MONETARY IMPROVEMENT PROGRAM

FEDERAL RESERVE press release

For immediate release March 14, 1980

The Federal Reserve Board today imposed interest rate limitations on debt instruments that are issued by a bank holding company in denominations of $100,000 or less and with original maturities of four years or less.

Obligations of $10,000 or more with original maturities between six months and 2-1/2 years--or redeemable in periods of six months to 2-1/2 years--will be subject to the same interest rate ceilings paid by member banks on 26-week money market certificates.

Obligations with original maturities of 2-1/2 to 4 years--or redeemable after 2-1/2 to 4 years--will be subject to the ceiling rate payable on 2-1/2 year variable ceiling time deposits. Obligations with original maturities of less than 2-1/2 years--or redeemable in periods of less than 2-1/2 years--will be subject to the same rate limitations imposed on member banks.

Action is necessary at this time in view of the impact such instruments are likely to have on deposit flows among depositary institutions. This action does not apply to commercial paper issued by bank holding companies.

A copy of the Board's order is attached.

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TITLE 12 -- BANKS AND BANKING

CHAPTER II -- FEDERAL RESERVE SYSTEM

[Regulation Q]

(Docket No. R-0279)

Part 217 - INTEREST ON DEPOSITS

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final Rule.

SUMMARY: The Board of Governors has amended Regulation Q (12 CFR Part 217) to impose interest rate limitations on certain obligations issued by a member bank's parent bank holding company. The amendment will apply to an obligation with a denomination of less than $100,000 issued or guaranteed by a bank holding company, regardless of the use of the proceeds, with an original maturity of 4 years or less, or redeemable by the holder in 4 years or less. Obligations with original maturities of 2-1/2 years to 4 years, or redeemable in periods of 2-1/2 years to 4 years, will be subject to the ceiling rate of interest payable on the 2-1/2 year variable ceiling time deposit. Obligations in denominations of $10,000 or more with original maturities between 26 weeks and 2-1/2 years, or redeemable in periods of 26 weeks to 2-1/2 years, will be subject to the ceiling rate of interest payable by member banks on 26-week money market time deposits of less than $100,000. Obligations in denominations of less than $10,000 with original maturities of less than 2-1/2 years, or redeemable in periods of less than 2-1/2 years will be subject to the same interest rate limitations applicable to comparable obligations of member banks. The amendment does not apply to commercial paper issued by a member bank's parent bank holding company. This action is being taken in order to facilitate the orderly administration of currently prescribed interest rate limitations.

EFFECTIVE DATE: March 14, 1980.

FOR FURTHER INFORMATION CONTACT: Gilbert T. Schwartz, Assistant General Counsel (202/452-3625); Anthony F. Cole, Senior Attorney (202/452-3612) or Paul S. Pilecki, Attorney (202/452-3281), Legal Division, Board of Governors of the Federal Reserve System, Washington. D.C. 20551.

SUPPLEMENTARY INFORMATION: The Board of Governors has amended Regulation Q (12 CFR §§ 217.1 and 217.7) to apply Regulation Q interest rate ceilings to certain obligations issued or guaranteed, in whole or in part, as to principal or interest by a member bank's parent bank holding company. The amendment applies to any obligation, regardless of the use of the proceeds, issued in a denomination of less than $100,000 that has an

original maturity of 4 years or less, or that is redeemable by the holder in periods of 4 years or less. Obligations with original maturities of 2-1/2 years to 4 years, or redeemable between 2-1/2 years and 4 years, will be subject to the ceiling rate of interest payable on the 2-1/2 year variable ceiling time deposit. Obligations in denominations of $10,000 or more with original maturities of 26 weeks to 2-1/2 years, or redeemable in periods of 26 weeks to 2-1/2 years, will be subject to the ceiling rate of interest payable by member banks on 26-week money market time deposits of less than $100,000. In addition, obligations in denominations of less than $10,000 with original maturities of less than 2-1/2 years, or redeemable in periods of less than 2-1/2 years, will be subject to the interest rate limitations applicable to comparable obligations of member banks.

With respect to obligations redeemable at specified intervals at the holder's option, the rate of interest payable on such obligations must be adjusted at the beginning of each such interval. The maximum rate of interest that may be paid for the period during the specified redemption intervals will be determined by applying the Regulation Q rules in effect at the time the obligation was issued. For example, on March 17, 1980, a parent bank holding company subject to this action issues an obligation with redemption intervals between 2-1/2 to 4 years. The maximum rate of interest that may be paid during each redemption interval will be determined by the rule in effect as of March 17 for determining the ceiling rate of interest payable on the 2-1/2 year variable ceiling time deposit. This rule provides that a member bank may pay interest at a rate of 11-3/4 per cent or 75 basis points below the yield on 2-1/2 year Treasury securities, whichever is less. Consequently, the maximum rate that may be paid on the obligation during the first redemption interval is 11-3/4 per cent. The maximum rate that may be paid during subsequent redemption intervals will be 11-3/4 per cent or 75 basis points below the yield on 2-1/2 year Treasury securities, whichever is less. This procedure for determining the maximum rate payable during each redemption interval will apply even if the rule relating to the determination of the ceiling rate of interest payable on the 2-1/2 year variable ceiling time deposit is modified. If, however, the rule relating to the determination of the ceiling rate of interest payable on the 2-1/2 year variable ceiling time deposit is modified, the new rule would apply to bank holding company obligations issued on or after the effective date of the new rule.

The amendment applies only to obligations required to be registered with the Securities and Exchange Commission under the Securities Act of 1933 and, consequently, the amendment does not apply to commercial paper issued by a member bank's parent bank holding company. The amendment applies to covered obligations regardless of the use of the proceeds -- i.e., even if the proceeds are not being supplied to the parent bank holding company's member bank subsidiary or subsidiaries. However, if a bank holding company directly issues obligations subject to interest rate limitations imposed by the Federal Deposit Insurance Corporation or the Federal Home Loan Bank Board pursuant to P.L. 89-597, such obligations will not be subject to the interest rate limitations imposed by this action.

The Board has concluded that regulations pertaining to the rates that may be paid on obligations issued by bank holding companies in denominations of less that $100,000 with original maturities of 4 years or less are necessary at this time in view of the impact the issuance of such obligations is likely to have on deposit flows among depository institutions. Such obligations typically are issued at rates substantially in excess of the Regulation Q ceiling rates of interest payable by member banks on time deposits of comparable maturities and are competitive with consumer deposits issued by depository institutions. The Board believes that such obligations generally should be subject to the interest rate limitations imposed upon member banks.

The Board's action was taken after consultation with the Federal financial institution regulatory agencies. In order to facilitate the administration of currently prescribed deposit interest rate limitations, the Board finds that application of the notice and public participation provisions of 5 U.S.C. § 553 to this action would be contrary to the public interest and that good cause exists for making the amendment effective immediately.

Pursuant to its authority under sections 19(a) and (j) of the Federal Reserve Act (12 U.S.C. §§ 461 and 371b), the Board amends Regulation Q (12 CFR 217), effective March 14, 1980, as follows:

1. Section 217.1 of Regulation Q is amended by adding:

§ 217.1 -- DEFINITIONS

* * * * *

(h) Obligations issued by the parent bank holding company of a member bank. For the purposes of this Part, the "deposits" of a member bank also includes an obligation that is (1) issued in a denomination of less than $100,000; (2) required to be registered with the Securities and Exchange Commission under the Securities Act of 1933; (3) issued or guaranteed in whole or in part as to principal or interest by the member bank's parent which is a bank holding company under the Bank Holding Company Act of 1956, as amended (12 U.S.C. §§ 1841-1850), regardless of the use of the proceeds; and (4) issued with an original maturity of 4 years or less, or which is redeemable at intervals of 4 years or less at the option of the holder. The term "deposits" does not include those obligations of a bank holding company that are subject to interest rate limitations imposed pursuant to P.L. 89-597.

2. Section 217.7 of Regulation Q is amended by adding:

§ 217.7 -- MAXIMUM RATES OF INTEREST PAYABLE BY MEMBER BANKS ON TIME AND SAVINGS DEPOSITS

* * * * *

(h) Obligations of the parent bank holding company of a member bank. Notwithstanding the above, interest may be paid on a deposit as defined in § 217.1(h) of this Part at a rate not to exceed the following schedule:

Original Maturity or Redemption Period	Maximum Per Cent
2-1/2 to 4 years	For an obligation that is not redeemable prior to maturity, interest may be paid at the rate established for 2-1/2 year variable ceiling time deposits pursuant to the provisions of § 217.7(g) in effect at the time the obligation is issued. For an obligation that is redeemable prior to maturity, the maximum rate of interest that may be paid from the date of issuance until the first date on which the obligation may be redeemed shall not exceed the rate established for 2-1/2 year variable ceiling time deposits pursuant to the provisions of § 217.7(g) in effect at the time the obligation is issued. For a successive period thereafter, interest may be paid during such period until the next date on which the obligation may be redeemed at a rate not to exceed the rate that would be in effect on the first day of such period for 2-1/2 year variable ceiling time deposits established pursuant to the provisions of § 217.7(g) in effect at the time the obligation was issued.
26 weeks or more but less than 2-1/2 years ($10,000 minimum denomination required)	For an obligation that is not redeemable prior to maturity, interest may be paid at the rate established for 26-week money market time deposits pursuant to the provisions of § 217.7(f) in effect at the time the obligation is issued. For an obligation that is redeemable prior to maturity, the maximum rate of interest that may be paid from the date of issuance until the first date on which the obligation may be redeemed shall not exceed the rate established for 26-week money market time deposits pursuant to the provisions of § 217.7(f) in effect at the time the obligation is issued. For a successive period thereafter, interest may be paid during such period until the next date on which the obligation may be redeemed at a rate not to exceed the rate that would be in effect on the first day of such period for 26-week money market time deposits established pursuant to the provisions of § 217.7(f) in effect at the time the obligation was issued.

Original Maturity or Redemption Period	Maximum Per Cent
30 days or more but less than 2-1/2 years (No minimum denomination required)	Interest may be paid at the ceilings established pursuant to the provisions of § 217.7(b) in effect at the time the obligation is issued.
less than 30 days	No interest may be paid.

By order of the Board of Governors, effective March 14, 1980.

(signed) Theodore E. Allison
Theodore E. Allison
Secretary of the Board

[SEAL]

March 15, 1980

To Chief Executives of Money Market Funds

President Carter on Friday announced a broad program designed to reduce inflationary forces in the United States. In addition to fiscal, energy, and other measures, the President, under the Credit Control Act of 1969, authorized the Federal Reserve Board to exercise special restraints on the growth of certain kinds of credit. The government's program was undertaken in an economic environment which required extraordinary emergency actions.

Under the authority provided by the President, the Board has taken several actions to restrain credit growth, including the imposition of a special deposit requirement of 15 percent on increases in total investment assets of money market funds and other similar entities. The enclosed documents provide details concerning the action; you will shortly be hearing from your local Federal Reserve Bank regarding reporting and special deposit maintenance requirements.

The Board is aware of the extraordinary nature of this action. We believe, however, that this measure -- along with our other actions -- is necessary as part of the broad effort to turn the inflationary trend around. We believe that the government's overall program seeks to spread the burden of combatting inflation among all lenders as fairly as is practicable. I am sure that I can rely on your wholehearted cooperation in the best interests of our Nation.

Sincerely,

Money Market Mutual Fund Representatives

Tuesday, March 18, 1980

5:30 p.m. -- Board Room

Representatives:

Investment Company Institute

David Silver, President
John F. Cogan, Chairman of the Board
(Chief Executive Officer, Pioneer Group)
Matthew Fink, General Counsel
Alfred Johnson, Chief Economist
Edward Cohen, Counsel

Dreyfus Corporation

Howard Stein, Chief Executive Officer

Fidelity Management and Research Corporation

Edward C. Johnson, III, Chief Executive Officer

Federated Fund Group

John Donahue, Chief Executive Officer

Merrill Lynch Asset Management

Arthus Zeikel, President

Board Members and Staff

Chairman Volcker
Governor Partee
Jim Brundy
Gerald Corrigan
Neil Petersen

Federal Advisory Council all invited

G. Lamar Crittenden, First National Bank of Boston

Donald C. Platten, Chemical Bank, New York

G. Morris Dorrance, Philadelphia National Bank

Merle E. Gilliand, Pittsburgh National Bank

J. Owen Cole, First National Bank of Maryland, Baltimore

Robert Strickland, Trust Company of Georgia, Atlanta

Roger E. Anderson, Continental Illinois Bank and Trust Company of Chicago

Clarence C. Barksdale, First National Bank in St. Louis

Donald J. Grangaard, First Bank System, Inc., Minneapolis

Gordon Wells, First National Bank of Kansas City

James D. Berry, Republic of Texas Corporation, Dallas

~~Richard P. Cooley, Wells Fargo, San Franciso~~

Meeting, Monday - March]7,]980 - Board Room - 10:00 a.m.

