REVIEW: MONEY, CREDIT AND FEDERAL RESERVE POLICY CHANGES

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INTRODUCTION

This paper does extend actuarial horizons beyond the trade ratio and other devices related to the underwriting portion of our business. In an inflationary environment the financial and investment potentials and pitfalls become more and more dominant.

The paper is interesting and well worth thought and study. It should encourage dusting off the Money and Banking textbooks and reviewing the monetary data published in the Wall Street Journal and other financial media.

The main stated concern of the paper is "Federal Reserve Policy and its success in succeeding to curb or stop price inflation." It is now evident that other things and other people play important roles in the inflation problem. The Fed cannot cause the rains to come or cause OPEC to reduce oil prices.

Attachment 1. provides some additional perspective as to the Fed role concerning money supply and interest rates. Interest rates do influence both the supply and demand side of the "price equation."

The review will not attempt to evaluate the author's excellent presentation of monetary formulas and historical data. Some discussion as to the makeup of the Fed Open Market Committee would have been of interest. What kind of people are these who make the "gut" decisions?

The review will attempt to pick up questions and issues raised in the paper and discuss them a bit in terms of current numbers and the current economic situation.

THE PRESENT INFLATIONARY SITUATION

The author refers to high inflation wiping out the liquid assets of the middle classes. The present inflationary environment differs from past extreme cases because it is gradual, persistent and forever.

The key words in the present situation appear to be "pass through." Individuals and companies that can pass through the inflationary cost increases do as well or better than before while others (e.g. autos, housing and big ticket consumer items businesses) really suffer.

The professional middle class segment (doctors, lawyers, accountants, actuaries and consultants) appear to thrive on the "pass through" process. The "borrow short - lend long" companies are the ones really nailed to the wall in this tight money ordeal.

The key "pass through" words might be: demand inelasticity, price regulation, competition, monopoly, flexibility and indexing.

INFLATION AND INSURANCE

The author mentions but does not analyze the effects of inflation rates on life insurance. Benefits on a life insurance policy are fixed so there is no problem of inflation increasing benefits. Policy loans were a major problem during the first half of 1980; policyholders could borrow on their policies at 5-8% and reinvestment at 12-15%. Long term bond values dropped drastically; however, some offset would be provided through reduced real valuation of the policy reserve liability.

Attachment 2 illustrates the extreme policy loan pressure during the tight money stretch of early 1980.

Life insurance investment strategy is now changing. The ordinary long term bonds are being replaced with debt instruments with shorter maturities, equity kickers, negotiable rates and "put" provisions. Large companies are giving serious consideration to using interest rate futures to hedge bond portfolios.

Projection of inflationary costs into casualty ratemaking should be manageable in the present environment.

Percent Change from Corresponding Month of Prior Year

	Dec. 1979	Nov. 1980
Wages, Salaries	10.0%	8.9%
CPI	13.3	12.4 (Dec.)
Auto Maint. & Repairs	10.2	11.0
Medical Care	10.1	10.7
Hospital Room	11.1	14.5
Other Hosp. Services	11.3	15.5

Source: Salomon Bros.

Hospital cost rate of increases have stabilized in the last few months. Inflated gasoline prices have tended to reduce auto claim frequency. Increased wage levels help lines with a wage-salary exposure base. Property value increases raise the exposure base for property coverages.

The author was concerned that the long tail lines writers would suffer in the present inflationary environment. There are two sides to this. The ultimate value of the claim should represent a Federal tax deduction for the current or occurred year. The yield on long term corporate bonds now exceeds 14% which should parallel the inflation rate being recognized in the reserving procedure. Untaxed loss reserve increases

represent a major ingredient in investment income growth.

The author mentions the problem of the big spread between amortized or carrying value of bonds and market value. Market vs. amortized values for bonds is a "big ticket" item. The 10K Report to the SEC requires a "fair market" aggregate value to be reported but not included in the statement.

