183B)$ $(1-B)$ $(1-B^{-12})$ $1nz = (1-.69992B^{-12})a$
 $(.0500)$
 $\chi^2 = 36.5$ $df = 28$ S.E.E. .273 X 10^{-1} SAMPLE 59.1-78.12
to $(1-B)^3(1-B^{-12})$ $1nt_1^4 = (1-.64701B^3)$ $(1-.61528B^{-12})a$
 $(.0531)$ $(.0587)$
 $\chi^2 = 29.9$ $df = 28$ S.E.E. .549 X 10^{-2} SAMPLE 59.1-78.12
to $(1-B^{-12})$ $[(1-B)$ $1nt_2^4 + .00224D_1^8 + .4750D_2 - .08269D_3^3]$
 $(.0186)$ $(.0133)$ $(.0168)$
 $= (1-.53840B)^{-1}(1-.65984B^{-12})a$
 $(.0617)$ $(.0565)$
 $\chi^2 = 31.0$ $df = 28$ S.E.E. .298 X 10^{-1} SAMPLE 61.1-78.12
to $(1-B)$ $(1-B^{-12})$ $1n$ $(r+1) = (1-.61654B + .21149B^2 - .41122B^2)a$
 $(.0887)$ $(.0885)$ $(.0757)$
 $\chi^2 = 31.0$ $df = 27$ S.E.E. .887 X 10^{-2} SAMPLE 68.10-78.12
to $(1-B)$ $(1-B^{-12})$ $1n$ $(r+1-v) = (1-.23795B - .51541B^{-12})a$
 $(.0841)$ $(.0891)$
 $\chi^2 = 21.4$ $df = 28$ S.E.E. .704 X 10^{-2} SAMPLE 68.10-78.12

a D_1 is a dummy for the period 1966.7 to 1966.12, D_2 is a dummy for the period 1968.12 to 1970.6 and D_3 is a dummy for the periods 1967.1-2 and 1970.7-8.

TABLE II REVISED COMPONENT MODELS

k	$(1-B)(1-B^3)(1-B^{12})$ lnk = $(17390B^3)(16243B^{12})$ a _t
	$\chi^2 = 36.4 \text{ df} = 28 \text{ S.E.E.} = .568 \times 10^{-2} \text{ SAMPLE } 59.1-79.12$
g	$(1-B)(1-B^{12})$ lng = $(14131B)(11349B^2)(16308B^{12})$ a _t $(.0658) (.0742) (.0545)$
	$\chi^2 = 34.2$ df = 27 S.E.E. = .200 SAMPLE 59.1-79.12
Z	$(13587B)(1-B)(1-B^{12})\ln z = (16899B^{12})a_t$ (.0626) $(.0997)\chi^2 = 35.3 df = 28 S.E.E. = .269 X 10-1 SAMPLE 59.1-79.12$
	X - 33.3 d1 = 20 S.E.E. = .269 X 10 SAMPLE 39.1-79.12
t*	$(1-B)(1-B^3)(1-B^{12})\ln t_1^* = (16741B^3)(15819B^{12})a_t$
	$\chi^2 = 32.6 \text{ df} = 28 \text{ S.E.E.} = .559 \text{ X } 10^{-2} \text{ SAMPLE } 59.1-79.12$
t* 2	$(1-B^{12})[(1-B)lnt_2^* + .0023D_1^a + .0474D_20828D_3]$
	$(.0183) (.0130) (.0165)$ $= (15367B)^{-1} (16595B^{12})a_{+}$
	(.0600) (.0546)
	χ^2 = 30.7 df = 28 S.E.E. = .293 X 10 ⁻¹ SAMPLE 61.1-79.12
r+1	$(1-B)(1-B^{12})\ln(r+1) = (16773B + .2459B^23695B^{12})a_t$
	(.0823) (.0833) (.0699)
	χ^2 = 35.3 df = 27 S.E.E. = .948 X 10 ⁻² SAMPLE 68.10-79.12
r+1-v	$(1-B)(1-B^{12})\ln(r+1-v) = (13140B5186B^{12})a_{t}$
	(.0735) (.0746)
	$\chi^2 = 28.7 \text{ df} = 28 \text{ S.E.E.} = .709 \text{ X } 10^{-2} \text{ SAMPLE } 68.10-79.12$

Component	Multiplier Elasticity	Log Error	Contributon to Multiplier Error	Percent Contribution
k	4345	0155	.0067	57.5
r+1	2972	0114	.0034	29.0
Ъ	.0100	1530	0015	-13.1
t i	1913	0120	.0023	19.7
t 2	0446	0003	.0000	.1
8	0174	3868	.0007	5.7
z	0040	0272	.0001	.9
Interaction	CC3 CF4	was ties		. 2
Multiplier Error	r (Log)		.0117	100.0

TABLE IV ${\rm M_{1-B}}\ {\rm Net\ Monetary\ Base\ Multipliers\ (NSA)}$ (Forecasts Based on Information Through Jan., 1981)

	Actual 1980	Predicted 1981	% Change
Jan.	2.60525	2.59104*	55
Feb.	2.58122	2.54276	-1.50
March	2.59039	2.53558	-2.14
April	2.59282	2.57954	51
May	2.49851	2.51635	.71 } .31
June	2.52663	2.54513	.73
July	2.53204	2.54872	.66
Aug.	2.54161	2.54344	.07 }03
Sept.	2.58006	2.55898	82
Oct.	2.59590	2.57206	92
Nov.	2.58203	2.55321	-1.12
Dec.	2.57252	2.56839	16