INVITED	WILL ATTEND
Mr. ~~A. Robert Abboud~~ Chairman of the Board First National Bank of Chicago One First National Plaza Chicago, Illinois 60670	Richard L. Thomas, President
Mr. ~~Robert Anderson~~ Chairman of the Board and Chief Executive Officer Security Pacific National Bank 333 South Hope Street Los Angeles, California 90071	George Moody, V.P.
Mr. ~~Elliott Averett~~ Chairman and Chief Executive Officer The Bank of New York 48 Wall Street New York, New York 10015	Peter Herrick, Exec. V.P.
Mr. ~~Norman Barker, Jr.~~ Chairman of the Board and Chief Executive Officer United California Bank 707 Wilshire Boulevard Los Angeles, California 90017	Paul Hulten, Sr. (Exec. V.P. Holding Bancorp.)
Mr. ~~Harry Bassett~~ Chairman Southeast Banking Corporation 100 South Biscayne Boulevard Miami, Florida 33131	Charles Zwick, Pres.
* Mr. Gene H. Bishop Chairman and Chief Executive Officer Mercantile Texas Corporation 1704 Main Street Dallas, Texas 75201	
No - Mr. Charles M. Bliss President and Chief Executive Officer Harris Trust and Savings Bank 111 West Monroe Street Chicago, Illinois 60603	

INVITED	WILL ATTEND
* Mr. Gilbert F. Bradley Chairman of the Board and Chief Executive Officer Valley National Bank of Arizona P.O. Box 71 Phoenix, Arizona 85001	
* Mr. Alfred Brittain, III Chairman of the Board Bankers Trust Company 280 Park Avenue New York, New York 10017	
* Mr. Bennett A. Brown President and Chief Executive Officer Citizens and Southern National Bank P.O. Box 9586 Savannah, Georgia 31402	
Mr. ~~Theodore D. Brown~~ Chairman of the Board and Chief Executive Officer First National Bank of Denver 621 17th Street Denver, Colorado 80217	Philip Hogue, Exec. V.P.
* Mr. George A. Butler President and Chief Executive Officer First Pennsylvania Bank N.A. 555 East City Line Avenue Bala-Cynwyd, Pennsylvania 19004	
* Mr. Rodkey Craighead Chairman Detroit Bank and Trust Fort at Washington Detroit, Michigan 48231	
Mr. ~~Edward W. Duffy~~ Chairman of the Board and Chief Executive Officer Marine Midland Bank One Marine Midland Center Buffalo, New York 14240	John R. Petty, Pres. & Chief Operating Officer

* - Will attend

INVITED	WILL ATTEND
Mr. ~~William B. Eagleson, Jr.~~ Thomas A. Cooper, V. Chmn. Chairman of the Board and President Girard Bank 15 City Line Avenue Bala-Cynwyd, Pennsylvania 19004	
Mr. H. E. Ekblom Chairman and Chief Executive Officer European American Bank and Trust Company Ten Hanover Square New York, New York 10015	
Mr. ~~John A. Elorriaga~~ Robert Mitchell, Chairman of the Board and Pres. Chief Executive Officer United States National Bank of Oregon P.O. Box 4412 Portland, Oregon 97208	
No - Mr. Robert D. H. Harvey Chairman of the Board Maryland National Bank Baltimore & Light Streets Baltimore, Maryland 21202	
* Mr. James H. Higgins Chairman Mellon Bank N.A. Mellon Square Pittsburgh, Pennsylvania 15230	
No - Mr. William M. Jenkins Chairman Seattle-First National Bank 1001 Fourth Avenue Seattle, Washington 98124	
Mr. Hal C. Kuehl, Chairman First Wisconsin Corporation First Wisconsin Center 777 East Wisconsin Avenue Milwaukee, Wisconsin 52202	
Mr. ~~Donald E. Lasater~~ Neal J. Farrell, Chairman of the Board and Pres. Chief Executive Officer Mercantile Trust Company 8th and Locust St. Louis, Missouri 63101	

INVITED	WILL ATTEND
* Mr. Ben F. Love, Sr. Chairman and Chief Executive Officer Texas Commerce Bank, N.A. P.O. Box 2558 Houston, Texas 77001	
* Mr. Elvis L. Mason Chairman of the Board First National Bank in Dalls P.O. Box 6031 Dalls, Texas 75283	
Mr. ~~C. J. Medberry~~ Robert James, Wash. Rep. Chairman of the Board Bank of America P.O. Box 37000 San Francisco, California 94137	
* Mr. John G. Medlin, Jr. President and Chief Executive Officer Waschovia Bank and Trust Company, N.A. P.O. Box 3099 Winston-Salem, North Carolina 27102	
* Mr. John W. Morrison Chairman of the Board and Executive Officer Northwestern National Bank of Minneapolis Seventh and Marquette Minneapolis, Minnesota 55480	
* Mr. Julien L. McCall Chairman of the Board National City Bank P.O. Box 5756 Cleveland, Ohio 44101	
Mr. John F. McGillicuddy Chairman of the Board and President Manufacturers Hanover Trust Company 350 Park Avenue New York, New York 10022	
Mr. Akira Nakajima Chairman of the Board The Bank of Tokyo Trust Company P.O. Box 439 New York, New York 10005	

* Will attend

INVITED	WILL ATTEND
Mr. Lewis T. Preston Chairman of the Board Morgan Guaranty Trust Company of New York 23 Wall Street New York, New York 10015	
Mr. Dean E. Richardson Chairman of the Board Manufacturers National Bank of Detroit Manufacturers Bank Tower Renaissance Center Detroit, Michigan 48243	
* Mr. David Rockefeller Chairman of the Board The Chase Manhattan Bank 1 Chase Manhattan Plaza New York, New York 10015	
* Mr. Nat S. Rogers Chairman of the Board First City National Bank of Houston P.O. Box 2557 Houston, Texas 77001	
No - Mr. Chauncey E. Schmidt Chairman, President, and Chief Executive Officer Bank of California, NA 400 California Street San Francisco, California 94104	
Mr. ~~E. Norman Staub~~ Chairman of the Board The Northern Trust Company 50 South La Salle Street Chicago, Illinois 60675	Charles H. Barrow, Sr. Exec. V.P.
* Mr. Robert G. Stevens, Chairman, President, and Chief Executive Officer BancOhio National Bank 155 East Broad Street Columbus, Ohio 43265	
Mr. ~~Charles G. Stoddard~~ President Michigan National Bank 171 Ottawa Avenue Grand Rapids, Michigan 49503	Stanford Stoddard

INVITED	WILL ATTEND
* Mr. Thomas I. Storrs Chairman and Chief Executive Officer North Carolina National Bank One NCBN Plaza Charlotte, North Carolina 28255	
Mr. Robert M. Surdam/Richard Cummings, V.Chm. Chairman of the Board National Bank of Detroit Woodward at Fort Street Detroit, Michigan 48232	or Joseph Conway
Mr. ~~G. Robert Truex, Jr.~~ Chairman and Chief Executive Officer Rainier National Bank P.O. Box 3966 Seattle, Washington 98124	Edward MacMillan, Sr V.P
* Mr. John H. Vogel Chairman of the Board and Chief Executive Officer National Bank of North America 44 Wall Street New York, New York 10005	
* Mr. Harry J. Volk Chairman and Chief Executive Officer Union Bank Union Bank Square Fifth and Figueroa Los Angeles, California 90071	
* Mr. John A. Waage Chairman of the Board Republic National Bank of New York P.O. Box 423 New York, New York 10018	
Mr. ~~Robert F. Wallace~~ Chairman of the Board First National Bank of Oregon P.O. Box 3131 Portland, Oregon 97208	Stephen K. Foster, Exec. V.P.
* Mr. Gordon T. Wallis Chairman of the Board Irving Trust Company One Wall Street New York, New York 10015	

* - Will attend

INVITED WILL ATTEND

No - Mr. M. Brock Weir
Chairman
Cleveland Trust Company
900 Euclid Avenue
Cleveland, Ohio 44101

* Mr. Thomas R. Wilcox
Chairman
Crocker National Bank
One Montgomery Street
San Francisco, California 94104

Mr. ~~Walter B. Wriston~~ G.A. Costanzo,
Chairman V. Chmn.
Citibank
55 Wall Street
New York, New York 10043

* - Will Attend

Meeting, Monday - March 17, 1980 - Board Room - 10:00 a.m. - Foreign Banks

Chief Officer in New York

Mr. W.B. Bateman
* Bank of Montreal
New York, New York

Mr. Dennis Bunyan
* National Westminster
New York, New York

~~Mr. John Cox~~ Mr. Richard Carden
Barclays Bank Chief Exec., V.P.
New York, New York

Mr. Philippe de Boissieu
* Banque Nationale de Paris
New York, New York
or
Mr. Mario Gabriele/Sergio GaHinara
Banco di Roma 1st Vice Pres.
New York, New York

Mr. T.E.S. Hodgson
* Lloyds Bank
New York, New York

Mr. James Hudson
* Toronto Dominion Bank
New York, New York

~~Mr. Klaas Peter Jacobs~~ Mr. Ruedorffer
Commerzbank
New York, New York

Mr. Akimasa Kato
* Sanwa Bank
New York, New York

Mr. Kiyoshi Kikuchi
* Mitsui Bank
New York, New York

Mr. H.R. Kuchler
Union Bank of Switzerland
New York, New York

Mr. Hector Raul Maradaraz
Banco de la Nacion
New York, New York

~~Mr. Shigeru Murata~~ Mr. Yokobori, N.
Fuji Bank Dep. Gen. Mgr.
New York, New York

~~Mr. Toru Nakajima~~ Mr. M. Kishida
Bank of Tokyo Dep. Gen. Mgr.
New York, New York

Mr. Y. Ogura
* Sumitomo Bank
New York, New York

Mr. Romano Pesci
* Credito Italiano
New York, New York

Mr. Lutz R. Raettig/Mr. Kohohavwieir,
Westdeutsche Landesbank Sr. V.P.
New York, New York

Mr. Detlev Staecker
Deutsche Bank
New York, New York

~~Mr. Yoshihiko Uyedo~~ Mr. Matsuka
Dai-Ichi Dep. Gen. Mgr.
New York, New York

~~Mr. Frank H. van Veenendal~~ Mr. Halim, Sr.V.P.
Alegemene Bank
New York, New York

Mr. George R. Vigon
* Credit Lyonnais
New York, New York

Mr. Peter Wodtke
Swiss Banking Corporation
New York, New York

~~Mr. Osamu Yamada~~ Mr. T. Kuronoma
Mitsubishi Bank Sr. Eco.
New York, New York

* will attend

FEDERAL RESERVE press release

For immediate release MARCH 14, 1980

The Federal Reserve Board today announced a series of monetary and credit actions as part of a general government program to help curb inflationary pressures. The actions are:

1. A voluntary Special Credit Restraint Program that will apply to all domestic commercial banks, bank holding companies, business credit extended by finance companies, and credit extended to U.S. residents by the U.S. agencies and branches of foreign banks. The parents and affiliates of those foreign banks are urged to cooperate in similarly restricting their lending to U.S. companies. Special effort will be made to maintain credit for farmers and small businessmen.

2. A program of restraint on certain types of consumer credit, including credit cards, check credit overdraft plans, unsecured personal loans and secured credit where the proceeds are not used to finance the collateral. The Board has established a special deposit requirement of 15 percent for all lenders on increases in covered types of credit. Automobile credit, credit specifically used to finance the purchase of household goods such as furniture and appliances, home improvement loans and mortgage credit are not covered by the program.

3. An increase from 8 percent to 10 percent in the marginal reserve requirement on the managed liabilities of large banks that was first imposed last October 6, and a reduction in the base upon which the reserve requirement is calculated.

4. Restraint on the amount of credit raised by large non-member banks by establishing a special deposit requirement of 10 percent on increases in their managed liabilities.

5. Restraint on the rapid expansion of money market mutual funds by establishing a special deposit requirement of 15 percent on increases in their total assets above the level of March 14.

6. A surcharge on discount borrowings by large banks to discourage frequent use of the discount window and to speed bank adjustments in response to restraint on bank reserves. A surcharge of 3 percentage points applies to borrowings by banks with deposits of $500 million or more for more than one week in a row or more than four weeks in any calendar quarter. The basic discount rate remains at 13 percent.

In making the announcement, the Board said:

"President Carter has announced a broad program of fiscal, energy, credit and other measures designed to moderate and reduce inflationary forces in a manner that can also lay the ground work for a return to stable economic growth.

"Consistent with that objective and with the continuing intent of the Federal Reserve to restrain growth in money and credit during 1980, the Federal Reserve has at the same time taken certain further actions to reinforce the effectiveness of the measures announced in October of 1979. These actions include an increase in the marginal reserve requirements on managed liabilities established on October 6 and a surcharge for large banks on borrowings through the Federal Reserve discount window.

"The President has also provided the Federal Reserve, under the terms of the Credit Control Act of 1969, with authority to exercise particular restraint on the growth of certain types of consumer credit extended by banks and others. That restraint will be achieved through the imposition of a requirement for special deposits equivalent to 15 percent of any expansion of credit provided by credit cards, other forms of unsecured revolving credit, and personal loans.

"One consequence of strong demands for money and credit generated in part by inflationary forces and expectations has been to bring heavy pressure on credit and financial markets generally, with varying impacts on particular sectors of the economy. At the same time, restraint on growth in money and credit must be a fundamental part of the process of restoring stability. That restraint is, and will continue to be, based primarily on control of bank reserves and other traditional instruments of monetary policy. However, the Federal Reserve Board also believes the effectiveness and speed with which appropriate restraint can be achieved without disruptive effects on credit markets will be facilitated by a more formal program of voluntary restraint by important financial intermediaries, developing further the general criteria set forth in earlier communications to member banks."

Special Credit Restraint Program

In adopting this program, the Board said increases in lending this year should generally be consistent with the announced growth ranges for money and credit

reported to Congress on February 19. Although growth trends will vary among banks and regions of the country, growth in bank loans should not generally exceed the upper part of the range of 6-9 percent indicated for bank credit (that is, loans and investments). Banks whose past lending patterns suggest relatively slow growth should expect to confine their growth to the lower portion or even below the range for bank credit.

The Board said the commercial paper market and finance companies--both a growing source of business credit--will be monitored closely in the program. Since activity in the commercial paper market is normally covered by bank credit lines, banks are expected to avoid increases in commitments for credit lines to support such borrowing out of keeping with normal business needs. Thrift institutions and credit unions will not be covered by the special program in light of the reduced trend in their asset growth.

No numerical guidelines for particular types of credit are planned but banks are encouraged particularly:

-- To restrain unsecured lending to consumers, including credit cards and other revolving credits. Credit for automobiles, home mortgage and home improvement loans should be treated normally in the light of general market conditions.

-- To discourage financing of corporate takeovers or mergers and the retirement of corporate stock, except in those limited instances in which there is a clear justification in terms of production or economic efficiency commensurate with the size of the loan.

-- To avoid financing for purely speculative holdings of commodities or precious metals or extraordinary inventory accumulation.

-- To maintain availability of funds to small business, farmers homebuyers and others without access to other forms of financing.

-- To restrain the growth in commitments for back-up lines in support of commercial paper.

No specific guidelines will be issued on the terms and pricing of bank loans. However, rates should not be calculated in a manner that reflects the cost of relatively small amounts of marginal funds subject to the marginal reserve requirement on managed liabilities. The Board also expects that banks, as appropriate and possible, will adjust lending rates and other terms to take account of the special needs of small business and others.

Lenders covered by the program are asked to supply certain data and information. The President, in activating the Credit Control Act, has provided the authority to require such reports.