In statutory accounting Schedule D, Part 1A gives a "crude" distribution of bond values by maturity. If market value for bonds is introduced into statutory accounting it is likely that pressure for discounting loss reserves would arise; this could change materially the amount of Federal taxable income. Bonds at market certainly would cool the present competitive environment.

From a casualty company management standpoint a strong inflationary environment will shift emphasis from the underwriting side to the investment side. Market volatility cannot be ignored for long and professional money management as well as in house investment strength comparable with underwriting strength may become the order of the day.

Stock investors bet money on their convictions as to the future course of events. Attachment 3 illustrates how investors bet on the insurance outlook in inflationary 1980. There were some winners and some losers but overall the performance was mediocre. The inflationary high investment returns caused an intense competitive situation particularly in commercial lines; the change in the investment vs. underwriting numbers array probably confused both analysts and investors. 1981 "bottom line" projections are relatively flat.

The spread between market and carrying value of bonds likely is the most significant market depressant. This spread will vary materially among companies because of differences in maturity distributions. The spread is well recognized and discounted in the market. Recently Travelers stock has been selling at 63% of GAAP book value and Continental Corp. at 65% of book. Good buys?

MONETARY DEFINITIONS

The author defines and explains the various definitions of money supply. Attachment 4 elaborates on the paper's presentation with particular emphasis on the present state of confusion and frustration in trying to interpret current data.

In a January 15, 1981 Drexel Burnham Lambert report "Money and Capital Market Developments - 1" the author Patrick Savin argues that the number to watch is "non borrowed bank reserves" rather than various classes of money supply. This number gives direct response to Fed open market operations.

Interpretation of monetary data is frustrating and confusing; perhaps the WSJ article will help relieve the pain. Actuaries have their own occupational frustrations.

OCTOBER 1979 - NEW BEGINNING OR DISASTER?

Over a year has elapsed since the Fed October 1979 action described by the author was effected. Dramatic happenings followed.

The Fed policy change to regulate the money supply instead of the Federal Funds rate opened the curtain on a period of unbelievable volatility in financial markets.

The Dow Jones Industrial Average dropped 100 points between October 5 and November 7, 1979.

In March we had "Bunky Hunt Thursday" to add to the financial markets instability. Recession anticipation became a dominant factor. Credit controls didn't work.

Attachment 5 illustrates the extent to which the Fed permitted the money supply to build up between April and November 1980. This either diminished or delayed the anticipated recession but caused violent volatility in the financial markets. The question always exists as to whether the Fed ever can or will push tight money to the extent of producing a "barn burner" depression. If not, we just climb up the ladder again.

Attachment 6 reveals the extent of interest rate volatility since October 1979.

Short term borrowing costs to business increased 55%; these generally are "pass through" costs or "supply reducing" costs. A Wall Street Journal headline January 28, 1971 reads "Despite Soft Demand, Suppliers Continue to Increase Prices to Keep Up with Costs." On the demand side the high credit costs quench the thirst for big ticket consumer items.

Of greatest concern to casualty insurance companies is the extreme deterioration in the municipal bond market. A change in yields from 6.10% to 9.40% on the 30 year bonds means a market depreciation of 35%. This represents a disaster for casualty insurance companies. Companies should devote attention to Schedule D, Part 1A and diversify their maturity exposure.

Inflation as measured by the CPI Index does not support any contention that the Fed actions are curbing inflation.

CPI - Year To Year Changes	
1976	+4.8%
1977	+6.8
1978	+9.0
1979	+13.3
1980	+12.4

No discussion of the Fed and inflation would be complete without a quotation from Salomon Bros. Henry Kaufman. Henry says: "Fed members cannot be all-wise, virtuous and completely dedicated to winding down inflation while most others in society have other priorities."