^{*} Actual

TABLE V $^{M}_{\mbox{1-B}} \mbox{ Adjusted Unborrowed Reserve Multipliers (NSA)}$ (Forecasts Based on Information Through Jan., 1981)

	Actual 1980	Predicted 1981	% Change
Jan.	9.73326	9.93159*	2.02
Feb.	10.04061	9.78341	-2.59
March	10.41966	9.86236	-5.50
April	10.31752	9.98570	-3.26
May	9.80923	9.81456	.05
June	9.88950	10.02668	1.38
July	9.88535	9.99408	1.09
Aug.	10.01651	10.02201	.05
Sept.	10.15917	10.05300	-1.05
Oct.	10.21154	10.04524	-1.64
Nov.	10.19004	9.99366	-1.94 > -1.00
Dec.	9.98201	10.04015	.58

^{*} Actual

ADDENDUM

Since we wrote our report for this meeting, we have found some independent information on the extent of deposit shifts in response to nationwide NOW accounts. On pages 39-40 of the Monetary Policy Report to Congress by Chairman Volcker on February 25, 1981, it is stated that survey evidence indicates that 75-80 percent of the shift to NOW accounts during January, 1981 has been from demand deposit accounts, and that it is estimated that 22 billion dollars of deposit shifts occurred during January. We have used this information to adjust our forecasts of the various multiplier components for January, 1981, based on the time series available through December, 1980, and found that the 1.1 percent error without adjustments is reduced to a -.09 percent error after the adjustments, and the tendency for all of the affected components to contribute to the net monetary base error in the same direction has been eliminated. The adjustments involve multiplying the forecasts for k, t_2^* , g, and z by .985 and multiplying the forecast for t_1^* , by .982. the technique is exactly that used for the ATS adjustment to the old M_1 models in early 1979.

The revised forecasts that are attached continue these adjustments throughout the entire year. Implicitly, we are accepting the Board's estimates of the January shifts, but assuming that no further shifts of any consequence will occur. This latter assumption is contrary to the current estimate of the Board staff, which believes that only about fifty percent of the ultimate shift has occurred by the end of January (Monetary Policy Report, p. 40). In our judgment, it is difficult to reconcile the very small increase in the differential between $\rm M_{1-A}$ and $\rm M_{1-B}$ over the last three weeks of February, with the view that substantial shifts are still occurring.

 ${
m M_{1-B}}$ - Net Monetary Base Multiplier (Adjusted for NOW Acct Shift)

	1980 <u>Actual</u>	1981 Predicted	% <u>Change</u>
Jan.	2.60525	. 2.59104*	55
Feb.	2.58122	2.57029	42
March	2.59039	2.56300	-1.06
April	2.59282	2.60759	.57
May	2.49851	2.54345	1.78
June	2.52663	2.57264	1.80
July	2.53204	2.57630	1.73
Aug.	2.54161	2.57092	1.15
Sept.	2.58006	2.58671	.26
Oct.	2.59590	2.59998	.16
Nov.	2.58203	2.58086	05 > .34
Dec.	2.57252	2.59619	.92

^{*} Actual

 M _{1-B} - Unborrowed Reserves Multiplier (Adjusted for NOW Acct Shift)

	1980 <u>Actual</u>	1981 <u>Predicted</u>	% Change
Jan.	9.73326	9.93159*	2.02
Feb.	10.04061	9.88715	-1.54
March	10.41966	9.96697	-4.44
April	10.31752	10.09172	-2.21
May	9.80923	9.91840	1.11
June	9.88950	10.13292	2.43
July	9.88535	10.09999	2.15
Aug.	10.01651	10.12814	1.11
Sept.	10.15917	10.15968	.01
Oct.	10.21154	10.15184	59
Nov.	10.19004	10.09947	89 > .05
Dec.	9.98201	10.14616	1.63

^{*} Actual

M₂ - Unborrowed Reserves Multiplier (Adjusted for NOW Acct Shifts)

	1980 <u>Actual</u>	1981 <u>Predicted</u>	% Change
Jan.	38.09347	38.74750*	1.70
Feb.	40.34063	40.29931	10
March	42.23680	40.85994	-3.31
April	42.15965	40.67608	-3.58
May	40.23717	40.82347	1.45
June	40.28285	41.44900	2.85
July	40.23775	41.12300	2.18
Aug.	40.75380	41.35373	1.46
Sept.	40.97350	41.36024	.94
Oct.	40.89798	41.09347	.48
Nov.	40.63575	40.62513	03 > .88
Dec.	39.63461	40.51699	2.20

^{*} Actual

M₃ - Unborrowed Reserves Multiplier (Adjusted for NOW Acct Shifts)

	1980 <u>Actual</u>	1981 Predicted	% Change
Jan.	44.37923	45.60774*	2.73
Feb.	47.09813	47.60599	1.07
March	49.29623	48.29710	-2.05
April	49.17904	48.05028	-2.32
May	46.96313	48.34496	2.90
June	46.77616	48.92388	4.49
July	46.52458	48.51382	4.19
Aug.	47.18387	48.95890	3.69
Sept.	47.46021	49.02134	3.24
Oct.	47.46871	48.80870	2.78
Nov.	47.37869	48.42584	2.19 > 3.04
Dec.	46.45021	48.41305	4.14

^{*} Actual

Policymaking, Accountability, and the Social Responsibility of the Fed

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PPS-81-5

Statement prepared for the March 15-16, 1981 meeting of the Shadow Open Market Committee.