Monthly reports are requested from domestic banks with assets in excess of $1 billion and for branches and agencies of foreign banks that have worldwide assets in excess of $1 billion. Monthly reports are also requested on the business credit activities of domestic affiliates of bank holding companies with total assets in excess of $5 billion. Banks with assets between $300 million and $1 billion are asked to report quarterly. Smaller institutions need not report unless subsequent developments warrant it.

Foreign banks will be asked to respect the substance and spirit of the guidelines in their loans to U.S. borrowers or loans designed to support U.S. activity.

A panel of large corporations will be asked to report monthly on their commercial paper issues and their borrowings abroad. Finance companies with more than $1 billion in business loans outstanding will also be asked to report monthly on their business credit outstanding.

Consumer Credit Restraint

The special deposit requirements of 15 percent on increases in some types of consumer credit is designed to encourage particular restraint on such credit extensions. Methods used by lenders to achieve such restraint are a matter for determination by the individual firms. Increases in covered credit above the base date--March 14--will be subject to the special deposit requirement.

Among lenders subject to the regulation are commercial banks, finance companies, credit unions, savings and loan associations, mutual savings banks, retail establishments, gasoline companies and travel and entertainment card companies--in all instances where there is $2 million or more in covered credit.

Typical examples of credit that is covered are credit cards issued by financial institutions, retailers and oil companies; overdraft and special check-type credit plans; unsecured personal loans; loans for which the collateral is already owned by the borrower; open account and 30-day credit without regard to whether a finance charge is imposed; credit secured by financial assets when the collateral is not purchased with the proceeds of the loan.

Examples of consumer credit not covered are:

Secured credit where the security is purchased with the proceeds of the loan such as an automobile, mobile home, furniture or appliance; mortgage loans where the proceeds are used to purchase the home or for home improvements; insurance company policy loans, credit extended for utilities, health or educational services; credit extended under State or Federal government guaranteed loan programs; and savings passbook loans.

All creditors with $2 million or more of covered credit outstanding on March 14 must file a base report by April 1 directly with the Federal Reserve or through the Federal Home Loan Bank Board or the Federal Credit Union Administration. This report will state the amount of credit outstanding on March 14 or a figure for the nearest available date.

Thereafter, these creditors must file a monthly report on the amount of covered consumer credit outstanding during the month, based on the daily average amount of covered credit if that data is available, or the amount outstanding on other appropriate dates approved by the Federal Reserve. The first report--for the period from March 15 through April 30--is due by May 12. The report for subsequent months is due by the second Monday of the following month.

The first 15 percent deposit requirement must be maintained beginning May 22 on increases in outstanding credit.

Marginal Reserve Requirement

On October 6, the Board established an 8 percent marginal reserve requirement on increases in managed liabilities that had been actively used to finance a rapid expansion in bank credit. The base for this reserve requirement was set at the larger of $100 million or the average amount of managed liabilities held by a member bank, an Edge corporation, or a family of U.S. agencies and branches of a foreign bank as of September 13-26. Any increase in managed liabilities above that base period was subject to the additional 8 percent reserve requirement.

Managed liabilities include large time deposits ($100,000 or more) with maturities of less than a year, Eurodollar borrowings, repurchase agreements against U.S. government and federal agency securities, and federal funds borrowed from a nonmember institution.

In today's action, the Board increased the reserve requirement to 10 percent and lowered the base by (a) 7 percent or (b) the decrease in a bank's gross loans to foreigners and gross balances due from foreign offices of other institutions between the base period and the week ending March 12, whichever is greater. In addition, the base will be reduced to the extent a bank's foreign loans continue to decline. The minimum base amount remains at $100 million.

Nonmember Banks

The special deposit requirement for nonmember banks is designed to restrain credit expansion in the same manner as the marginal reserve requirement on the managed liabilities of member banks.

For nonmembers, the base is the two-week period that ended March 12 or $100 million, whichever is greater. The 10 percent special deposit will be maintained

at the Federal Reserve on increases in managed liabilities above the base amount. The base will be reduced in subsequent periods to the extent that a nonmember bank reduces its foreign loans.

Money Market Mutual Funds

Money market mutual funds and similar creditors must maintain a special deposit with the Federal Reserve equal to 15 percent of the increase in their total assets after March 14.

A covered fund must file by April 1 a base report of its outstanding assets as of March 14. Thereafter, a monthly report on the daily average amount of its assets must be filed by the 21st of the month. For example, a report on the first month's assets--from March 15 to April 14--must be filed by April 21 and the special deposit requirement will be maintained beginning May 1. A fund that registers as an investment company with the Securities and Exchange Commission after March 14 must file a base report within two weeks after it begins operations.

Discount Rate

In fixing the surcharge for large bank borrowing, the Board acted on requests from the directors of all 12 Federal Reserve Banks. The action is effective Monday. The discount rate is the interest rate that member banks are charged when they borrow from their district Federal Reserve Bank.

The surcharge above the basic discount rate would generally be related to market interest rates. It is designed to discourage frequent use of the discount window and to encourage banks with access to money markets to adjust their loans and investments more promptly to changing market conditions. This should facilitate the ability of the Federal Reserve to attain longer-run bank credit and money supply objectives.

The surcharge will apply to banks with more than $500 million in deposits on their borrowings for ordinary adjustment credit, when such borrowing occurs successively in two statement weeks or more, or when the borrowing occurs in more

than four weeks in a calendar quarter. There will be no other change in the administration of the discount window with respect to adjustment credit. Such credit will continue to be available to member banks only on a short-term basis to assist them in meeting a temporary requirement for funds or to provide a cushion while orderly adjustments are made in response to more subtained charges in a bank's position.

The surcharge will not apply to borrowing under the seasonal loan program, which will continue at the basic discount rate, nor to borrowing under the emergency loan program.

Attached are copies of the following documents:

1. The Special Credit Restraint Program.
2. Regulation CC establishing a special deposit requirement on increases in certain types of consumer credit.
3. An amendment to Regulation D increasing the marginal reserve requirement on managed liabilities to 10 percent and reducing the base period.
4. A subpart of Regulation CC establishing a special deposit requirement for nonmember banks.
5. A subpart of Regulation CC establishing a special deposit requirement for money market mutual funds.

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Special Credit Restraint Program

Background

President Carter has announced a broad program of fiscal, energy, credit, and other measures designed to moderate and reduce inflationary forces in a manner that can also lay the groundwork for a return to stable economic growth.

In connection with those actions, and consistent with the continuing objective to restrain growth in money and credit during 1980, the Federal Reserve has also taken certain further actions to reinforce the effectiveness of the measures announced in October of 1979. These actions include an increase in the marginal reserve requirements on managed liabilities established on October 6 and the establishment of a surcharge on borrowings through the discount window by large banks.

The President has also authorized the Federal Reserve, under the terms of the Credit Control Act of 1969, to exercise particular restraint on certain types of credit. The Board has determined to restrain the growth of certain types of consumer credit through the imposition of a requirement for special deposits equivalent to 15% of any expansion of consumer credit provided by any lender through credit cards, other forms of unsecured revolving credit, and personal loans. Under the authority of the Credit Control Act, the Federal Reserve has also (a) applied a special deposit requirement on the growth of managed liabilities of large non-member banks and (b) imposed a special deposit requirement on the growth in the net assets of money market mutual funds and other similar entities.

One consequence of strong demands for money and credit generated in part by inflationary forces and expectations has been to bring heavy pressure on credit and financial markets generally, with varying impacts on particular sectors of the economy. At the same time, restraint on growth in money and credit must be a fundamental part of the process of restoring stability. That restraint is, and will continue to be, based primarily on control of bank reserves and other traditional instruments of monetary policy. However, the Federal Reserve Board also believes

the effectiveness and speed with which appropriate restraint can be achieved without unnecessarily disruptive effects on credit markets will be facilitated by a program of voluntary credit restraint by important financial intermediaries. The program set forth here develops certain general criteria to help guide banks and others in their lending policies during the period ahead.

Statement of Purpose

The purpose of the Special Credit Restraint Program is to encourage lenders and borrowers, in their individual credit decisions, to take specific account of the overall aims and quantitative objectives of the Federal Reserve in restraining growth in money and credit generally. The guidelines set forth are consistent with the continuing interest of the Federal Reserve and individual institutions to:

-- Meet the basic needs of established customers for normal operations, particularly smaller businesses, farmers, thrift institution bank customers, and agriculturally-oriented correspondent banks, and homebuyers with limited alternative sources of funds.

-- Avoid use of available credit resources to support essentially speculative uses of funds, including voluntary buildup of inventories by businesses beyond operating needs, or to finance transactions such as takeovers or mergers that can resasonably be postponed, that do not contribute to economic efficiency or productivity, or may be financed from other sources of funds.

-- Limit overall loan growth so that adequate provision is made for liquidity and acceptable capital ratios.

In requesting cooperation of individual institutional lenders in achieving the general objectives of this program, the Federal Reserve Board is strongly conscious of the fact that sound decisions concerning the distribution of credit and specific loans

can be made only by individual institutions dealing directly in financial markets and intimately familiar with the needs and conditions of particular customers. We are also aware, however, that in existing market circumstances, individual institutions may be under competitive pressure to make loans or commitments that, in the aggregate, cannot be sustained within our overall monetary and credit objectives or that, for particular institutions, may exceed prudent limits. By more clearly considering individual lending and commitment decisions in the light of the national objectives reflected in this program, undue market pressures and disturbances can be avoided and available credit supplies be used to meet more urgent requirements.

Nature of the Program

Coverage

The Special Credit Restraint Program will be directed primarily toward the domestic credit supplied by commercial banks and the domestic business credit extended by finance companies. Surveillance will also be exercised over borrowing in the commercial paper market and borrowings abroad by U.S. corporations.

With regard to domestic commercial banks, the program is designed to cover credit extended to U.S. residents by both the domestic and overseas offices of such banks. Credit extended to U.S. residents by agencies and branches of foreign banks domiciled in the United States will be specifically covered. Affiliates abroad of banks operating in the U.S. are expected to respect the substance and spirit of the guidelines in their loans to U.S. borrowers or loans otherwise designed to support U.S. activity.

In recent months, the commercial paper market and finance companies have been a growing source of business credit. In recognition of this trend and to assure comparable competitive treatment, finance companies (including subsidiaries of bank holding companies) are asked to follow the general guidelines in their business lending.

Activity in the commercial paper market is normally covered by bank credit lines. That practice is strongly encouraged in the interest of continuing to provide a sound base to that market. But the use of commercial paper should be restrained, and growth in the market and activity of the larger users of that market will be closely monitored. For their part, banks are expected to give special attention to avoiding increases in commitments for credit lines for purposes of supporting commercial paper borrowing for other than normal business operating purposes.

Thrift institutions and credit unions are not specifically covered by the Special Program in light of recent patterns in their asset growth.

Reporting arrangements are described below.

Quantitative Guidelines

The Federal Reserve has recently set forth growth ranges for the monetary aggregates for 1980 as follows:

M1A	3½%	-	6%
M1B	4%	-	6½%
M2	6%	-	9%
M3	6½%	-	9½%

The growth ranges set forth for M3 encompass almost all the relatively short-term liabilities of banks and other depository institutions. That liability growth was broadly estimated to be consistent with growth in total bank credit (loans and investments) of 6-9%. We are aware that in current market circumstances, banks may be requested to carry a larger than normal share of growth in business and certain other types of credit. However, prudent attention to liquidity and capital positions will also be required, and liquidity of banks is already somewhat depleted. Taking these factors into account, growth in bank loans, consistent with the monetary growth ranges and maintenance of prudent liquidity positions, should not generally exceed the upper part of the indicated range of growth in total bank credit. That growth should

be spread out over time in an orderly fashion, taking account of normal seasonal patterns.

Growth trends vary among banks and regions of the country. Individual institutions will wish to appraise their own prospects and policies in that light. Banks whose past patterns suggest relatively slow growth, and particularly those serving more slowly growing areas, should expect to confine growth to the lower portion or even below the indicated range for bank credit, particularly in instances where liquidity or capital ratios are below average. More rapidly growing banks should also evaluate their ability to support such growth without impairing liquidity or capital ratios.

The Federal Reserve and other federal bank regulatory agencies will carefully review patterns of loans and commitments at institutions that are experiencing growth in lending at or above the top of the range specified. Account will be taken of their own past experience and regional trends as well as the banks' capacity to finance their loan portfolios without straining capital or liquidity. Increases in loans by banks resulting in lower capital or liquidity ratios, particularly when the bank ratios are below peer groups, will be especially closely reviewed to assure their position is not weakened. In that connection, other regulatory authorities will be consulted as appropriate.

Individual institutions should adopt commitment policies that enable them to maintain adequate control over growth in loan totals and to assure funds are available to meet the priority needs specified below.

Qualitative Guidelines

The Board does not intend to set forth numerical guidelines for particular types of credit. However, banks are encouraged particularly:

(1) To restrain unsecured lending to consumers, including credit cards and other revolving credits. Credit for auto,

home mortgage and home improvement loans should not be subject to extraordinary restraint.

(2) To discourage financing of corporate takeovers or mergers and the retirement of corporate stock, except in those limited instances in which there is a clear justification in terms of production or economic efficiency commensurate with the size of the loan.

(3) To avoid financing of purely speculative holdings of commodities or precious metals or extraordinary inventory accumulation out of keeping with business operating needs.

(4) To maintain reasonable availability of funds to small businesses, farmers, and others without access to other forms of financing.

(5) To restrain the growth in commitments for backup lines in support of commercial paper.

(6) To maintain adequate flow of credit to smaller correspondent banks serving agricultural areas and small business needs and thrift institutions.

The terms and pricing of bank loans are expected to reflect the general circumstances of the marketplace. No specific guidelines or formulas are suggested. However, the Board does not feel it appropriate that lending rates be calculated in a manner that reflects the cost of relatively small amounts of marginal funds subject to the marginal reserve requirements on managed liabilities. Moreover, the Board expects that banks, as appropriate and possible, will adjust lending rates and other terms to take account of the special needs of small businesses, including farmers, and others.

Reporting

The Federal Reserve will closely monitor developments in all sectors of the credit markets and will ask that certain data and information be supplied by banks and others. The President, in activating the Credit Control Act of 1969, has provided authority for requiring such reports.