CONCLUSION

The concensus seems to be growing that both Keynesian and Austerity economics are failing to solve our problems. Austerity is a concept not particularly appealing to the American people. The IDS Advisory Review for December 1980 contains some well spoken words: "The "austerity" approach of tight money, is currently being attempted in England and, in our opinion, is failing. The corporate sector is being negatively impacted faster than inflation is being squeezed out, forcing an enlargement in the role of government to meet the social needs of the nation. Thus, tight money, as the leading edge in the inflation fight, appears to be counterproductive, lowering growth and government revenues while increasing the demand for government services. As the increasing deficit requires an ever greater share of the capital market, investment and productivity will decline, rather than increase as hoped."

The new "supply side" economics emphasizes incentives to spur growth in the output side of the economy; this is essential if inflationary expectations are to be reduced. Such encouragement would be in the form of tax incentives and reduced regulation. Increased productivity

is probably a required ingredient necessary to make monetary restraint effective and useful.

An appraisal of the inroads of Kemp-Roth-Stockman-Laffer "supply side" economics can be more mature at the time of the May meeting than in January. The principle and objective is appealing.

Actuaries may not wish to plug money supply numbers into rating formulas but an appreciation of the confusion of our times should be interesting and useful.

THE WALL STREET JOURNAL, Monday, January 26, 1981

ATTACH

Why Fed Can't Control Interest Rates

NEW YORK

In 1980 interest rates rode a roller coaster. The most spectacular performance was turned in by the federal funds rate, the fee that banks charge on reserves they lend to one another. Between February and April the funds rate shot up from less than 13% to over 19%, fell to 9% in June, and then soared to 20% in December. Such volatility was totally without precedent.

Interest rates now appear to have started downward, and Federal Reserve officials have made it clear that they won't welcome a repetition of 1980. The Fed's comments, unfortunately, lend support to its critics who claim the central bank can control interest rates. While it's true the Fed can influence rates over short periods, any attempt to do more than that will fail.

Lawrence K. Roos, president of the Federal Reserve Bank of St. Louis, was discussing this matter in a talk a few days ago. Mr. Roos currently is a voting member of the Federal Open Market Committee, the group that decides central bank monetary strategy. The committee includes the seven members of the Board of Governors and five of the Fed's regional bank presidents.

Mr. Roos tried to explain the Fed's relationship to interest rates as simply as possible. An interest rate, he said, is a price, the price of credit. The markets for credit are relatively free and are growing more so. The government still sets maximum interest rates that may be paid on some deposits, but under the Monetary Control Act of 1980 that power will be phased out. State usury laws still exist, but their grip has been loosening.

In a free market, price is determined by supply and demand. The Federal Reserve has no direct control over the demand for credit. It can create a panic among potential borrowers, as it did last spring by imposing credit controls. Some citizens cut up their credit cards and mailed them to Washington on the assumption that credit buying had been declared unpatriotic. The behavior of borrowers can be influenced by their expectations as to results of Fed policies. But there is no direct control.

"On the other hand," Mr. Roos says, "the Federal Reserve can exert a direct influence on the supply of credit." It does so chiefly by changing the amount of the banks' excess reserves—the reserves over and above the amounts they are required to hold to back up their deposits.

When the institutions acquire more excess reserves they step up their lending activity, increasing the supply of credit. When their excess reserves decline, the lenders cut back their lending.

The Fed can affect the banks' reserves in three ways: It can change the discount rate, the fee it charges on loans of reserves to financial institutions. It can change reserve requirements. Or it can buy or sell securities in the open market.

Federal Reserve officials long ago gave up making much use of the discount rate as a policy instrument; the public pays more attention to rate changes than the Fed does. The amount of borrowed reserves last year fluctuated between $500 million and $3.5 billion, tiny in comparison with total reserves of more than $40 billion. So changes in the discount rate are allowed to lag behind the market, often far behind the market. Obviously enough, a policy instrument would lead the market, not lag behind it.