I. The Mismangement of Our Monetary Affairs

The Federal Reserve Act of 1914 provided the legal basis for the existence and operation of our Central Bank. A variety of political interests and economic hopes contributed to the ultimate establishment of a Federal Authority manipulating the supply of base money. The seasonal variations in interest rates associated with seasonal shifts in credit demand and currency transactions strongly motivated among other reasons the political thrust toward a Central Bank. There were also expectations that the financial crises intermittently experienced in the 19'th century and again in 1907 could be more effectively alleviated or even avoided once an "elastic currency supply" was assured by the Central Bank.

The operation of the new Central Bank certainly benefitted important groups in the economy. The U.S. Government was not the least in these groups. The Federal Reserve System conveniently attended to the Treasury's borrowing requirements imposed by the first world war. These allocative concerns and aspects bearing on wealth redistribution with the aid of arrangements imposing implicit taxes or offering hidden subsidies dominated the political market's attitude toward the Central Bank. These same aspects also competed over the decades to this day for the attention of our monetary authorities. This pattern is clearly revealed by the seriously mislabelled "Depository Institution De-Regulation and Monetary Control Act of 1980". It would hardly be justified however to argue that our Central Bank exhibited no concern or interest in the broad performance of the U.S. economy. The attention to the range of issues confronting the Central Bank remains nevertheless conditioned by the relative importance of these issues for the potential clientele or constituency of a Central Bank. We note in this context that stabilization policies rank comparatively low among the interests of the clientele compared to the potential gains to be expected from allocative arrangements frequently pursued under the guise of a monetary policy. But the behavior of Central Banks unavoidably produces consequences for the aggregate performance of the economy. Whatever they do and for whatever reason it is done, their behavior affects the course of our affairs. The Federal Reserve System may not have initiated the economic decline in the summer of 1929, but it certainly is responsible for the massive depression lasting over four years. This experience motivated the passage by Congress of the Employment Act of 1946. It was designed to direct the policymakers' attention more explicitly to the broad performance of the economy. There ensued a phase of comparative stability in the 1950's and early 1960's. But the rising emphasis on economic stabilization and the activist use of financial policies in order to guide the path of the economy did not prevent, and probably even encouraged, the drift into permanent inflation prevailing over the past fifteen years.

Our experiences reveal that Central Banks are potent institutions with a remarkable power to influence our affairs. Their behavior casts a broad shadow on oursocial fate, as the political consequences of the Great Depression sadly indicate. Our experience also informs us that prevailing political arrangements thoroughly failed to "tame the Central Banks". There exists no accountability procedure forcefully directing the monetary policymakers' attention to the global consequences of their decision. This state does not preclude occurrences of comparatively stable episodes. But we have little grounds to rely on such observations. The conceptions and policymaking procedures shattering the social and political world with the Great Depression also destroyed the international monetary system planned in Bretton Woods for the postwar period. They also created the uncertain drift of an erratic and permanent inflation. This history should convince us that it is time for a change. We need some basic changes in the policymaking institutions controlling our monetary affairs. The subsequent sections discuss the nature of this problem confronting us.

II. Monetary Policymaking: The Issue

1. Discretion, Judgment and Activism

Two major and connected strands of thought shaped the Central Banks' traditional approach to policymaking. They also influenced academia's discussions abut monetary policymaking. One strand emphasized monetary policymaking as an exercise in "judgment". This judgment encompasses all the relevant information characterizing the state of economic affairs. Careful judgment brought to bear on all this information will guide the Central Bank's behavior in the best interests of the public. This vision of policymaking determines some of the inherited arrangements, in particular the emphasis on policymaking bodies with a substantial number of members with diverse interests and backgrounds. It is also argued that the judgment emerging from a well-informed policy body will produce over time the best performance we can reasonably achieve in human affairs. Intelligent and honorable men appointed to responsible positions can certainly be relied upon, so we are told, to produce the best policies under whatever circumstances may prevail. Their continuous assessment and judicious evaluation of ongoing developments provides the necessary flexibility to modify and adjust policies to new circumstances. Such adjustments resulting from the policymakers judgment about a state of affairs assures us that policy tends to absorb and smooth the shocks continuously imposed on our economy.

The effective use of judgment requires moreover that the Central Bank authorities be granted a wide range of discretion. This use of <u>discretionary</u> judgment seems, according to the view of many policymakers and their advisers, an essential strand of successful stabilization policies. A policy of discretionary judgment is moreover committed to an activist approach in policymaking. It is systematically associated with a conviction that an activist intervention and manipulation of policy instruments forms a necessary condition in order to produce an acceptable performance of the economy. The discretionary use of judicious and balanced judgment would provide the basis for activist policymaking.