In the case of domestic banks with assets in excess of $1 billion, and for U.S. branches and agencies of foreign banks that have worldwide assets in excess of $1 billion, a monthly report will be requested. Monthly reports will also be requested on the business credit activities of domestic affiliates of bank holding companies with U.S. financial assets in excess of $1 billion. As will be noted, the bank reports include, apart from qualitative information, certain data on the movements in broad categories of loans and commitments, liquid asset holdings, and capital accounts. Certain data, including that on capital and liquidity, will be requested on a consolidated worldwide basis. Banks with less than $1 billion but more than $300 million in assets will report quarterly. Smaller institutions, while requested to observe the program, will not have special reporting requirements unless warranted by subsequent developments.

A group of large corporations will be requested to complete a brief monthly form about their activities in the commercial paper market, including the extent and usage of "backup" lines of credit at banks and their borrowing abroad. Finally, finance companies -- including subsidiaries of bank holding companies -- with more than $1 billion in loans outstanding to business borrowers will be requested to provide monthly reports concerning their business lending activities.

Consultative Arrangements

In instances warranted by trends in loans and commitments, Federal Reserve Bank officials in consultation with other federal bank regulatory agencies, will review with individual banks and others their progress in achieving and

maintaining appropriate restraint on lending. In general, such consultations will be sought if:

(1) Bank or finance company lending is occurring at a pace that appears to be significantly in excess of the national objective, taking account of the location or past experience of the bank or other institution.

(2) Commitment policies appear to suggest the possibility of large subsequent increases in lending or exceptional expansion of commercial paper borrowing.

(3) Explanations of "takeover" or "speculative" financing contained in regular reports raise significant questions.

(4) The distribution of credit at an institution generally appears disproportionate in light of the qualitative guidelines above.

(5) Liquidity positions or capital ratios reflect developing strains, particularly in the case of institutions whose ratios are below peer group averages.

In the case of nonbanks, the Federal Reserve may also wish to hold informal discussions with such institutions if such discussions seem warranted by developments.

TITLE 12--BANKS AND BANKING

CHAPTER II--FEDERAL RESERVE SYSTEM

SUBCHAPTER A--BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

[Regulation D]

(Docket No. R-0278)

Part 204--RESERVES OF MEMBER BANKS

Marginal Reserve Requirements

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: On October 6, 1979, the Board of Governors amended Regulation D to establish a marginal reserve requirement of 8 per cent on the amount by which the total of certain managed liabilities of member banks (and Edge and Agreement Corporations) and United States branches and agencies of foreign banks exceeds the amount of an institution's base of managed liabilities. An institution's base was defined as the daily average total of managed liabilities outstanding during the period September 13-26, 1979, or $100 million, whichever is greater. The Board has amended Regulation D to increase the marginal reserve requirement ratio to 10 per cent. The Board also has amended Regulation D to reduce an institution's managed liabilities base by the greater of 7 per cent or the amount of decrease in an institution's daily average gross loans to non-United States residents and gross balances due from foreign offices of other institutions between the base period (September 13-26, 1979) and the statement week ending March 12, 1980. In the future, an institution's base will be reduced further after March 12, 1980, by the amount by which it decreases its daily average gross loans to non-U. S. residents and gross balances due from foreign offices of other institutions during a statement week. However, in no event will the base of an institution that was a net borrower of managed liabilities during the base period (September 13-26, 1979) be reduced below $100 million. The purpose of this action is to control further the availability of bank credit.

EFFECTIVE DATE: This action is effective for marginal reserves required to be maintained during the seven-day period beginning April 3, 1980, against total managed liabilities outstanding during the seven-day period beginning on March 20, 1980.

FOR FURTHER INFORMATION CONTACT: Gilbert T. Schwartz, Assistant General Counsel (202/452-3625), Anthony F. Cole, Senior Attorney (202/452-3612), or Paul S. Pilecki, Attorney (202/452-3281), Legal Division, Board of Governors of the Federal Reserve System, Washington, D. C. 20551.

SUPPLEMENTARY INFORMATION: On October 6, 1979, the Board of Governors amended Regulation D (12 CFR Part 204) to impose a marginal reserve requirement of 8 per cent on the amount by which the total managed liabilities of member banks (and Edge and Agreement Corporations) and United States branches and agencies of foreign banks with total worldwide consolidated bank assets in excess of $1 billion exceeds the amount of the institution's managed liabilities outstanding during the base period (September 13-26, 1979) or $100 million, whichever is greater (44 Fed. Reg. 60071). Managed liabilities include the total of (1) time deposits in denominations of $100,000 or more with original maturities of less than one year; (2) Federal funds borrowings with original maturities of less than one year from U. S. offices of depository institutions not required to maintain Federal reserves and from U. S. government agencies; (3) repurchase agreements with original maturities of less than one year on U. S. government and agency securities entered into with parties other than institutions required to maintain Federal reserves; and (4) Eurodollar borrowings from foreign banking offices, asset sales to related foreign offices and member bank foreign office loans to U. S. residents. The purpose of this action was to better control the expansion of bank credit, help curb speculative excesses in financial, foreign exchange and commodity markets and thereby serve to dampen inflationary forces.

Under the marginal reserve program, the amount of marginal reserves that a member bank, Edge or Agreement Corporation, or a U. S. branch or agency family of a foreign bank that is a net borrower of managed liabilities is required to maintain is determined by the amount by which the total of the institution's managed liabilities during a given seven-day reserve computation period exceeds the daily average amount of managed liabilities outstanding during the base period or $100 million, whichever is greater. For an institution that is a net lender of managed liabilities (that is, the sum of its managed liabilities is negative because its net Eurodollar loans to its foreign offices are greater than the total of its other managed liabilities), its managed liabilities base is the algebraic sum of its managed liabilities and $100 million.

The Board has determined to increase the marginal reserve requirement ratio to 10 per cent and also has determined to adjust the base amount of managed liabilities for institutions subject to the marginal reserve requirement program. For reserve computation periods beginning March 20, 1980, if an institution was a net borrower of managed liabilities during the base period, its base amount will be reduced by an amount equal to the greater of 7 per cent of its current base or an amount equal to the decrease in the sum of its daily average gross loans to non-United States residents and gross balances due from foreign offices of other institutions from the base period (September 13-26, 1979) to the seven-day statement week ending March 12, 1980. For example,

if an institution has a borrowed managed liabilities base of $250 million, its base would be reduced by at least $17.5 million (7 per cent x $250 million). However, if such institution's daily average of gross loans to non-United States residents and gross balances due from foreign offices of other institutions decreased between the base period (September 13-26, 1979) and the statement week ended March 12, 1980, by $25 million, then the new managed liabilities base for such institution would be $225 million, since the decrease in daily average of such loans and balances was greater than 7 per cent. Consequently, the marginal reserve ratio of 10 per cent would be applied to the institution's managed liabilities in excess of $225 million.

The managed liabilities base shall be further reduced in reserve computation periods beginning March 20, 1980, by the amount by which the institution's daily average of gross loans to non-United States residents and gross balances due from foreign offices of other institutions during the statement week is lower than the daily average amount of such loans and balances during the statement week ending on March 12, 1980. In order to minimize the reserve impact of small repayments or reductions in the daily average gross loans to non-United States residents and balances due from foreign offices of other institutions, a future reduction in such loans and balances below the daily average for the week ending March 12, 1980, will reduce the base only in increments of $2 million. For example, if an institution reduces such loans and balances by a daily average of $12.5 million during the statement week ending March 26, 1980, its base for that week and future weeks will be reduced by $12 million. This approach also will enable institutions to receive ordinary repayments of foreign loans without being required to relend such funds immediately to avoid increased marginal reserves. The base for an institution that was a net borrower of managed liabilities during the base period (September 13-26, 1979), will not be reduced below $100 million. The base will not change for an institution that was a net lender of managed liabilities during the base period. An institution's base will not be affected by an increase in daily average gross loans to non-United States residents. In addition, eligible bankers' acceptances not held in the issuer's own portfolio will not be regarded as loans for purposes of determining reductions in the managed liabilities base.

These actions are being taken to moderate expansion of bank credit, thereby dampening inflationary pressures. In order to achieve the above stated objectives as soon as possible, the Board for good cause finds that the notice, public procedure, and deferral of effective date provisions of 5 U.S.C. § 553(b) with regard to these actions are impracticable and contrary to the public interest.

These actions are taken pursuant to the Board's authority under sections 19, 25 and 25(a) of the Federal Reserve Act (12 U.S.C. §§ 461, 601 et seq.) and under section 7 of the International Banking Act of 1978 (12 U.S.C. § 3105).

Effective April 3, 1980, section 204.5 of Regulation D (12 CFR § 204.5) is revised as follows:

§ 204.5 RESERVE REQUIREMENTS

* * * * *

(f) Marginal Reserve Requirements.

(1) Member banks. A member bank shall maintain a daily average reserve balance against its time deposits equal to 10 per cent of the amount by which the daily average of its total managed liabilities during the seven-day computation period ending eight days prior to the beginning of the corresponding seven-day reserve maintenance period exceeds the member bank's managed liabilities base as determined in accordance with subparagraph (3). A member bank's managed liabilities are the total of the following: * * *

(2) United States branches and agencies of foreign banks. A United States branch or agency of a foreign bank with total worldwide consolidated bank assets in excess of $1 billion shall maintain a daily average reserve balance against its liabilities equal to 10 per cent of the amount by which the daily average of its total managed liabilities during the seven-day computation period ending eight days prior to the beginning of the corresponding seven-day reserve maintenance period exceeds the institution's managed liabilities base as determined in accordance with subparagraph (3). In determining managed liabilities of United States branches and agencies, the managed liabilities of all United States branches and agencies of the same foreign parent bank and of its majority-owned (greater than 50 per cent) foreign banking subsidiaries (the "family") shall be consolidated. Asset and liability amounts that represent intra-family transactions between United States branches and agencies of the same family shall not be included in computing the managed liabilities of the family. United States branches and agencies of the same family shall designate one U.S. office to be the reporting office for purposes of filing consolidated family reports required for determination of the family's marginal reserve requirements. The reporting office shall file reports and maintain marginal reserves required under this section for the family at the Federal Reserve Bank of the district in which the reporting office is located. The total managed liabilities of a family are the total of each branch's and agency's: * * *

(3) Managed liabilities base. During the seven-day reserve computation period beginning March 20, 1980, and during each seven-day reserve computation period thereafter, the managed liabilities base of a member bank or a family of United States branches and agencies of a foreign bank ("family") shall be determined as follows:

(i) For a member bank or family that, on a daily average basis, is a net borrower of total managed liabilities during the fourteen-day base period ending September 26, 1979, its managed liabilities base shall be the daily average of its total managed liabilities during the base period less the greater of

(A) 7 per cent of the daily average of its total managed liabilities during the base period; or

(B) the amount equal to the decrease in its daily average gross loans to non-United States residents[18] and gross balances due from foreign offices of other institutions[19] or to institutions, the time deposits of which are exempt from the rate limitations of Regulation Q pursuant to § 217.3(g) thereof[20] between the fourteen-day base period ending September 26, 1979, and the computation period ending March 12, 1980.

For each computation period beginning after March 19, 1980, the managed liabilities base of a member bank or family shall be further reduced during the computation period by the amount by which its lowest daily average of gross loans to non-United States residents[18] and gross balances due from foreign offices of other institutions[19] or to institutions, the time deposits of which are exempt from the rate limitations of Regulation Q pursuant to § 217.3(g) thereof[20] outstanding during any computation period beginning after March 19, 1980, is lower than the daily average amount of such loans and balances outstanding during the computation period ending on March 12, 1980. The amount representing such difference shall be rounded to the next lowest $2 million.

In no event will the managed liabilities base for an institution that was a net borrower of managed liabilities during the fourteen-day base period ending September 26, 1979 be less than $100 million.

(ii) For a member bank or family that, on a daily average basis, is a net lender of total managed liabilities during the fourteen-day base period ending September 26, 1979, its managed liabilities base shall be the sum of its daily average negative total managed liabilities and $100 million.

18/ A United States resident is: (a) Any individual residing (at the time the credit is extended) in any State of the United States or the District of Columbia; (b) any corporation, partnership, association or other entity organized therein ("domestic corporation"); and (c) any branch or office located therein of any other entity wherever organized. Credit extended to a foreign branch, office, subsidiary, affiliate or other foreign establishment ("foreign affiliate") controlled by one or more such domestic corporations will not be deemed to be credit extended to a United States resident if the proceeds will be used in its foreign business or that of other foreign affiliates of the controlling domestic corporation(s).

19/ Any banking office located outside the States of the United States and the District of Columbia of a bank organized under domestic or foreign law.

20/ A foreign central bank, or any international organization of which the United States is a member, such as the International Bank for Reconstruction and Development (World Bank), International Monetary Fund, Inter-American Development Bank, and other foreign international, or supranational entities exempt from interest rate limitations under § 217.3(g)(3) of Regulation Q (12 CFR 217.3(g)(3)).

By order of the Board of Governors of the Federal Reserve System, March 14, 1980.

(Signed) Theodore E. Allison

Theodore E. Allison
Secretary of the Board

[SEAL]

TITLE 12--BANKS AND BANKING

CHAPTER II--FEDERAL RESERVE SYSTEM

SUBCHAPTER A -- BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYTEM

(Docket No. R-0280)

Part 229--CREDIT RESTRAINT

[Subpart A]

Consumer Credit

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final Rule.

SUMMARY: Pursuant to the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, the Board has adopted provisions requiring creditors that extend certain types of consumer credit to maintain a special non-interest bearing deposit with the Federal Reserve equal to 15% of the amount by which certain types of the creditor's outstanding consumer credit exceeds the larger of $2 million or the amount of such credit outstanding on March 14, 1980 (or the last day or other period immediately prior to March 14, 1980 for which data are available). Members of the Federal Home Loan Banks and all other savings and loan associations shall maintain the special deposit with the Federal Home Loan Banks. Credit unions, whether or not members of the National Credit Union Administration's Central Liquidity Facility, shall maintain the special deposit with the Central Liquidity Facility. The types of consumer credit covered by this regulation include credit extended through the use of credit cards, unsecured consumer loans, and secured consumer credit where the proceeds are not being used to purchase the collateral. Credit extended for business and agricultural purposes and closed-end consumer credit secured by the collateral financed are not subject to the regulation. The purpose of this action is to help curb inflationary pressures in the economy.