Changes in reserve requirements similarly are seldom used for policy purposes. A small change in percentage requirements can make a massive change, in dollars, in the reserves that financial institutions do or do not have.

So buying or selling securities in the open market has become the Fed's primary policy tool. When the Federal Reserve buys securities it pays for them by creating reserves. When it sells securities it reduces reserves.

Over a short period of time the Federal Reserve can, say, keep interest rates higher than they otherwise would be if it holds down the level of bank reserves. That may be what the Federal Reserve has in mind for the next few weeks. But denying the banks reserves also promotes a slowdown in money-supply growth or even a decline. When banks are forced to restrict their lending activity they create fewer deposits for borrowers, deposits that would add to the money supply.

Slower money supply growth in time will reduce the public's expectations of inflation. And when lenders expect less inflation they are willing to accept lower interest rates for their money. Current high interest rates contain a large element of inflation expectations, and if the public's views start to change the Federal Reserve will be unable to block a sharp decline in interest rates.

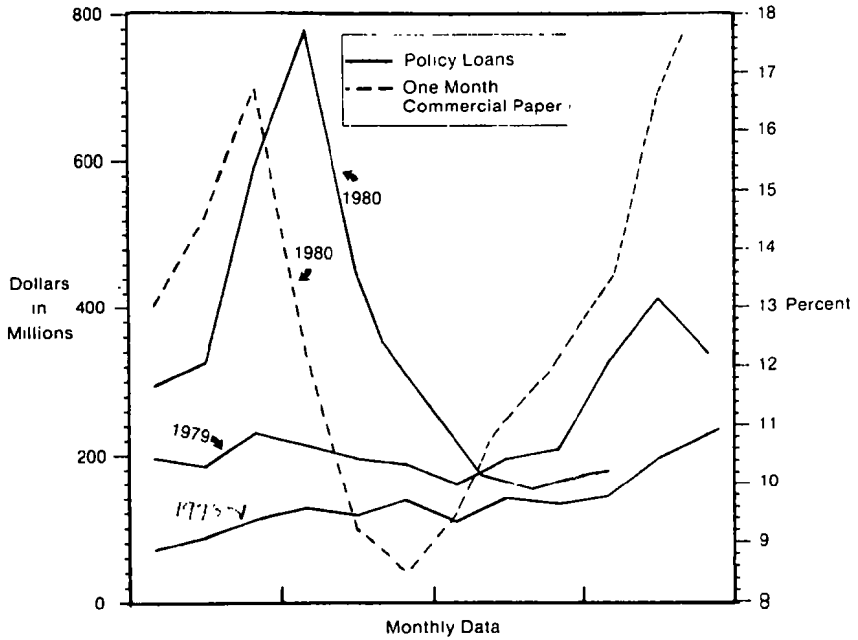
The same factors were at work, in the opposite direction, in the last half of 1980. The Fed was supplying financial institutions with reserves at a rapid clip, a policy that was surely increasing the supply of credit. But a rise in the supply went along with a sharp rise in the growth rate of the money stock. The public's inflation expectations grew fast, overwhelming the Fed's measures to boost the supply of credit.

The central bank's efforts to influence interest rates can, at times, worsen the economy's recessions. Right now, excessive efforts to slow the interest rate decline by denying the banks reserves could guarantee that the economy itself will decline early this year. It may decline anyway, but the Fed could make the decline a certainty.

Instead of attempting to control interest rates, Mr. Roos suggests, "the Fed must concentrate on doing what it is capable of doing—controlling monetary growth."

—LINDLEY H. CLARK JR.