The case for discretionary judgment and activist policymaking may sound quite appealing. Its pervasive plausibility is however only supported by general impressions and vague allusions. It creates an impression of judicious knowledge about the economy which simply does not exist. Two kinds of information need be distinguished among the inputs in judgmental policymaking. One type of information refers to the array of facts characterizing a given state of the economy. Such information bears on production, employment, orders, inventories, prices, wages, trade balance, interest rates, loans, etc. There are good grounds to believe and we can hardly doubt that our monetary authorities perform this particular information task exceedingly well. The problem with a policy procedure expressed by discretionary judgment lies not on this information level. An evaluation of policies and specific decisions requires however beyond the information about some major facts also knowledge about an economy's mode of working expressed by its detailed response structure. Such knowledge could indeed guide policymakers' judgment with the rational expectation that discretionary judgment will effectively stabilize the economy. Such detailed knowledge of the economy's mode of functioning forms a necessary and sufficient condition for the successful execution of activist policy procedures anchored with a policy body's discretionary judgment.

The facts bearing on the state of our reliable knowledge are however quite clear in this respect and can hardly be disputed. We do not reliably possess the detailed knowledge of the economy's response structure needed to rationally justify an activist approach to policymaking. Whatever judgment will be exercised in the context of the diffuse uncertainty about our economy's detailed responses cannot be rationally based on highly corroborated and generally acknowledged knowledge. But an activist procedure supported by such discretionary judgment cannot offer any assurances of effective stabilization. Activist policies pursued on the basis of a misconceived response structure convert the intention of stabilization into a destabilized reality. Discretionary judgment exercised in the context of our prevailing and diffuse

uncertainty bearing on the economy's detailed mode of operation may occasionally produce episodes with a satisfying performance. We have no grounds however to expect such performance with any sense of reliability. Activist policymaking against a background of uncertain and possibly illusory knowledge is liable to destabilize the economy. Discretionary judgment forms thus a policy making pattern involving serious risks of deflation, inflation and erratic movements over a longer horizon.

The case for an activist judgment in policymaking is frequently supported with comments elaborating how such policymaking could usefully adjust the Central Bank's behavior to the prevailing circumstances. All these arguments rest however, without any exception, on the more or less implicit assumption of full and reliable knowledge of the economy's dynamic structure. With such knowledge actually available, activist policymaking could have a serious chance of success. But we do not possess such knowledge whatever the advocates of activism seem to argue. This is actually confirmed, beyond the observable state of our research efforts, by arguments typically adduced on behalf of a discretionary activism. We read occasionally that a variety of crucial relations or magnitudes (some velocity measure for instance) are highly unpredictable and move quite erratically. The occurrence of such "loose ends" in the economic process apparently precludes a non-activist strategy. The latter seems to require, so the argument suggests, that no essential loose ends roam around the economic scene. Their occurrence requires the flexible procedures of an activist judgment. This whole argument is unfortunately thoroughly impressionistic and confused. The "loose ends" noted to some extent essentially reflect the core of the information problem emphasized above. A detailed analysis of this information problem demonstrates that the "loose ends" adduced by advocates of activist policymaking lower the likelihood of success for their strategies and raise the social significance of a non-activist strategy. Some further probing into the argument typically advanced by advocates of discretionary activism typically yields the following result: we are basically told that there can be visualized, conceived or formulated dynamic structures which produce in the average a better performance under some specific activist regime than under a non-activist regime. This proposition is correct and most acceptable. But it is naive and inadmissible to derive from it any positive proposal about activist policymaking in our world. It states an intellectual exercise with no significance for relevant policymaking. And most particularly it offers no rational justification for activist procedures in the context of our knowledge situation. Lastly, we do have the accumulated experience of the past decades. Discretion and judgment produced the social failure of the Great Depression and unleashed the social and political problems fostered by a permanent and erratic

inflation. We conclude thus that there is no analytic case for activist discretionary judgment as the anchor of our policymaking. This conclusion is strengthened by the sad experience accumulated under this policy pattern. There is no reason indeed to continue this history.

2. Alternative Strategies

The exercise of judicious judgment drawing on all available information offers per se no strategic conception. Two alternative strategies dominate the discussion about monetary policymaking. One is geared to the manipulation of some interest rates and the other is addressed to the control of monetary growth. Either procedure can be applied in the context of discretionary activism or be used as instruments of a non-activist strategy. This section traces some issues associated with the two alternative modes of executing monetary policy.

a) Interest Targeting Policy

Central Banks showed traditionally great concern about the behavior of interest rates and exhibit a pronounced preference to use interest rates as an instrument or guideline of policy. This preference was hardly justified on rational grounds and little, if any, economic analysis was invoked. The fading of the Fed's old free reserve conception in the second half of the 1960's and the Fed's move to a Keynesian framework yielded an explicit argument supporting an interest targeting approach frequently used in recent years. An analysis proceeding within a standard Keynesian framework determines that the rational choice of an interest targeting approach depends on the relative magnitude of the disturbances operating on the "money market" expressing the interaction between money demand and money stock. Interest targeting policies dominate monetary targeting policies provided the variability of disturbances affecting the money market is sufficiently large relative to the variability of the disturbances operating on the output market. The Fed seems to suggest on many occasions that money market variability actually exceeds the corresponding output market variability. This justification of interest targeting is however not supported by any evidence. Several pieces of work pursued within and beyond the Federal Reserve System established the greater importance of output market variability. We also note that the standard observations about the business cycle, in particular the co-movement of interest rates, are difficult to reconcile with the assertion of dominant money market disturbances. Most econometric models, whatever their worth, require the driving force of exogeneous variables directly operating on the output market in order to trace movements similar to a business cycle.