EFFECTIVE DATE: March 14, 1980.

FOR FURTHER INFORMATION CONTACT: Robert E. Mannion, Deputy General Counsel; Gilbert T. Schwartz, Assistant General Counsel; or Margaret L. Egginton, Attorney; Legal Division, Board of Governors of the Federal Reserve System, Washington, D.C. 20551 (202/452-3000).

SUPPLEMENTARY INFORMATION: In accordance with the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, dated March 14, 1980, the Board has adopted this regulation to require certain creditors that extend certain types of consumer credit to hold a special deposit with the Federal Reserve Banks against increases in

the amount of those types of credit outstanding. Creditors that have less than $2 million of consumer credit outstanding of the types covered by the regulation will not be required to maintain the special deposit. The amount of the special deposit that must be held will be equal to 15% of the amount by which certain types of consumer credit extended by the creditor exceeds the larger of $2 million or the amount of such credit outstanding as of the base date. For creditors that have daily credit data available, the base date is March 14, 1980 or the last day before March 14, 1980 for which such data are available. For creditors that do not have daily credit data available, the base date is the period immediately prior to March 14, 1980 for which credit data are available.

The regulation will apply to (1) all open-end consumer credit, whether secured or unsecured and (2) closed-end consumer credit that is either unsecured or secured by collateral that is not being purchased with the proceeds of the credit. Examples of open-end consumer credit are:

- credit card plans, such as cards issued by financial institutions, retailers, and oil companies;

- overdraft and special check-type credit plans offered by financial institutions;

- other revolving credit plans.

Examples of closed-end consumer credit that is covered are:

- unsecured personal loans;

- loans for which the collateral provided is already owned by the borrower;

- open account and 30-day credit without regard to whether a finance charge is imposed, such as travel and entertainment card plans and retail merchant credit;

- credit secured by financial assets, other than savings deposits, when the collateral is not purchased with the loan proceeds.

Credit extended through the use of credit cards will be presumed to be consumer -- that is, non-business -- credit unless the creditor establishes otherwise. A creditor also will be required to treat as covered consumer credit any such credit that is sold or otherwise transferred to any non-U. S. office of the same or another entity and any such credit sold or otherwise transferred with recourse to another entity wherever located.

Examples of consumer credit that is not covered are:

- secured credit where the collateral is purchased with the proceeds of the loan, such as automobile, mobile home, and other chattel-secured loans (see Uniform Commercial Code § 9-107, including Official Comments 1 and 2);

- credit secured by financial assets when the collateral is purchased with the proceeds;

- credit secured by savings deposits held at the lending institution;

- mortgage loans where the proceeds are used to purchase the collateral or for home improvements or "bridge" loans;

- insurance company policy loans;

- credit extended by providers of utility, health and educational services;

- credit extended under state or federal government guaranteed consumer loan programs, such as student loans.

All creditors with $2 million or more of covered consumer credit outstanding as of the base date are required to file a base report on the amount of such credit outstanding with the Federal Reserve Banks by April 1, 1980. If daily data are available, a creditor shall report as its base the actual amount of covered credit outstanding on March 14, 1980 or the last day before March 14 for which such data are available; if daily data are not available, the creditor shall report as its base the amount of such credit outstanding during the last period immediately before March 14, 1980, for which such data are available. A base report may be also required of certain creditors with covered consumer credit of less than $2 million. All creditors with $2 million or more of covered consumer credit outstanding as of the base date or anytime thereafter on an average basis during any calendar month shall file monthly reports on the amount of covered consumer credit outstanding. The monthly report on the average amount of covered consumer credit outstanding during the calendar month shall be filed by the second Monday of the following month. For example, a report on the daily average amount of covered credit outstanding during May shall be filed by June 9, 1980. The initial monthly report, however, shall cover the period from March 15, 1980 through April 30, 1980 and shall be filed by May 12, 1980.

Based upon the monthly report, a covered creditor is required to maintain a special non-interest bearing deposit with the Federal Reserve (or with the Federal Home Loan Bank or Central Liquidity Facility) equal to 15% of the amount by which the average amount of its covered credit exceeds the reported base or $2 million, whichever is greater. The special deposit shall be maintained in collected funds,

in the form of U. S. dollars, during the period beginning on the fourth Thursday of the month following the month for which the last report has been filed and ending on the day prior to the fourth Thursday of the next month. For example, the report covering the month of May shall be filed by June 9, 1980, and the special deposit based upon the May report shall be held beginning June 26, 1980, and continue through July 23, 1980, at which time a special deposit based upon June's report shall be required. The deposit based on the initial report, for March 15 through April 30, 1980, shall be maintained beginning May 22, 1980 and ending June 25, 1980. The amount of the special deposit may not vary during each maintenance period. Federal Reserve services, such as check collection, will not be made available based on maintenance of the special deposit.

Members of the Federal Home Loan Banks and all other savings and loan associations shall file reports and maintain the special deposit with the Federal Home Loan Banks. Credit unions, whether or not members of the National Credit Union Administration's Central Liquidity Facility, shall file reports and maintain the special deposit with the Central Liquidity Facility. Deposits maintained with the Federal Home Loan Banks and the Central Liquidity Facility shall be passed through by those entities to the Federal Reserve Banks. All other covered creditors, including commercial banks, U.S. branches and agencies of foreign banks, retailers, other credit card issuers, and finance companies, are required to file reports and maintain the special deposit with the Federal Reserve Bank for the District in which the reporting office of the creditor is located.

For purposes of reporting and determining whether the creditor's outstanding covered credit exceeds the $2 million threshold during the base period or thereafter, the covered credit of all U. S. offices of the same company and direct and indirect U. S. subsidiaries of the same parent company shall be combined, and only one base and monthly report shall be filed for the combined organization. For example, if a company has 100 offices throughout the United States, it should combine the required information from each office, and one designated reporting office should file one combined base or monthly report for the entire company. The covered credit of all U. S. offices (such as the branches, agencies and subsidiaries, including banks) of the same foreign parent company and all U.S. offices of that foreign parent's non-U.S. subsidiaries shall be combined and one office selected as the reporting office for such offices. A subsidiary is a company that is more than 50 per cent owned, directly or indirectly, by another.

These actions are being taken to curb inflationary pressures. Continuing growth of consumer credit has contributed to inflationary forces by helping to sustain consumer demand for goods and services. As a consequence of this sustained high level of demand, savings in the economy have fallen to the lowest level since the Korean War. Restraint on consumer credit will tend to encourage additional savings, which can be channelled to productive investment to increase the supply of goods. At the same time, consumer demands for the supply of goods available will be restrained. In both of these ways, restraint on consumer credit will contribute to dampening inflationary forces. The particular types of credit to which these restraints will apply are those generally showing undue strength in recent months. Thus, automobile credit, residential mortgage credit, and credit extended to purchase the collateral will not be affected by this action.

The Board believes that it is in the national interest to achieve the objective of curbing inflation as quickly as possible, and that publication of this rule for comment or any delay in its effective date would lead to rapid increases in extensions of consumer credit that would not be subject to the regulation and would frustrate its purpose. The Board, therefore, for good cause finds that further notice, public procedure, and deferral of effective date provisions of 5 U.S.C. § 553(b) with regard to these actions are impracticable and contrary to the public interest.

Pursuant to its authority under the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, the Board hereby issues this subpart (12 C.F.R. 229, Subpart A) effective March 14, 1980, as follows:

SECTION 229.1 - AUTHORITY, PURPOSE, AND SCOPE

(a) Authority. This subpart is issued by the Board of Governors of the Federal Reserve System pursuant to the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, dated March 14, 1980.

(b) Purpose and Scope. This subpart is intended to curb inflation generated by the extension of certain types of consumer credit in an excessive volume and governs extensions of such credit by all covered creditors.

SECTION 229.2 - DEFINITIONS

(a) For the purposes of this subpart, the terms, "Board," "credit," "creditor," "extension of credit" and "credit transaction," and "loan," shall have the meanings given them in the Credit Control Act. In addition, the following definitions apply.

(b) "Base" means the larger of $2 million or the amount of covered credit outstanding as of the close of business on the base date.

(c) "Base date" means: for a creditor that has daily credit data available, March 14, 1980 or the last day immediately before March 14, 1980 for which such data are available; for a creditor that does not have daily credit data available, the period immediately before March 14, 1980 for which credit data are available.

(d) "Closed-end credit" means all consumer credit except open-end credit.

(e) "Consumer credit" means credit extended in the U. S. primarily for personal, family, or household purposes and does not include credit for business or agricultural purposes.

(f) "Covered credit" means consumer credit that is (1) open-end credit and (2) closed-end credit which is unsecured or in which the proceeds of the credit are not being used to purchase the collateral. Covered credit that is sold or otherwise transferred after March 14, 1980 to any office located outside the U. S. of the same or another entity shall remain the covered credit of the transferor until such credit is repaid. Covered credit that is sold or otherwise transferred on a recourse basis to any U. S. office of the same or another entity shall remain the covered credit of the transferor; covered credit that is transferred on a non-recourse basis to any U. S. office of the same or another entity shall be treated as covered credit of the transferee. Covered credit does not include insurance company policy loans; credit extended by federal, state or local governments, or by providers of utility, health or education services; state or federal government guaranteed loans; or loans secured by savings deposits[1/] held at the lending institution.

(g) "Covered creditor" means any creditor which extends covered credit. For purposes of determining the amount of a creditor's outstanding covered credit, the covered credit of all U. S. offices of (i) the same company, (ii) U. S. subsidiaries of the same parent company, and (iii) non-U. S. subsidiaries of the same parent company shall be combined. A subsidiary is a company that is more than 50 per cent owned directly or indirectly by another company.

(h) "Open-end credit" means consumer credit extended on an account pursuant to a plan under which (1) the creditor may permit the customer to make purchases or obtain loans, from time to time, directly from the creditor or indirectly by use of a credit card, check, or other

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1/ As defined in § 217.1(e) of this Chapter (Regulation Q).

device, as the plan may provide; (2) the customer has the privilege of paying the balance in full or in instalments; and (3) a finance charge may be computed by the creditor from time to time on an outstanding unpaid balance.

(i) "U.S." means the fifty states of the United States and the District of Columbia.

SECTION 229.3 - REPORTS

(a) Each covered creditor with $2 million or more of covered credit outstanding as of the base date, and certain covered creditors as may be required by the Board, shall file a base report by April 1, 1980. The base report shall state the amount of the covered creditor's base. A creditor with a base of $2 million or more as indicated on its base report, or with covered credit outstanding in excess of $2 million on an average basis during any calendar month, shall submit monthly reports. The initial monthly report shall be filed by May 12, 1980, for the period March 15 through April 30, 1980; thereafter, the monthly report shall be filed for each full calendar month by the second Monday of the following month. The monthly report shall include the average amount of covered credit outstanding during the month (on a daily average basis if such data are available) and the amount by which that number exceeds the creditor's base.

(b) One base and one monthly report shall be filed by a reporting office for all the offices of a covered creditor. A covered creditor may designate any of its offices as its reporting office.

(c) Members of the Federal Home Loan Banks and all other savings and loan associations shall file reports with the Federal Home Loan Banks. Credit unions, whether or not members of the National Credit Union Administration's Central Liquidity Facility, shall file reports with the Central Liquidity Facility. All other creditors shall file reports with the Federal Reserve Bank in whose District their reporting office is located.

SECTION 229.4 - MAINTENANCE OF SPECIAL DEPOSIT

(a) Each covered creditor shall hold a non-interest bearing special deposit equal to 15 per cent of the amount by which the average amount of its covered credit outstanding during the calendar month exceeds its base. The corresponding period during which the special deposit shall be maintained begins on the fourth Thursday of the month following the calendar month for which the report was filed and continues through the Wednesday before the fourth Thursday of the next month. The special deposit shall be maintained in collected funds in the form of U. S. dollars.

(b) Members of the Federal Home Loan Banks and all other savings and loan associations shall maintain the special deposit with the Federal Home Loan Banks. Credit unions, whether or not members of the National Credit Union Administration's Central Liquidity Facility, shall maintain the special deposit with the Central Liquidity Facility. Deposits maintained with the Federal Home Loan Banks and the Central Liquidity Facility shall be placed with a Federal Reserve Bank. All other creditors shall maintain the special deposit with the Federal Reserve Bank to which the creditor reports.

SECTION 229.5 - PENALTIES

For each willful violation of this subpart, the Board may assess against any creditor, or officer, director or employee thereof who willfully participates in the violation, a maximum civil penalty of $1,000. In addition, a maximum criminal penalty of $1,000 and imprisonment of up to one year may be imposed for willful violation of this subpart.

By order of the Board of Governors of the Federal Reserve System, effective March 14, 1980.

(Signed) Theodore E. Allison

Theodore E. Allison
Secretary of the Board

[SEAL]

TITLE 12--BANKS AND BANKING

CHAPTER II--FEDERAL RESERVE SYSTEM

SUBCHAPTER A--BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

(Docket No. R-0281)

Part 229--CREDIT RESTRAINT

[Subpart B]

Short Term Financial Intermediaries

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: Pursuant to the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, the Board has adopted provisions requiring money market funds and other similar creditors to maintain a special non-interest bearing deposit with the Federal Reserve equal to 15 per cent of the amount by which the investment assets of these creditors exceeds their investment assets on March 14, 1980. Special non-interest bearing deposits shall be maintained at the Federal Reserve Bank of the district in which the creditor maintains its principal place of business. The purpose of this action is to control inflation by limiting the expansion of short-term credit offered by such financial intermediaries.

EFFECTIVE DATE: March 14, 1980.

FOR FURTHER INFORMATION CONTACT: Gilbert T. Schwartz, Assistant General Counsel, Lee S. Adams, Senior Attorney, C. Baird Brown, Attorney, or Daniel L. Rhoads, Attorney, Legal Division, Board of Governors of the Federal Reserve System,.Washington, D.C. 20551 (202/452-3000).