Chart 2. Policy Loans vs. One Month Commercial Paper



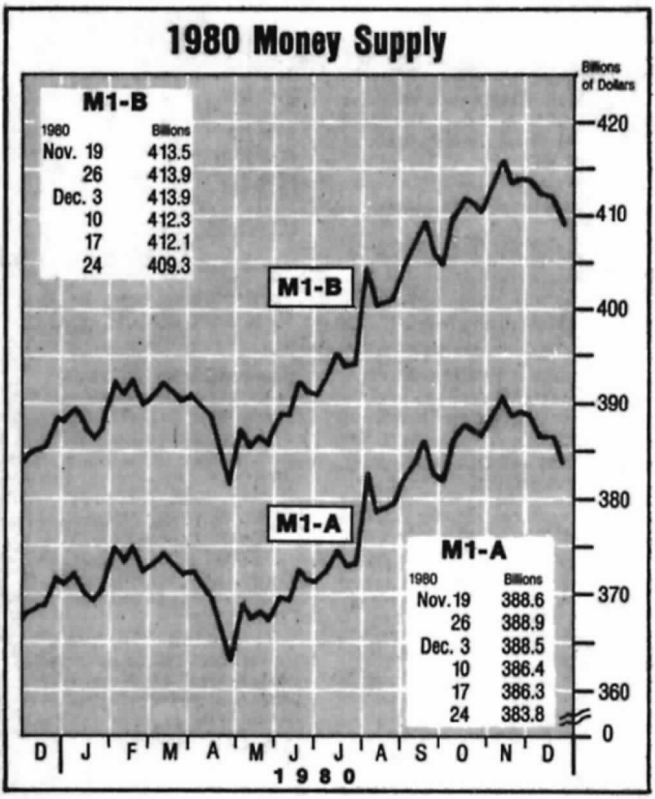
SOURCE: SALOMON BROS.

COMMON STOCK PRICES

Attachment 3

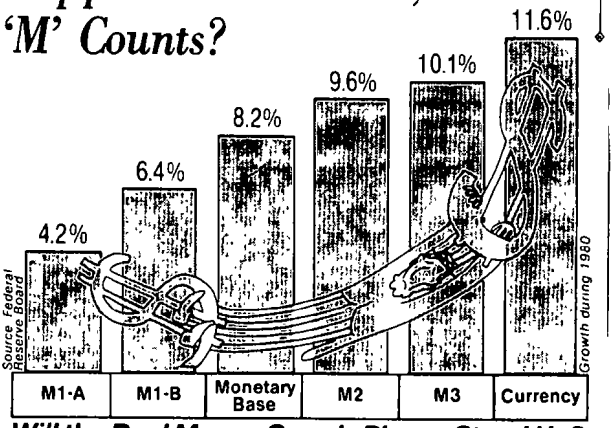
Company	Price 12/31/79	Price 12/31/80	% Change
Progressive Corp.	$16	$29	+81.3%
Washington Nat'l Corp.	26	38	+46.2%
Conn. General	35	47	+34.3%
American Express	30	40	+33.3%
S & P 500	107.94	135.76	+25.8%
Amer. Int'l Grp.	60	75	+25.0%
GEICO Corp.	12	15	+25.0%
INA Corp.	33	41	+24.2%
Reliance Grp.	60	73	+21.7%
Fremont General	21	25	+19.1%
Employers Cas.	34	40	+17.7%
Dow Jones Ind.	838.74	963.99	+14.9%
Gov't Emp. Life	14	16	+14.3%
Kemper Corp.	29	33	+13.8%
Transamerica Corp.	17	19	+11.8%
General Reins.	49	54	+10.2%
Mission Ins. Grp.	31	34	+ 9.7%
Aetna Life & Cas.	33	36	+ 9.1%
U.S.F. & G.	39	42	+ 7.7%
United Services	14	15	+ 7.1%
Crawford	17	18	+ 5.9%
Chubb Corp.	38	40	+ 5.3%
USLIFE	23	24	+ 4.4%
Farmers Grp.	27	28	+ 3.7%
Alex. & Alex.	33	34	+ 3.0%
Hartford Steam	$33	$34	+ 3.0%
Travelers	38	39	+ 2.6%
Median Companies Change	-	-	+ 1.3%
American General	37	37	UNCH.
CNA Financial	16	16	UNCH.
Crum & Forster	28	28	UNCH.
Liberty Nat'l	21	21	UNCH.
NLT Corp.	24	24	UNCH.
SAFECO Corp.	37	36	- 2.7%
Marsh/McLennan	35	34	- 2.9%
Bus. Men's Assur.	31	30	- 3.2%
Fred S. James	25	24	- 4.0%
Prov. Life & Acc.	47	45	- 4.3%
St. Paul Cos.	41	39	- 4.9%
Combined	19	18	- 5.3%
Monarch Cap. Corp.	19	18	- 5.3%
Ohio Casualty	36	34	- 5.6%
South. Fin. Corp.	15	14	- 6.7%
Lincoln Nat'l	44	40	- 9.1%
Capital Holding	20	18	-10.0%
Cont. Corp.	27	24	-11.1%
Frank B. Hall	27	24	-11.1%
Western Cas.	40	35	-12.5%
Jefferson-Pilot	30	25	-16.7%
North Nat'l	33	27	-18.2%
Corroon & Black	27	22	-18.5%
American Nat'l	16	13	-18.8%
Colonial Penn	21	16	-23.8%