The structure of prevalent shocks operating on an economy is moreover not invariant with respect to interest targeting policies. Agents operating all over the economy will know under the circumstances that all shocks, whatever their origin may be and wherever their immediate impact could occur, will be fully accommodated by the monetary authorities. They will know in particular that all price increasing events will be "validated" by a matching monetary expansion. This knowledge tends to produce incentives encouraging price increasing shocks operating most particularly on the supply side of output or labor markets. The expectation of validating monetary expansion offers opportunities to extract real wealth by anticipatory price or wage increases engineered by major supply monopolists at the cost of all others. Persistent accommodation eventually accelerates all agents learning about its implication. The monetary authorities thus encourage with this procedure a gradually accelerating inflation. They may delay and slow down the resulting acceleration by lowering the likelihood of accommodation. But this uncertainty bearing on degree and timing of accommodation unavoidably contributes to raise the output market disturbances and lowers the economy's performance under the circumstances.

b) Monetary Control Policy

i. Interest Targeting as a Tactical Means of Monetary Control

Monetary control rarely appeared as the favored choice of monetary authorities. Interest targeting fitted more conveniently the interests of their constituency and corresponded more closely to a traditional conception shaped by banking experiences. Monetary control can be executed by two radically different modes. One procedure uses interest targeting as a tactical means in the context of a monetary control strategy. The Federal Reserve's procedure developed over the past six years (or possibly more) exemplifies this case. The procedure was based on an estimated money demand function linking the money stock M_t with the federal funds rate ffr and the value of nominal GNP. We can thus write

$$M_{+} = \lambda \text{ (ffr}_{+}, GNP_{+}, u)$$

With GNP predetermined by prior evolution and accordingly predicted, $M_t + M_{t-1} + \Delta M_t$ with M_{t-1} determined by history, one obtains a relation between the federal funds rate and monetary growth ΔM_t modified by an ongoing disturbance u. Having chosen a target growth for money the relation is used to specify the target level of the federal funds rate which will produce, in the average, the desired monetary growth. The accumulated record of this tactical procedure yields indeed little recommendation for it. Some recent investigations of its performance record establish that the low quality of monetary control cannot be attributed to forecast error of GNP anchoring the relation between the federal funds rate and monetary growth. The problem lies

essentially with the whole procedure centering on a shifting and unreliable relation. The frequent disregard by the Federal Open Market Committee of the staff's preparatory groundwork based on the framework summarized above reveals the policymakers' doubts about the relevance of the postulated relation. This persistent exercise in discretionary judgment reenforces the dubious connection between the instrument ffr and monetary growth. The procedure provides moreover temptations to backslide into an interest targeting with little substantial attention to monetary evolution. Mark Rush demonstrated recently that over most of the monetary targeting period initiated in early 1975 the Federal Reserve successfully realized the federal funds target over the "planning period" but thoroughly failed in terms of monetary targeting.

ii. Reserve Targeting as a Tactical Means of Monetary Control

An alternative tactical approach discards the approach centered on money demand. It addresses the control over monetary growth with the manipulation of a reserve magnitude. The Shadow Open Market Committee proposed for many years that the Federal Reserve Authorities use the monetary base to hold monetary growth along a target path. We note that the monetary base is immediately and effectively controllable by the Fed. This controllability is assured by the manipulation of the Fed's asset or non-monetary liability position. The work undertaken over the past years by James Johannes and Robert Rasche shows moreover that the link between the monetary base and the money stock constituted by the monetary multiplier is sufficiently reliable and predictable for purposes of monetary control exercised over one or two quarters.

Some research undertaken by the staff of the Board of Governors bearing on monetary control via targeting some reserve magnitude confirms the basic result obtained by Johannes-Rasche. The Board's staff explored the implications for monetary control of targeting non-borrowed reserves, total reserves and the monetary base. The resulting patterns were examined in the context of some specific econometric models developed and used in the Federal Reserve System. These results confirmed that reserve targeting offers an effective opportunity to control the money stock over one or two quarters within a useful tolerance level. This tolerance level is actually quite small relative to the magnitude of the problem inherited at the moment. The work emanating from members of the Shadow thus supports the Board staff's finding that monetary control exercised within one year and within useful limits is technically feasible and within our pragmatic reach. These results are particularly interesting as the Fed's models were geared to a world reflecting the response patterns produced by an interest targeting policy.

In spite of all the evidence to the contrary pervasive objections to the possibility or desirability of monetary control still persist. The possibility is challenged by a variety of arguments totally unaware of the accumulated research or unfamiliar with elementary economic analysis. Corresponding impressions suitable for the media market would assert that nobody can live on the other side of the earth, that the earth is flat or that the sun keeps turning around the earth. One argument insistently propagated among financial analysts maintains that credit and money are the same. This removes, so we are told, all possibility of monetary control. It is remarkable however that any peasant around the world would have little difficulty to distinguish between money (i.e. an item generally used to settle transactions and debts) We also note that even financial analysts expressing difficulties to recognize any differences behave very differently with respect to the two items on their balance sheet. We do know with sufficient precision what items constitute money and our measurements can be developed with sufficient accuracy for purposes of a non-inflationary monetary control.