SUPPLEMENTARY INFORMATION: In accordance with the Credit Control Act (12 U.S.C. §§ 1901-1909) as implemented by Executive Order 12201, the Board has adopted this Subpart of its Credit Restraint regulation to require creditors, consisting of investment companies commonly regarded as money market funds and certain common trust funds of banks that invest in short term assets (short term investment funds) to hold a non-interest bearing special deposit with the Federal Reserve against increases in their total assets. The amount of the special deposit that must be held shall be equal to 15 per cent of the amount by which the assets of the creditor exceed the amount of such assets in the creditor's portfolio on March 14, 1980. The special deposit must be made in collected funds in U.S. dollars.

A creditor will be covered if its investment portfolio primarily consists of short-term securities, deposits, or other instruments with original or remaining maturities of 13 months or less through which it extends credit to banks, federal, state or local governmental units or agencies thereof, any corporation, partnership or other business entity, or any person. Covered creditors include both open and closed-end management companies and unit investment trusts. A series of shares or units of a registered investment company is a covered creditor if the investment assets which are included in the valuation of the shares or units in the series primarily have maturities of less than 13 months. Common trust funds of banks and trust companies are also included unless all moneys contributed to them are held by the bank or trust company incidentally to the management of other trust assets. Collective investment funds consisting of funds of retirement, pension, or other tax exempt trusts are not covered.

A covered creditor, other than a unit investment trust or series of units of such a trust ("Non-unit Creditor"), that possesses assets on March 14, 1980, shall file a base report with a Federal Reserve Bank by April 1, 1980. A Non-unit Creditor that acquires or holds assets or trust moneys that cause it to become a covered creditor after March 14, 1980, shall file a base report, within two weeks after it becomes a covered creditor. The base report will state the amount of the Non-unit Creditor's covered credit, which is defined as the total amount of its investment assets and other deposits plus accrued interest, held as of March 14, 1980, whether or not it was a covered creditor at that time. If the covered creditor was not in existence on March 14, 1980, its base amount is zero.

Thereafter, each Non-unit Creditor shall file a report monthly stating the daily average amount of its net assets during each reporting period by the 21st day of the month in which the reporting period ends. The reporting periods will run from the 15th day of each month to the 14th day of the following month. For example, the first reporting period will run from March 15 to April 14, 1980, and the second from April 15 to May 14, 1980. The report for the first reporting period must be filed by April 21, 1980, and for the second by May 21, 1980. Based upon this report, a covered creditor is required to maintain a special non-interest bearing deposit with the Federal Reserve Bank in the District in which its principal place of business is located equal to 15 per cent of the amount by which the reported average of covered credit exceeds the reported base. The special deposit shall be maintained during the period beginning on the first Thursday of the first full calendar month following the period for which the report was filed and ending on the day prior to the first Thursday of the next month. For example, the special deposit based upon the first report shall be held beginning May 1, 1980 and continue through June 4, 1980, at which time a special deposit based upon the second report shall be required.

A unit investment trust or series of units of such a trust ("Unit Creditor") that holds investment assets on March 14, 1980, need not file reports or maintain special deposits, as their assets are fixed as of the date they are transferred to the trust and will not increase after March 14, 1980. A Unit Creditor that is established, by the transfer of investment assets to the trustee, after March 14, 1980, must file immediately upon acquisition of assets by the trust, a base report stating the amount of covered credit held by the trust. Each such Unit Creditor must maintain a special deposit equal to 15 per cent of the covered credit it holds. The special deposit must be maintained during the period beginning with the acquisition of assets by the Unit Creditor and ending on the day prior to termination of the trust pursuant to the terms of the trust agreement. A Unit Creditor is only required to file reports and maintain deposits if, at its inception, its assets primarily have original or remaining maturities of less than 13 months. A Unit Creditor whose assets at its inception had longer maturities, but whose asset maturities fall below 13 months as the termination of the trust approaches is not required to report or to maintain a special deposit.

For a covered creditor that is a series of shares or units of a registered investment company, reports should be filed and deposits maintained by the registered investment company. If the entire investment company which issues such a series is a covered creditor, the entire company may file a single report and maintain a single deposit. Otherwise the investment company must file a separate report and maintain a separate deposit for each series that is a covered creditor. Maintenance of a special deposit at a Federal Reserve Bank does not entitle covered creditors to Federal Reserve services.

Recent strong demands for money and credit, generated in part by inflationary forces, have brought heavy pressure on credit and financial markets generally, with varying impacts on particular sectors of the economy. The creditors covered by this Subpart act as financial intermediaries, accepting funds from investors who desire a stable, liquid, high income investment, and extending credit primarily through the purchase of money market instruments. Rapid expansion of credit extended by these creditors has contributed to the pressures by facilitating borrowing in the markets for Eurodollars, commercial paper, bankers acceptances, and other short-term liquid instruments. Moreover, the rapid expansion of such creditors has tended to impede reasonable flows of credit to other sectors including housing, small businesses, and farmers. Restraint on the growth of money market funds and similar creditors will enable funds to flow in more usual measure to productive uses, and thus contribute to dampening inflationary forces.

These actions are being taken to curb inflationary pressures. The Board believes that it is in the national interest to achieve this objective as quickly as possible, and that publication of this rule for comment or any delay in its effective date would lead to rapid increases in extensions of credit that would not be subject to the regulation and would frustrate its purpose. The Board therefore finds for good cause that further notice, public procedure, and deferral of effective date provisions of 5 U.S.C. § 553(b) with regard to these actions are impracticable and contrary to the public interest.

Pursuant to its authority under the Credit Control Act (12 U.S.C. §§ 1901-1909) the Board hereby adopts Subpart B of its Credit Restraint regulation (12 C.F.R. § 229) effective March 14, 1980, as follows:

SECTION 229.11--AUTHORITY, PURPOSE, AND SCOPE

(a) Authority. This Subpart is issued by the Board of Governors of the Federal Reserve System pursuant to the Credit Control Act (12 U.S.C. §§ 1901 - 1909), as implemented by Executive Order 12201.

(b) Purpose and Scope. This Subpart is intended to curb inflation generated by the extension of credit by certain of those financial intermediaries which are not subject to either the amendments of law effected by Pub. L. 89-597, as amended, or section 19 of the Federal Reserve Act, as amended (12 U.S.C.§461), and which are primarily engaged in the extension of short-term credit, specifically money market funds and other similar creditors.

SECTION 229.12--DEFINITIONS

(a) For the purposes of this Subpart, the terms "credit," "creditor," and "extension of credit" shall have the meanings given them in the Credit Control Act. In addition, the following definitions apply.

(b) "Base" means the amount[1/] of covered credit held by a covered creditor as of the close of business on March 14, 1980.

(c) "Covered credit" means any extension of credit originated through the acquisition of a security, deposit, or other instrument, including but not limited to domestic and Eurodollar certificates of deposit, U.S. Treasury bills, repurchase agreements, commercial paper, bankers acceptances, and state and local government obligations, and any interest accrued thereon.

1/ Assets should be valued for purposes of this Subpart by the same procedure used by a registered investment company to value assets in calculating net share or unit value under the Investment Company Act of 1940 and rules promulgated thereunder.

(d) "Covered creditor" means any creditor (1) that is (A) an investment company registered with the Securities and Exchange Commission under the Investment Company Act of 1940, (B) any series of shares or units of such a company, or (C) any common trust fund or similar fund maintained by a bank or trust company exclusively for the collective investment and reinvestment of moneys contributed thereto by the bank or trust company in its capacity as a trustee, unless all moneys contributed thereto are held incidentally to the management of other trust assets; and (2) whose investment portfolio consists primarily of securities, deposits or other instruments, including but not limited to domestic and Eurodollar certificates of deposit, U.S. Treasury bills, repurchase agreements, commercial paper, and state and local obligations with maturities of 13 months or less. However, a unit investment trust is only a covered creditor if its investment portfolio consists primarily of securities, deposits, or other instruments with maturities of 13 months or less[2/] at the time the unit investment trust acquires those assets.

(e) "Security" means any security as defined in the Securities Act of 1933.

(f) "Unit investment trust" means any unit investment trust as defined in the Investment Company Act of 1940, or a series of units of such a trust.

SECTION 229.13--REPORTS

(a) Each covered creditor except a unit investment trust shall file a base report and periodic reports. The base report shall state the amount of the covered creditor's base and shall be submitted no later than April 1, 1980, or in the case of a covered creditor that becomes a covered creditor after March 14, 1980, within two weeks of acquiring or holding assets or accepting trust moneys that cause it to become a covered creditor. Periodic reports shall be filed monthly for each period running from the 15th day of each calendar month to the 14th day of the following month, or in the case of a covered creditor that becomes a covered creditor after March 14, for each full period after it becomes a covered creditor. These reports shall be submitted by the 21st day of the month in which the reporting period ends, and shall state the amount by which the average of the daily amounts of covered credit outstanding during the reported period exceeds the base.

2/ This includes variable rate securities, deposits or other instruments with longer nominal maturities but with interest rates subject to adjustment at intervals shorter than 13 months.

(b) A covered creditor that is a unit investment trust established after March 14, 1980, shall file a base report stating the amount of covered credit it holds. This report shall be filed immediately upon acquisition of investment assets by the unit investment trust. Each such covered creditor shall also notify the appropriate Federal Reserve Bank two weeks before termination of the trust stating the projected date of termination of the trust.

(c) All reports shall be filed with the Federal Reserve Bank in the District where the covered creditor has its principal place of business.

SECTION 229.14--MAINTENANCE OF SPECIAL DEPOSIT

(a) Each covered creditor that is not a unit investment trust shall maintain a non-interest bearing special deposit equal to 15 per cent of the amount by which the average of the daily amounts of its covered credit outstanding during each reporting period exceeds its base. The corresponding period during which the special deposit shall be maintained begins on the first Thursday of the first full calendar month following the period for which the report was filed and ends on the day prior to the first Thursday of the following month. The special deposit shall be maintained at the Federal Reserve Bank to which the covered creditor reports.

(b) Each covered creditor that is a unit investment trust established after March 14, 1980, shall maintain a non-interest bearing special deposit equal to 15 per cent of the covered credit it holds as of the date it acquires investment assets. This special deposit shall be maintained during the period beginning with the day the covered creditor acquires assets consisting of covered credit and ending one day prior to final distribution of trust assets by the Trustee pursuant to the terms of the trust agreement. The special deposit shall be maintained at the Federal Reserve Bank to which the covered unit investment trust reports. Upon two weeks notice, the special deposit will be returned to the trustee one day prior to maturity or final distribution pursuant to the terms of the trust agreement.

(c) Special deposits shall be maintained in collected funds in the form of U.S. dollars.

SECTION 229.15--PENALTIES

For each willful violation of this Subpart, the Board may assess against any creditor, or officer, director or employee thereof who willfully

participates in the violation, a maximum civil penalty of $1,000. In addition, a maximum criminal penalty of $1,000 and imprisonment of one year may be imposed for willful violation of this Subpart.

Board of Governors of the Federal Reserve System, effective March 14, 1980.

(signed) Theodore E. Allison
Theodore E. Allison
Secretary of the Board

[SEAL]

TITLE 12--BANKS AND BANKING

CHAPTER II--FEDERAL RESERVE SYSTEM

SUBCHAPTER A--BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

(Docket No. R-0282)

Part 229--CREDIT RESTRAINT

[Subpart C]

Nonmember Commercial Banks

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: Pursuant to the Credit Control Act (12 U.S.C. §§ 1901 - 1909) as implemented by Executive Order 12201, the Board has adopted provisions requiring commercial banks that are not members of the Federal Reserve System to maintain a non-interest bearing special deposit with the Federal Reserve equal to 10 per cent of the amount by which the total of certain managed liabilities of those banks exceeds the amount of such managed liabilities outstanding during a base period. The purpose of this action is to better control the expansion of bank credit and thereby serve to dampen inflationary forces. The managed liabilities affected by this action include the total of (1) time deposits in denominations of $100,000 or more with original maturities of less than one year; (2) Federal funds borrowings with original maturities of less than one year from U.S. offices of certain depository institutions and from U.S. government agencies; (3) repurchase agreements with original maturities of less than one year on U.S. government and agency securities; and (4) Eurodollar borrowings from foreign banking offices, asset sales to related foreign offices, and foreign office loans to U.S. residents. The special deposit requirement will not apply to borrowings from the United States, principally in the form of Treasury tax and loan account note balances. The 10 per cent special deposit requirement will apply to the amount by which the daily average amount of an institution's total managed liabilities during a deposit computation period exceeds a base amount calculated generally as either the daily average amount of such liabilities outstanding during the base period (February 28 to March 12, 1980) or $100 million, whichever is greater.

EFFECTIVE DATE: The special deposit requirement is effective on marginal total managed liabilities outstanding during the seven-day computation period beginning March 13, 1980, and each seven day period thereafter. The non-interest bearing special deposit for the computation periods beginning March 13, 20, and 27, 1980 must be held during the deposit maintenance period beginning April 10, 1980. Thereafter the special deposit must be held during the seven day maintenance period beginning eight days after the end of the corresponding computation period.

FOR FURTHER INFORMATION CONTACT: Gilbert T. Schwartz, Assistant General Counsel, C. Baird Brown, Attorney, Paul S. Pilecki, Attorney, or Daniel L. Rhoads, Attorney, Legal Division, Board of Governors of the Federal Reserve System, Washington, D.C. 20551 (202/452-3000).

SUPPLEMENTARY INFORMATION: In accordance with the Credit Control Act (12 U.S.C. §§ 1901 - 1909) as implemented by Executive Order 12201, the Board has adopted this Subpart to require certain borrowers consisting of all commercial banks that are not members of the Federal Reserve System to maintain a non-interest bearing special deposit with the Federal Reserve System. This Subpart does not apply to United States branches and agencies of foreign banks that are subject to the Board's marginal reserve requirements (12 C.F.R. § 204.5(f)). Other United States branches and agencies of foreign banks are covered. The amount of the special deposit to be held will be equal to 10 per cent of the amount by which the daily average total of an institution's managed liabilities during a deposit computation period exceeds a base amount. Generally, an institution's base is the daily average amount of the institution's total managed liabilities outstanding during the base period (February 28 to March 12, 1980) or $100 million, whichever is greater. The managed liabilities on which the special deposit requirement will apply include the total of (1) time deposits in denominations of $100,000 or more with original maturities of less than one year; (2) Federal funds borrowings with original maturities of less than one year from U.S. offices of certain depository institutions and from U.S. government agencies; (3) repurchase agreements with original maturities of less than one year on U.S. government and agency securities; and (4) Eurodollar borrowings from foreign banking offices of the same institution or of other banks, asset sales to related foreign offices, and non-member commercial bank foreign office loans to U.S. residents.