Source - Conning & Co.



SOURCE: LOS ANGELES TIMES

Supply of Money Supplies Is Abundant; Problem: Which 'M' Counts?



Will the Real Money Supply Please Stand Up?

By Alfred L. Malabre Jr.
Staff Reporter of The Wall Street Journal

In fact, economists do occasionally agree with one another.

For instance, they agree (at least most of them do) that curbing inflation will necessitate curbing the growth of the money supply—bringing it down carefully to a pace roughly consistent with the economy's natural ability over the long term to lift the supply of goods and services that money buys. (Economists place that long-term rate around 2% to 3% annually.)

It sounds straightforward, but a question arises. Just what constitutes the money supply?

Mr. Webster tells us that money is "something generally accepted as a medium of exchange, a measure of value."

A child will say that money is the change in your pocket and the bills in your wallet, the stuff represented by the chart's extreme-right bar It rose nearly 12% last year, far faster than the economy's natural, long-term ability to expand

When an economist talks about money, however, the picture can grow fuzzy.

A reference to the money supply may mean what the child imagines plus what's in your regular checking account at the bank—the M1-A depicted by the left-hand bar. It rose only about 4% in 1980, a fraction of the rise in currency and an increase within hailing distance of the economy's growth potential

Or the money supply may mean M1-B, which embraces M1-A plus additional checking-type accounts including those that pay interest at all depository institutions. Its 1980 increase of more than 6% clearly seems inflationary.

Or it may mean the monetary base, which includes once again currency plus cash-type assets that banks keep on reserve to satisfy Federal Reserve Board rules. Its 1980 advance of over 8% appears still more inflationary.

The list goes on.

The money supply may also mean M2, whose reach covers M1-B plus all traditional savings-type accounts of less than $100,000 plus money-market mutual-fund shares *plus* such banking esoterica as, to quote a Federal Reserve explanation, "overnight repurchase agreements at commercial banks" and "overnight Eurodollars held by U.S. residents other than banks at Caribbean branches of member banks."

Last year's increase in M2 of nearly 10% easily dwarfs any reasonable estimate of the economy's capacity to expand.

The same may be said of M3's rise. This broad gauge of the money supply—up more than 10% last year—encompasses M2 plus still other "repurchase agreements" plus all "large-denomination time deposits."

Even more varieties of the money supply—fewer than Howard Johnson has flavors; but too many to squeeze onto the adjoining chart—have been tracked from time to time.

Some years ago, for instance, as many as eight different M's were cited in the congressional testimony of a Federal Reserve Board chairman, Arthur F Burns. (He was known to feel that the Fed's various money numbers had been getting excessive public attention, and some analysts saw his long list of M's as a deliberate—but unsuccessful—effort to introduce such confusion into money-watching as to kill the sport.)