The professed uncertainty about money and its shifting substitution relations is frequently couched in terms of an irregular and erratic velocity behavior drifting loosely around the monetary scenery. The recent emphasis on financial innovations and unpredictably shifting money demand was supposed to erode the opportunities for monetary control. An examination of the behavior observed over the postwar period of the base velocity (i.e. V_o) should be instructive in this respect. Table I describes the mean and standard deviation of the quarterly percentage changes of V over half cycles. We note the comparatively large means and standard deviation in the 1950's. Both mean and standard deviation dropped in the subsequent decades below the vlaues exhibited in the 50's. The mean settled along 2.4% during the 60's, fell to 2% in the early 70's and rose back to 2.5% in the latter 70's. The standard deviation on the other hand reached a minimum of 2.7% in the 60's and rose subsequently to 3.9% in the late 70's. An inspection of the figures also shows that the coefficient of variation (i.e. the ratio of standard deviation to mean) is much larger for recession periods than for upswing periods. The behavior of the coefficient of variation over upswing phases is noteworthy for our purposes. It averaged slightly below 1 over the 50's and 60's and moved in a range from .66 to 1.15. The 70's in contrast exhibit a 50% increase in this coefficient to about 1.5%. The variability of changes in velocity relative to the mean thus increased substantially in the last decade compared to prior portions of the postwar period. This behavior of mean and standard deviation seems to be consistent with the occurrence of major real shocks in the 70's absent in the 50's or 60's, but is not consistent with the emphasis on the relative role of financial innovation. The real shocks are dominantly caught by the variability measure whereas the impact of financial innovations would be reflected by the mean. Such innovations have raised the mean from 2% to 2.5% in the later 70's. But this magnitude remains well within the range of past experience, including episodes withsubstantial stability of financial markets.

One more objection to monetary control frequently voiced, most particularly within the Federal Reserve System, refers to an alleged volatility of interest rates produced by a policy of monetary control. An interest targeting policy implies that monetary growth becomes a function of all the shocks operating over the economy. The behavior of these shocks determines the pattern of monetary growth with its consequences on the economy. The variability of short rates may under the circumstances be effectively lowered over a very short horizon by such a policy. The monetary accommodation with its inflationary bias and uncertain drift triggers however a feedback acknowledged in principle by the Fed in recent speeches by the Chairman but usually disregarded in this context. It raises over time the whole structure of nominal interest rates in the manner experienced over the past sixteen years. The uncertain drift built into policy by this strategy, notably indexed in terms of the rising demand for "Federal Reserve watchers" by the financial industry, conditions moreover the volatility observed in recent years. The very procedure designed to lower shortest horizon volatility of interest rates produces the massive volatility increasingly experienced by our financial markets.

TABLE I

Mean and Standard Deviation of Quarterly %

Changes in Base Velocity V.

<u>Period</u>	Mean	Standard Deviation
II/50-II/53	6.7922	7.8101
II/53-II/54	-2.0464	3.0135
П/54-Ш/57	5.3392	3.5249
III/57-II/58	-2.0393	5.3204
II/58-I/60	5.5563	5.7163
I/60-I/61	1.0473	5.8351
I/61-IV/69	2.4425	2.6659
IV/69-IV/70	-1.3322	2.2252
IV/70-III/74	2.0063	3.3873
III/74-I/75	-1.9424	5.8849
I/75-IV/80	2.4719	3.9088

Under a policy of monetary control ongoing shocks are unavoidably absorbed and reflected by interest rates. This will indeed produce some volatility. But the nature of this volatility need be more carefully examined. Transitory shocks will be reflected by a volatile pattern of shortest and short rates with little, if any, spillover to intermediate or long term rates. Permanent shocks also affect interest rates and contribute to generate movements over the whole term structure. The crucial condition requiring our attention at this point is the fact that these movements in interest rates generated by permanent shocks operating beyond the money market cannot be removed by an interest target policy. The latter converts these shocks into permanent accelerations of money (or decelerations) via monetary accommodation into corresponding accelerations (or decelerations) in the price-level and matching adjustments in the level of nominal interest rates. The uncertainty about the timing and magnitide of monetary accommodation, augmented by the uncertainty of a change in policy, tends however to produce a larger volatility of interest rates in response to permanent shocks under an interest targeting regime than under a regime of monetary control. The social cost of volatile short rates reflecting ongoing transitory shocks seems in my judgment small compared to the social cost imposed on the economy by the alternative policy.

The Shadow Open Market Committee stressed over many years that an invocation of monetary control is not a sufficient condition of success. The detail of institutional arrangements influence the degree of controllability exercised by the monetary authorities. Controllability can frequently be improved by suitable changes in prevailing institutions. Our work and the research developed by the Board's staff demonstrates that the dependence of required reserves on lagged deposits and the operation of the discount window unnecessarily lower somewhat the controllability of monetary growth. The Federal Reserve Authorities should certainly be aware of this fact. The necessary change is within their power and jurisdiction. Banks operated quite successfully over many decades without lagged reserve requirements; they could also adjust quite easily to a different operation of the discount mechanism. The refusal by the Federal Reserve Authorities, at least to this point in time, to initiate the required adjustments contributes to the doubt and reservations about their intentions and professed commitments.