Time Deposits of $100,000 or More

Managed liabilities subject to the special deposit requirement include deposits of the following types:

(a) Time deposits of $100,000 or more with original maturities of less than one year; and

(b) Time deposits of $100,000 or more with original maturities of less than one year represented by promissory notes, acknowledgements of advance, due bills, or similar obligations (written or oral) as provided in § 204.1(f) of Regulation D; and

(c) Time deposits of any denomination with remaining maturities of less than one year represented by ineligible bankers' acceptances or obligations issued by a bank's affiliate to the extent that the proceeds are supplied to the bank as provided in § 204.1(f) of Regulation D.

Credit balances of $100,000 or more with original maturities of 30 days or more but less than one year will also be treated as managed liabilities subject to the special deposit requirement. Time deposits subject to the special deposit requirement do not include savings deposits and Christmas club-type deposits.

Federal Funds and Repurchase Agreements

Certain Federal funds borrowings and repurchase agreements of non-member commercial banks are treated as managed liabilities subject to the special deposit requirement. Under this approach, the amount of borrowings with original maturities of less than one year from agencies of the United States and other non-exempt entities (together with other managed liabilities) that exceeds the institution's base, will be subject to the 10 per cent special deposit requirement. The Board believes that exempting Federal funds borrowings from institutions whose liabilities already are subject to Federal reserve requirements from the special deposit requirement is appropriate to facilitate the reserve adjustment process.

Borrowings from the United States government (principally in the form of Treasury tax and loan account note balances), however, will not be regarded as managed liabilities subject to the special deposit requirement. Borrowings with original maturities of less than one year from Federal agencies and instrumentalities such as the Federal Home Loan Bank Board and the Federal Home Loan Banks will be subject to the special deposit requirement.

In the past, the term "bank" has been defined by the Board to include commercial banks, savings banks, savings and loan associations, cooperative banks, credit unions, the Export-Import Bank, and Minbanc Capital Corporation (see 12 C.F.R. § 217.137). Borrowings from all such non-member institutions by non-member commercial banks will be regarded as managed liabilities subject to the special deposit requirement.

Borrowings from domestic offices of organizations that are required by the Board to maintain reserves will not be regarded as managed liabilities subject to the special deposit requirement. The institutions that currently are required to maintain reserves include member banks,

Edge Corporations engaged in the banking business (12 U.S.C. § 615), Agreement Corporations (12 U.S.C. §§ 601-604a), operations subsidiaries of member banks (12 C.F.R. § 204.117), and U.S. branches and agencies of foreign banks with worldwide banking assets in excess of $1 billion (12 U.S.C. § 3105).

Under the Board's action, borrowings in the form of repurchase agreements with original maturities of less than one year involving U.S. government and agency securities also would be regarded as managed liabilities subject to the special deposit requirement. Repurchase agreements entered into with U.S. offices of member banks or organizations that are required by the Board to maintain reserves with the Federal Reserve System would not be regarded as managed liabilities subject to the special deposit requirement. Repurchase agreements entered into by non-member commercial banks with nonexempt entities, such as non-member banks and nonbank dealers, will not be subject to the special deposit requirement if such transactions are intended to provide collateral to nonexempt entities in order to engage in repurchase transactions with the Federal Reserve System Open Market Account.

In order to continue to facilitate the activities of bank dealers in the U.S. government and agency securities markets, and to provide competitive equality between bank and nonbank dealers, the amendment permits non-member commercial banks to deduct the amount of U.S. government and agency securities held by the institution in its trading account from the total amount of its repurchase agreements entered into in determining the amount of its repurchase agreements subject to the special deposit requirement. A trading account represents the U.S. government and agency securities that are held for dealer transactions--i.e., securities purchased with the intention that they will be resold rather than held as an investment. The Board expects that institutions will not reclassify U.S. government and agency securities held in their investment or other accounts to their trading accounts for the purpose of avoiding special deposit requirements.

Managed liabilities subject to the 10 per cent special deposit requirement also will include any obligation that arises from a borrowing for one business day from a dealer in securities whose liabilities are not subject to the reserve requirements of the Federal Reserve Act of proceeds of a transfer of deposit credit in a Federal Reserve Bank (or other immediately available funds), received by such dealer on the date of the loan in connection with clearance of securities transactions.

Eurodollars

The Board also has included the Eurodollar borrowings of non-member commercial banks as managed liabilities subject to the special deposit requirement. Consequently, the amount of Eurodollars (together with other managed liabilities) of a bank that exceeds the institution's base will be subject to the 10 per cent special deposit requirement. Such Eurodollars include the institution's daily average balance of (1) borrowings with original maturities of less than one year from foreign offices of other banks and institutions that are exempt from interest rate limitations pursuant to § 217.3(g) of Regulation Q; (2) net balances due from an institution's domestic offices to its foreign offices; (3) liabilities of an institution's foreign branches to the extent that the branches hold assets (including participations) acquired from its domestic offices or has credit outstanding from the bank's foreign offices to U.S. residents.

Computation and Maintenance of Non-Interest Bearing Special Deposits

The amount of special deposits that a bank will be required to maintain each week will be determined by the amount by which the total of the institution's managed liabilities during a corresponding seven-day computation period exceeds its base of managed liabilities. The base amount for a bank that is a net borrower of managed liabilities is $100 million, or the daily average amount of its managed liabilities during the fourteen-day base period ending March 12, 1980, reduced by an adjustment for the reduction in its foreign lending from domestic offices, whichever is greater. The adjustment for any given computation period is based on the difference between the sum of its gross loans to non-United States residents and gross balances due from foreign offices of other institutions, and the lowest gross total of such lending for any computation week beginning after March 12, 1980. That difference is then rounded down to the largest lower multiple of $2 million and subtracted from the daily average of managed liabilities for the base period. For example, if a bank has $125 million of average managed liabilities and $40 million in gross lending to foreign borrowers and institutions during the base period, and $35 million of gross lending to foreign borrowers and institutions during the week beginning March 13, 1980, its base for that computation week would be $125 million minus $4 million = $121 million (where $4 million is derived from $40 million minus $35 million = $5 million which is rounded to $4 million). If in a later week the gross lending to foreign borrowers and institutions rises to $45 million, the base remains at $121 million. If in a later week the gross lending to foreign borrowers and institutions falls to $10 million, the reduction would be $40 million minus $10 million = $30 million (no rounding needed), thus the calulated base would be $125 million minus $30 million = $95 million, but the reported base amount would be $100 million,

which is a permanent floor for the base amount. The special deposit would be 10 per cent of the difference between its managed liabilities for the computation week and the $100 million base.

Rounding the reduction in the base will serve to minimize the impact of small repayments or reductions in the daily average gross loans to non-United States residents and balances due from foreign offices of other institutions. The reduction in such lending below the daily average for the base period ending March 12, 1980 will only reduce the base in increments of $2 million. This approach will enable institutions to receive ordinary repayments of foreign loans without being required to relend such funds immediately to avoid a reduction in the base.

For an institution that is a net lender of managed liabilities (that is, the sum of its managed liabilities is negative because its net Eurodollar loans to its foreign offices are greater than the total of its large time deposits, Federal funds purchased, repurchase agreements, and borrowed Eurodollars), its base will be the algebraic sum of its managed liabilities during the base period ending March 12, 1980, and $100 million. For example, if an institution has negative $150 million of managed liabilities during the base period, its base will be negative $50 million, and special deposit requirements will apply to the amount of its total managed liabilities above that amount. If such an institution maintained a daily average of total managed liabilities during a computation period of negative $30 million, it would be required to maintain the 10 per cent special deposit requirement against $20 million of managed liabilities during the reserve maintenance period.

The special deposit must be maintained in collected funds in the form of U.S. dollars. Maintenance of a special deposit does not entitle a non-member bank to Federal Reserve services.

Restraint on growth in money and credit must be a fundamental part of the process of subduing inflationary forces. Growth in bank credit in recent months has been excessive. Therefore, the Board has adopted this special deposit requirement based on managed liabilities issued by nonmember banks. This requirement will impose restraint on the sources of funds that banks typically have used to finance the expansion of bank credit. The nonmember bank special deposit requirement complements the additional restraint the Board has imposed on similar liabilities of member banks. In the absence of this constraint, nonmember banks could continue to extend credit with few limitations. Borrowers that could not be accommodated at a member bank could turn to a nonmember bank, thereby undermining restraint on bank credit. Containing the growth of bank credit financed in large part by managed liabilities at nonmember banks will thus contribute to dampening inflationary forces.

These actions are being taken to help curb the expansion of bank credit, thereby dampening inflationary pressures. The Board believes that it is in the national interest to achieve this objective as quickly as possible, and that publication of this rule for comment or any delay in its effective date would lead to rapid increases in extensions of credit that would not be subject to the regulation and would frustrate its purpose. The Board therefore finds for good cause that the notice, public procedure, and deferral of effective date provisions of 5 U.S.C. § 553(b) with regard to these actions are impracticable and contrary to the public interest.

Pursuant to its authority under the Credit Control Act (12 U.S.C. §§ 1901 - 1909) the Board hereby adopts Subpart C of its regulation regarding Credit Restraint (12 C.F.R. § 229) effective March 14, 1980, 1980, as follows:

SECTION 229.21--AUTHORITY, PURPOSE, AND SCOPE

(a) Authority. This Subpart is issued by the Board of Governors of the Federal Reserve System pursuant to the Credit Control Act (12 U.S.C. §§ 1901 - 1909), as implemented by Executive Order 12201.

(b) Purpose and Scope. This Subpart is intended to curb inflation by controlling the expansion of credit extended by commercial banks that are not members of the Federal Reserve System that is supported by extensions of credit to those banks in the form of managed liabilities.

SECTION 229.22--DEFINITIONS

(a) For the purposes of this Subpart, the terms "credit," and "extension of credit" shall have the meanings given them in the Credit Control Act. In addition, the following definitions apply.

(b) "Covered bank" means any commercial bank that is not a member of the Federal Reserve System, or required to maintain reserves under the Federal Reserve Act.

(c) "Member bank" means any bank that is a member of the Federal Reserve System.

SECTION 229.23--REPORTS

Each covered bank shall file with the Federal Reserve Bank for the Federal Reserve district in which its head office is located such reports as shall be required in connection with the maintenance of a special deposit under this Subpart.

SECTION 229.24--MAINTENANCE OF SPECIAL DEPOSIT

(a) During the seven-day deposit maintenance period beginning April 10, 1980, each covered bank shall maintain a non-interest bearing special deposit equal to 10 per cent of the sum of the amounts by which the daily average of its total managed liabilities during each of the seven-day computation periods beginning March 13, 20, and 27 exceeds its managed liabilities base as determined in accordance with paragraph (b). During the seven-day deposit maintenance period beginning April 17, 1980, and each deposit maintenance period thereafter, each covered bank shall maintain a non-interest bearing special deposit equal to 10 per cent of the amount by which the daily average of its total managed liabilities during the seven-day computation period ending eight days prior to the beginning of the corresponding seven-day deposit maintenance period exceeds its managed liabilities base as determined in accordance with paragraph (b). A covered bank's managed liabilities are the total of the following:

(1)(A) time deposits of $100,000 or more with original maturities of less than one year;

(B) time deposits of $100,000 or more with original maturities of less than one year representing borrowings in the form of promissory notes, acknowledgments of advance, due bills, or similar obligations as provided in § 204.1(f) of Regulation D; and

(C) time deposits with remaining maturities of less than one year represented by ineligible bankers' acceptances or obligations issued by a bank's affiliate, as provided in § 204.1(f) of Regulation D. However, managed liabilities do not include savings deposits, or time deposits, open account that constitute deposits of individuals, such as Christmas club accounts and vacation club accounts that are made under written contracts providing that no withdrawal shall be made until a certain number of periodic deposits have been made during a period of not less than three months;

(2) any obligation with an original maturity of less than one year that is issued or undertaken as a means of obtaining funds to be used in its banking business in the form of a promissory note, acknowledgment of advance, due bill, ineligible bankers' acceptance, repurchase agreement (except on a U.S. or agency security), or similar obligation (written or oral) issued to and held for the account of a domestic banking office or agency[1/] of another commercial bank or trust company that is not required to maintain reserves pursuant to Regulation D, a savings bank (mutual or stock), a building or savings and

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1/ Any banking office or agency in any State of the United States or the District of Columbia of a bank organized under domestic or foreign law.

loan association, a cooperative bank, a credit union, or an agency of the United States, the Export-Import Bank of the United States, Minbanc Capital Corporation and the Government Development Bank for Puerto Rico;

(3) any obligation with an original maturity of less than one year that is issued or undertaken as a means of obtaining funds to be used in its banking business in the form of a repurchase agreement arising from a transfer of direct obligations of, or obligations that are fully guaranteed as to principal and interest by, the United States or any agency thereof that the institution is obligated to repurchase except repurchase agreements issued to a domestic banking office or agency of a member bank, or other organization that is required to maintain reserves under Regulation D pursuant to the Federal Reserve Act,[2/] to the extent that the amount of such repurchase agreements exceeds the total amount of United States and agency securities held by the covered bank in its trading account;

(4) any obligation that arises from a borrowing by a covered bank from a dealer in securities that is not a member bank or other organization that is required to maintain reserves pursuant to Regulation D,[2/] for one business day, of proceeds of a transfer of deposit credit in a Federal Reserve Bank (or other immediately available funds), received by such dealer on the date of the loan in connection with clearance of securities transactions;

(5) borrowings with an original maturity of less than one year from foreign offices of other banks and from institutions that are exempt from interest rate limitations pursuant to § 217.3(g) of Regulation Q;

(6) net balances due from the covered bank's domestic offices to its foreign branches;

(7) liabilities of a foreign branch of the covered bank to the extent that the foreign branch holds assets (including participations) acquired from the covered bank's domestic offices; and

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2/ Edge Corporations engaged in banking, Agreement Corporations, operations subsidiaries of member banks and U.S. branches and agencies of foreign banks with worldwide banking assets in excess of $1 billion.