Mr. Burns is long retired and the Fed's list is mercifully smaller now. But it still includes, for example, something called L. At more than $2 trillion, this Brobdingnagian measure adds to M3 the short-term liabilities of all depository institutions, nonfinancial corporations and the government. It approximates, says a Fed economist, "the volume of credit extended through financial intermediaries." L's recent rise also is sharp.

Quite obviously, the supply of money supplies is abundant. And so: Which money supply should policy makers attempt to curb to curb inflation? Which money supply should the nonexpert, who merely seeks to keep abreast, keep a newspaper eye on?

Much attention once was focused on the measure represented by the chart's left-hand bar. Today dubbed M1-A, it was then known simply as M1. Its fall from grace, economists explain, can be traced to the Hydra-headed nature of money when inflation flares. M1-A by definition misses all the money that has fled in recent years of high inflation from checking accounts that pay no interest to interest-paying accounts, including lately ones that also allow checkwriting.

The upshot is that anyone—policy maker or layman—who still attempts to monitor the money supply only through M1-A would gain an impression of moderate monetary restraint when, it can be argued, monetary growth has in truth been rapid.

For a while, focus shifted to a now-defunct version of M2 that embraced various interest-paying accounts. The very recent rise of interest-paying accounts that allow checkwriting, in turn, has brought considerable attention to M1-B. This measure is deemed most important by many Fed officials and is usually what's meant nowadays when headlines talk about the money supply

M1-B fails, however, to catch the recent precipitous growth of money-market mutual funds. To bring this into the picture, some economists now claim that M2, the version depicted and defined above, is what deserves primary attention. "It's what I mainly watch," says Sam I. Nakagama, economist of Kidder, Peabody & Co., a New York-based securities firm. (For some money-watchers, a problem with M2 and M3 is that the Fed reports them only monthly, while such gauges as M1-A, M1-B and the monetary base are available weekly.)

Notwithstanding the views of the Fed about M1-B or those of Mr. Nakagama about M2, today's consensus tends to focus on still another monetary measure—the monetary base Precisely, the focus is on the monetary base, as adjusted weekly by the St. Louis Federal Reserve Bank to remove possible distortions because of shifting of bank deposits between savings and checking accounts.

An attraction of the monetary base, analysts assert, is that its components—bank reserves and currency – lend themselves more easily to control by Fed policy makers than, say, the wide-ranging components of M1-B or M2 or M3 Control the growth of the monetary base, it's argued, and eventually the growth of all the larger M's will be reined in as well. And, this theory holds, the Fed can indeed control the base's growth through its authority, for instance, to buy and sell securities in the open market. Fed selling acts to drain reserves from banks and Fed buying tends to supply them.

Even monetary-base watching, however, can be tricky. For example, the monetary base expanded briskly between 1930 and 1933, a time of tumbling prices when the economy was sinking toward the pit of the Great Depression The problem was that, as business worsened in those years, the currency component of the base rose extraswiftly, reflecting such factors as an understandable wariness about the safety of bank deposits. This rise more than offset a concurrent decline in the base's bank-reserves component.

The Fed's authority to manage money, it should be noted, derives from Congress, which is empowered by the U.S. Constitution to create money. To try to bring firmer control over monetary growth, Congress recently ordered Fed officials to set and announce publicly growth targets for most of the M's every six months. The varying targets provide an indication, at least, of what the Fed's intentions are. However, the targets are imprecise, normally covering a range of at least a couple of percentage points. Even with such latitude, the actual growth of one M or another often misses the mark.

The money-supply picture can grow still more confusing when efforts are made to attach much significance to changes in the weekly monetary data. Indeed, Irwin L. Kellner, an economist at Manufacturers Hanover Trust in New York, recently proposed that the Fed stop issuing any money-supply numbers weekly. On many weeks, it does seem that some special circumstance arises that may skew the readings. Moreover, few governmental statistics are more frequently or sharply revised than money-supply figures.