We may also note in this context the emergence of the "Depository Institution De-Regulation and Monetary Control Act of 1980". This act hardly simplifies the regulatory structure still imposed for a number of years on the financial industry. It appears dominantly to shift the nature of the regulation around and involves, thus, once more, new patterns of wealth redistribution. More immediately important for our

purposes here is the second portion. The act substantially modifies the reserve arrangements in the financial industry. The Fed successfully managed with this act to stop the erosion of its political clientele produced by inflationary increases in nominal interest rates and comparatively high reserve requirements. This political problem-was solved by extending reserve requirements controlled by the Fed to all institutions supplying transaction accounts. This extension of a complicated arrangement hardly improves the controllability of monetary growth. There is moreover no evidence that the decline of the Fed's clientele (membership) actually lowered the degree of monetary control. This problem was discussed in some detail in previous position papers. This act offers a useful illustration of how the political market manages to disregard the intent of the legislation addressed with so much moral fervor toward others. "Truth in packaging" suggests that we speak about a "Depository Institution Re-Regulation and (non-Monetary) Control Act". But truth in packaging apparently offers few sales advantages on the political market.

III. The Social Responsibility of the Monetary Authorities

The long shadow cast by the Fed over our social fate poses a serious problem and raises a searching question. We seem to be helplessly exposed to the consequences imposed on us by the Fed. Congress and elected officials submit in regular intervals to the citizens' verdict. The Fed is still, at this stage, beyond any effective feedback providing a measure of accountability for its actions and procedures. The social responsibility of this potent agency still remains an unsettled and serious problem. Three aspects associated with this problem will be considered in the last three sections of my paper.

1. What Is the Fed Now Doing?

On October 6, 1979 Chairman Volcker announced a shift in policy procedures. The announcement stated that the Fed will shift its relative attention somewhat in favor of monetary aggregates. The meaning was not clear and subsequent elaborations by various officials hardly contributed to clarify the intent of the announcement. The observations bearing on volatile interest rates and monetary growth made in 1980 reenforce the inherited uncertainty about the Fed's policies and policymaking. We were told on the one side that not only did the monetary authorities address their efforts to the control of monetary growth, but also shifted their tactical procedure to the manipulation of non-borrowed reserves. But we were also informed that the rapid decline in interest rates over the earlier portions of last year was an error current policy should (or will) not repeat. Other statements still assign some role to interest rates in the Federal Reserve Authorities' tactical scheme. It is difficult indeed to

infer from observable clues what they really do, but I submit the following conjecture as an interpretation reconciling their statements and actions. Their tactical procedure may be summarized by the following schema:

non-borrowed reserves → federal funds rate → money demand → money demand

This means that the traditional technique anchored with a money demand relation discussed above continues to form the centerpiece of their tactical approach. The addition of a first step offers an opportunity to maintain that "things have changed". But the manipulation of non-borrowed reserves is addressed to influence the federal funds rate. When monetary growth exceeds its target path non-borrowed reserves are comparatively lowered to raise the federal funds rate, lower money demand in the future and lower correspondingly the money stock (and monetary growth). This manipulation induces unavoidably partly offsetting changes in bank borrowing lowering the responses of total reserves to given changes in non-borrowed reserves. But the lagged reaction of money demand to the movements in the federal funds rate implies that the induced borrowing only affects the speed of approaching the monetary goal.

This procedure can hardly satisfy our demand for an effective monetary control. It suffers under two major flaws. The survival of the accustomed practice ensures the persistence of the control problem produced by it and so amply observed over the past. This problem is augmented by the relation between non-borrowed reserves, the federal funds rate and induced bank borrowing. The "new tactic" seems hardly designed to improve the Fed's performance substantially beyond the sad experiences of the last fifteen years.

A number of statements made moreover by members of the FOMC add to the confusion about the Fed's tactical procedure and conception. Chairman Volcker resurrected the Strong-Riefler-Burgess vision of the money supply process. Chairman voiced in the tradition of the 1920's and 1930's that bank borrowing exerts a restrictive effect on banks' asset acquisition and interest setting due to their "inherent reluctance" to borrow from the Fed. It is remarkable to note this resurgence of an ancient fallacy, obviously still surviving in the corridors and closets of the Federal Reserve Palace. The fact still remains, today as always and everywhere, that an increase in the monetary base is expansionary whatever the source of its increase. This "reluctance theory of bank borrowing" is however not a necessary component of the interpretation guiding the "new" tactical procedure. It can be attached in order to add an additional connection from rising (falling) bank borrowing to lowered (raised) monetary growth. The old free reserve doctrine could thus be allied to the "new technique". The manipulation of non-borrowed reserves is expected to produce a positive relation over time (with some lag due to money demand responses) between

free reserves and monetary growth. This weird combination of ideas hardly contributes to raise our confidence about the future behavior of the monetary authorities.

2. The Credibility of the Federal Reserve Authorities

The very question raised in the previous paragraph expressing our uncertainty reflects a central problem confronting the Federal Reserve Authorities. Its credibility reached a very low level indeed. Repeated promises to follow anti-inflationary policies were broken with remarkable regularity. The performance observed last year eroded credibility even further and deepened the prevailing uncertainty. The market for longer term instruments mirrors this state in the most explicit manner. It is difficult to assign much credibility to the Fed at this stage when we note that actions within the power of the authorities addressed to raise an effective monetary control procedure are neglected or disregarded. There is no determined move to change the reserve arrangements or the discount operation. There is no clear commitment to a long-run monetary control program anchored with a control over the monetary base or, as a second best, with control over some reserve magnitude not involving money demand or interest rates at any step of the procedure. Once such a commitment has been explicitly formulated and announced secrecy in policymaking is moreover redundant. The tradition of this secrecy follows unavoidably from a policy centered on discretionary judgment and addressed to the manipualtion of interest rates. Information about discretionary decisions pursued in such contexts offers indeed profitable opportunities for transactions on creditmarkets. But a strategy of monetary control, effectively and believably executed, removes this problem.

Doubts about the Federal Reserve's intentions and behavior are also fostered by the recent Hearings held by the Senate Banking Committee. In response to probing questions by Senator Hines and Senator Proxmire Chairman Volcker's answers were essentially evasive and vague. A listener received little assurance that a new game has or will really be initiated. This sense was reenforced by a peculiarity in the announcement of the new monetary target. One set was formulated for M-1B and another one for M-1B adjusted (for switching into new NOW accounts). The upper boundary of the target imposed on the first magnitude was actually raised relative to the prior state. The crucial point bears however on the fact that we possess no information about the nature of the computation made to reach M-1B adjusted. One wonders whether it is assumed that the deposits switching to M-1B lower its velocity and raise the velocity of M-1B adjusted. An unknown mixture of the two magnitudes would offer under the circumstances the best guide. But the unexplained adjustment in data proceeding in the context of an uncertain tactical arrangement addressed to a

shaky strategy does not raise the confidence the Fed requires in order to support effectively the Reagan Administration's program.

The Federal Reserve's position has been defended on occasion by simply denying either occurrence or relevance of the credibility problem. Its occurrence is however clearly revealed by the behavior of financial markets and the lucrative business of Federal Reserve watching. Federal Reserve officials are prone to emphasize that the quarterly variability of monetary growth is less in the USA than, say, in Switzerland. But this variability occurs in Switzerland against a background of firm expectations that the Swiss Monetary Authorities are committed to a non-inflationary course. The market thus essentially disregards quarterly deviations. The market even disregarded the substantial lapse from monetary control initiated in the fall of 1978 in response to the dollar's decline on the currency markets. But the market's expectation was confirmed. After less than six months monetary control was restored. There are no such expectations in the USA. Under the prevailing uncertainty agents will anxiously search out and interpret every wiggle and jiggle in the Fed's behavior and monetary events. The role of any given or observed short-run variability in monetary growth thus depends on the nature and credibility of a Central Bank's regime.

But let us consider the relevance of credibility. The lag in responses of price and wage setters to changes in the monetary regime is not fixed once and for all by the gods. It depends very much on price-wage setters assessment of the new information. A change in policy deemed to be essentially a short and transitory deviation from an ongoing inflationary trend hardly induces any modification of prevalent price-wage setting trends. A change in regime believably accepted by agents operating on the markets will induce on the other hand rapid adjustments in price-wage setting according to the agent's own longer-run interests. It follows that initiation of an antiinflationary policy in a context of low credibility lengthens the lag of price-wage responses and raises the social cost of an anti-inflationary policy. The credibility level assigned by the market to the Federal Reserve Authorities thus substantially influences the social cost of President Reagan's anti-inflation program. Our monetary authorities will probably adjust to the general economic plan, and particularly to the anti-inflationary program, presented by the Administration. We cannot be certain But the Fed can still obstruct the Administration by an uncertain and hesitant delivery produced by a slightly modified traditional game. This uncertain delivery will not improve the credibility level. It implies under the circumstances a more protracted inflation and a larger social cost associated with the Administration's program. Thus can the Fed's behavior and established institutional interest obstruct the President's intention to lead the nation out of an inflationary past at a minimal social cost.

3. An Accountability for Our Monetary Authorities

Much weight is occasionally attached to the presumed independence of the Federal Reserve System. We also hear voices raised in defense of the Fed's "institutional integrity". But the fact of this "integrity" means that we must suffer any consequences produced by the Federal Reserve Authorities. We must suffer Great Depressions and permanent inflations without recourse or accountability. But it is time for a change, and a change NOW. the following proposal is advanced, based on discussions with Allan H. Meltzer, in order to focus the issue for some further examination:

- a) The Federal Reserve Authorities are obliged to select a benchmark level of desired monetary growth. This benchmark level is determined in accordance with the Fed's preferred pattern of price-level movement.
- b) The Fed develops rules for determining necessary changes in the longer-run benchmark level. These rules must be publicly known and assessable.
- c) The Fed is obliged to institute an effective monetary control procedure with an acceptable tolerance level. The Fed will attend to initiate the institutional changes and measurement procedures assuring a small tolerance level.
- d) Members of the FOMC will submit to the President their resignation at the end of any year showing deviation in monetary growth (or the money stock) beyond the accepted tolerance level.
- e) The President may refuse the resignation upon receipt of an explanation about events. The acceptance of the resignation involves appointment of a new team.

I hope that this proposal may draw attention to the inadequate accountability of a powerful agency affecting our welfare in many detailed ways. The problem may be resolved, possibly by other arrangements or devices. But we certainly should not accept the old policy game with its high cost for the citizens of this country.