An extreme illustration of weekly bewilderment developed last Friday, when the Fed released, among other things, its latest M1-B report. In the preceding fortnight, the widely followed gauge had fallen sharply, generating some concern that Fed officials, after being perhaps too lax with monetary policy, were becoming overly restrictive. But in the Friday report M1-B rose $11.4 billion. This was by far the largest one-week advance on record, and it confounded many money-watchers.

A partial explanation appears to be that the week's report incorporated the advent on a nationwide basis of so-called NOW accounts (for negotiable orders of withdrawal). These interest-paying checking accounts surely had attracted funds, for example, from savings accounts not included within M1-B.

However, some analysts say that scrutiny of the various money-supply gauges reported Friday fails to explain adequately M1-B's surge. The surge would be less perplexing, for example, had there been a large concurrent drop in M1-A, signaling a big shift of funds out of normal checking accounts to NOW accounts. But M1-A rose $1.6 billion in the report, which covered the week ended Jan. 7. Other data released Friday, for the week ended Jan. 14, seemed to shed little light on M1-B's surge. The adjusted monetary base fell $1.3 billion while bank reserves climbed about $350 million.

Some money-watchers, it should be noted, focus mainly on bank reserves. They explain that such funds, while a relatively narrow gauge, ar crucial to generating growth in the broader monetary measures. It's also pointed out that such funds are most closely under the direct control of Fed policy makers and, therefore, can be highly indicative of Fed intentions.

Some experts greeted the huge increase in M1-B with dismay, suggesting that Fed policy is once again too lax. Others viewed the week's surge as an aberration, caused by special factors. Still others indicated a new skepticism about whether close money-supply watching is really worth the effort.

Paul Markowski, a New York-based economist who focuses on bank reserves, confesses that he has trouble tracking and analyzing the movements of all the M's. "When I try, I go bananas," he says, holding his palms against his temples. An analyst at New York's Merrill Lynch & Co. remarks: "Inflation killed off the Keynesian notion that big government is our salvation, and I'm starting to think confusion will kill off the idea that monetarism will save us."

THE WALL STREET JOURNAL, Thursday, January 22, 1981

ATTACHMENT 6

YIELDS

1st of Month	Federal Funds (Weekly Avg.)	3-Month Treas. Bills (Bond Equiv.)	Prime Rate	30-Year Treas. Bond	New Long AA Utilities	30-Year Prime Municipal
1979						
Oct.	11.78	10.44	13.50	9.23	10.30	6.10
Nov.	15.30	12.66	14.25	10.22	11.75	7.00
Dec.	12.97	11.95	15.00	10.06	11.38	7.00
1980						
Jan.	14.17	12.53	15.00	10.08	11.80	6.85
Feb.	13.14	12.54	15.25	11.08	12.88	7.20
March	15.09	14.62	16.75	12.15	13.88	8.25
April	19.35	14.98	19.25	12.27	14.75	9.00
May	14.33	10.60	19.00	10.87	12.38	7.50
June	10.76	7.99	14.00	10.33	11.88	7.40
July	9.66	8.18	11.50	9.94	11.50	7.70
Aug.	9.68	8.89	11.00	10.60	12.63	8.25
Sept.	10.30	10.23	11.50	11.25	13.12	8.50
Oct.	13.27	11.89	13.00	11.70	13.88	8.80
Nov.	13.40	13.29	14.50	12.20	14.25	9.10
Dec.	17.67	15.22	17.75	12.28	14.38	9.20
1981						
Jan.	20.18	15.02	21.00	11.94	14.50	9.40
High	20.23	17.71	21.50	13.12	15.50	10.00
Low	8.64	6.44	11.00	9.47	10.08	6.75