(8) liabilities of a foreign branch of the covered bank to the extent that it has credit outstanding from its foreign branches to U.S. residents[3/] (other than assets acquired and net balances due from its domestic offices). Provided, That this paragraph does not apply to credit extended (1) in the aggregate amount of $100,000 or less to any United States resident, (2) by a foreign branch which at no time during the computation period had credit outstanding to United States residents exceeding $1 million, (3) under binding commitments entered into before May 17, 1973, or (4) to an institution that will be maintaining reserves on such credit under paragraphs (c) or (f) of section 204.5 of Regulation D or under Regulation K.

(b) Managed liabilities base. During the seven-day deposit computation period beginning March 13, 1980, and during each seven-day deposit computation period thereafter, the managed liabilities base of a covered bank shall be determined as follows:

(1) For a covered bank that, on a daily average basis, is a net borrower of total managed liabilities during the fourteen-day base period ending March 12, 1980, its managed liabilities base shall be the daily average of its total managed liabilities during the base period reduced by the amount by which its lowest daily average of gross loans to non-United States residents[3/] and gross balances due from foreign offices of other institutions[4/] or institutions the time deposits of which are exempt from the rate limitations of Regulation Q pursuant to § 217.3(g) thereof[5/] outstanding during any computation period after March 12, 1980, is lower than the daily average amount of such loans and balances outstanding during the base period. The amount of the reduction shall be rounded down to the largest lower multiple of $2 million.

3/ A United States resident is: (a) any individual residing (at the time the credit is extended) in any State of the United States or the District of Columbia; (b) any corporation, partnership, association or other entity organized therein ("domestic corporation"); and (c) any branch or office located therein of any other entity wherever organized. Credit extended to a foreign branch, office, subsidiary, affiliate or other foreign establishment ("foreign affiliate") controlled by one or more such domestic corporations will not be deemed to be credit extended to a United States resident if the proceeds will be used in its foreign business or that of other foreign affiliates of the controlling domestic corporation(s).

4/ Any banking office located outside the States of the United States and the District of Columbia of a bank organized under domestic or foreign law.

5/ A foreign central bank, or any international organization, of which the United States is a member, such as the International Bank for Reconstruction and Development (World Bank), International Monetary Fund, Inter-American Development Bank, and other foreign international, or supranational entities exempt from interest rate limitations under § 217.3(g)(3) of Regulation Q (12 C.F.R. § 217.3(g)(3)).

However, in no event will the managed liabilities base for a covered bank that was a net borrower of managed liabilities during the fourteen-day base period ending March 12, 1980, be less than $100 million.

(2) For a covered bank that, on a daily average basis, is a net lender of total managed liabilities during the fourteen-day base period ending March 12, 1980, its managed liabilities base shall be the sum of its daily average negative total managed liabilities and $100 million.

(c) The special deposit shall be maintained at the Federal Reserve Bank to which the covered bank reports. The special deposit must be maintained in collected funds in the form of U.S. dollars.

SECTION 229.25--PENALTIES

For each willful violation of this Part, the Board may assess against any creditor, or officer, director or employee thereof who willfully participates in the violation, a maximum civil penalty of $1,000. In addition, a maximum criminal penalty of $1,000 and imprisonment of one year may be imposed for willful violation of this Part.

Board of Governors of the Federal Reserve System, effective March 14, 1980.

(Signed) Theodore E. Allison

Theodore E. Allison
Secretary of the Board

[SEAL]

FEDERAL RESERVE press release

For use at 6:30 p.m.
Thursday, February 7, 1980

February 7, 1980

The Federal Reserve Board today announced new definitions of money that will henceforth be used in the conduct of monetary policy.

The redefinitions, which have been under study for several years, were prompted by many financial developments which have reduced the significance of the old measures. Among these developments are the emergence of NOW accounts, automatic transfer services (ATS), money market mutual funds and a growing similarity between deposits in commercial banks and thrift instituions.

One of the new definitions is essentially the same as the old narrowly defined money supply (M_1) while a second concept will include transaction accounts of all depositary institutions.

The new definitions of money are as follows:

M-1A -- Currency plus demand deposits at commercial banks. This is essentially the same as the old M_1 with one exception--it excludes demand deposits held by foreign banks and official institutions.

M-1B -- This equals M-1A plus other checkable deposits at all depositary institutions including NOW accounts, ATS, credit union share drafts and demand deposits at mutual savings banks.

M_2 -- This equals M-1B plus savings and small-denomination time deposits at all depositary institutions, overnight RPs at commercial banks, overnight Eurodollars held by U.S. residents other than banks at Caribbean branches of member banks, and money market mutual fund shares.

M_3 -- This equals M_2 plus large-denomination time deposits at all depositary institutions and term RPs at commercial banks and savings and loan associations.

The Board also adopted a broad measure of liquid assets, L. This equals M_3 plus other liquid assets not included elsewhere such as term Eurodollars held by U.S. residents other than banks, bankers acceptances, commercial paper, Treasury bills and other liquid Treasury securities and U.S. savings bonds.

In addition to regular publication of these new measures, the Board will publish their principal components.

A detailed explanation of the new measures will be published in the February issue of the Federal Reserve Bulletin.

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For use at 6:30 p.m.
Thursday, February 7, 1980

February 7, 1980

The attached article on redefinition of the monetary aggregates will appear in the February issue of the Federal Reserve Bulletin.

THE REDEFINED MONETARY AGGREGATES

I. Background

The Federal Reserve has redefined the monetary aggregates. This action was prompted by the many financial developments that have altered the meaning and reduced the significance of the old measures. Some of these developments have been associated with the emergence in recent years of new monetary assets--for example, NOW accounts and money market mutual fund shares--while others have altered the basic character of standard monetary assets--for example, the growing similarity of and the growing substitution between the deposits of thrift institutions and those of commercial banks.[1/] In the process of redefinition a set of Board staff proposals was published in January 1979.[2/] Comments on these proposals received from the public and from invited experts, together with deliberations within the Federal Reserve System and further research by Federal Reserve staff, contributed to the Board's selection of the newly defined measures.

Given the changes that have occurred in financial practices in recent years, the new measures should aid both the Federal Reserve and the public in interpreting monetary developments. However, many of the changes in the payments mechanism and in the character of financial assets that have rendered such a redefinition necessary--some of which are ongoing--have also added significantly to the complexity of the monetary system. As

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1/ A discussion of many of these developments can be found in, "A Proposal for Redefining the Monetary Aggregates," Federal Reserve Bulletin (January 1979), pp. 14-17.

2/ See "A Proposal," pp. 13-42. The potential need for redefinition, in light of numerous financial innovations, was recognized by the Advisory Committee on Monetary Statistics. See Improving the Monetary Aggregates: Report of the Advisory Committee on Monetary Statistics (Board of Governors of the Federal Reserve System, June 1976), pp. 5-6, 9-12.

a consequence, it is recognized that no one set of monetary aggregates can satisfy every purpose or every user. For this reason, the principal components of the new measures--along with several related series--will be published regularly with the new aggregates. In this way, users will be able to analyze separately the components and to construct alternative measures.

The following section, Section II, presents the new aggregates and compares them to the old measures. This is followed in Section III by a discussion of the rationale underlying the redefinition. The historical behavior of the new aggregates is examined in Section IV. A final section, Section V, discusses some technical issues associated with the redefined measures: consolidation and seasonal adjustment procedures used in constructing the redefined aggregates and new data sources used in the redefinition. Three appendix tables contain annual and quarterly rates of growth of the new measures and their old counterparts.

II. The New Monetary Aggregates

Four newly defined monetary aggregates replace the old M-1 through M-5 measures. In addition, a broad measure of liquid assets has been adopted. The new aggregates are presented in Table 1. Two narrow transactions measures--M-1A and M-1B--have been adopted. M-1A is basically the same as the old M-1 aggregate, except that it excludes demand deposits held by foreign commercial banks and official institutions.[1/] The other narrow measure--M-1B--adds to M-1A interest-earning checkable deposits at all depositary institutions--namely negotiable order of withdrawal (NOW)

1/ The removal of demand deposits due to foreign commercial banks and official institutions follows a recommendation of the Advisory Committee on Monetary Statistics. See Improving the Monetary Aggregates: Report, pp. 15-19.

Table 1

New Measures of Money and Liquid Assets

Aggregate	Component	Amount in billions of dollars (not seasonally adjusted) November 1979
M-1A		372.2
	Currency	106.6
	Demand deposits 1/	265.6
M-1B		387.9
	M-1A	372.2
	Other checkable deposits 2/	15.7
M-2		1510.0
	M-1B	387.9
	Overnight RPs issued by commercial banks	20.3
	Overnight Eurodollar deposits held by U.S. nonbank residents at Caribbean branches of U.S. banks	3.2
	Money market mutual fund shares	40.4
	Savings deposits at all depositary institutions	420.0
	Small time deposits at all depositary institutions 3/	640.8
	M-2 consolidation component 4/	-2.7
M-3		1759.1
	M-2	1510.0
	Large time deposits at all depositary institutions 5/	219.5
	Term RPs issued by commercial banks	21.5
	Term RPs issued by savings and loan associations	8.2
L		2123.8
	M-3	1759.1
	Other Eurodollars of U.S. residents other than banks	34.5
	Bankers acceptances	27.6
	Commercial paper	97.1
	Savings bonds	80.0
	Liquid Treasury obligations	125.4

Note: Components of M-2, M-3 and L measures generally exclude amounts held by domestic depositary institutions, foreign commercial banks and official institutions, the U.S. Government (including the Federal Reserve), and money market mutual funds. Exceptions are bankers acceptances and commercial paper for which data sources permit the removal only of amounts held by money market mutual funds and, in the case of bankers acceptances, amounts held by accepting banks, the Federal Reserve, and the Federal Home Loan Bank System.

1/ Net of demand deposits due to foreign commercial banks and official institutions.

2/ Includes NOW, ATS and credit union share draft balances and demand deposits at thrift institutions.

3/ Time deposits issued in denominations of less than $100,000.

4/ In order to avoid double counting of some deposits in M-2, those demand deposits owned by thrift institutions (a component of M-1B) which are estimated to be used for servicing their savings and small time deposit liabilities in M-2 are removed.

5/ Time deposits issued in denominations of $100,000 or more.

accounts, automatic transfer from savings (ATS) accounts, and credit union share draft balances--as well as a small amount of demand deposits at thrift institutions that cannot, using present data sources, be separated from interest-earning checkable deposits.[1/] The new M-2 measure adds to M-1B overnight repurchase agreements (RPs) issued by commercial banks and certain overnight Eurodollars held by U.S. nonbank residents,[2/] money market mutual fund shares, and savings and small-denomination time deposits at all depositary institutions.[3/] Also, in order to avoid double counting of some deposits in this aggregate, the construction of the new M-2 involves subtracting a consolidation component--an estimate of those demand deposits thrift institutions use in servicing their savings and time deposit liabilities included in this aggregate.[4/] Redefined M-3 is equal to new M-2 plus large-denomination time deposits at all depositary institutions (including negotiable CDs) plus term RPs issued by commercial banks and savings and loan

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1/ M-1B is the same as the M-1 measure that was proposed by the Board staff in January 1979. See "A Proposal," pp. 17-20.

2/ Overnight Eurodollars in M-2 are those issued by Caribbean branches of member banks. Other overnight Eurodollars and longer-term Eurodollars of U.S. residents are included in the broad measure of liquid assets, L. Data on overnight Eurodollars included in M-2 are available on a timely basis, but data on other Eurodollars--at both U.S. and non-U.S. banks abroad--are available only with a lengthy lag and do not permit a separation of overnight from term Eurodollars. As improved data sources become available, adjustments may be made to the new measures. For example, the possible inclusion of Eurodollars held by nonresidents other than banks and official institutions could be reviewed. Moreover, with Eurodollar data on a more timely basis, consideration could be given to including Eurodollars of longer than overnight maturities in a broader monetary aggregate, rather than only in L.

3/ Small-denomination time deposits are those issued in denominations of less than $100,000. Depositary institutions are commercial banks (including U.S. agencies and branches of foreign banks, Edge Act Corporations, and foreign investment companies), mutual savings banks, savings and loan associations, and credit unions.

4/ At present, because of the small amount of checkable deposits at thrifts, this M-2 consolidation adjustment removes all demand deposit holdings of mutual savings banks and savings and loan associations. See Section IV for a further discussion of consolidation procedures.

associations.[1/] Finally, the very broad measure of liquid assets--L--equals new M-3 plus other liquid assets consisting of other Eurodollar holdings of U.S. nonbank residents,[2/] bankers acceptances, commercial paper, savings bonds, and marketable liquid Treasury obligations.[3/]

The relationship between the redefined and the old monetary aggregates is shown in Table 2. As already noted, the new M-1A measure is very similar to the old M-1 and differs in excluding demand deposits owned by foreign commercial banks and official institutions.[4/] M-1B thus differs from the old M-1 by excluding these deposits, on the one hand, and, on the other, by including other checkable deposits at both commercial banks and thrift institutions. New M-2 is closer in concept to old M-3, which included savings and time deposits liabilities at all depositary institutions (other than negotiable CDs at large commercial banks), than it is to old M-2, which excluded the public's holdings of savings and time deposits at thrift institutions. The major differences between the new M-2 and old M-3 measures are that new M-2 includes money market mutual fund shares and overnight RPs and Eurodollars--none of which appeared in any of the old monetary aggregates--and that it excludes all large-denomination time deposits. The only large-denomination time deposits removed from the old M-3 (and the old M-2) measure were negotiable CDs at large commercial banks--amounting to $95.9 billion in November 1979--while, as the table shows, it contained $151.2 billion of other large-denomination time deposits at both commercial banks and thrift institutions. By including all large-denomination time deposits at all depositary institutions, the new M-3 is closer in concept to the old

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1/ Large-denomination time deposits are those issued in denominations of $100,000 or more.

2/ See footnote 2, page 4.

3/ In general, the components of M-2, M-3, and L exclude amounts held by depositary institutions, money market mutual funds, the Federal government (including the Federal Reserve), and foreign commercial banks and official institutions. Marketable liquid Treasury obligations are those with remaining maturities of 18 months or less.

4/ The new M-1A also includes a very small amount of M-1-type balances at certain U.S. banking offices of foreign banks outside New York City, which are not in the old M-1.

Table 2

Relationship Between New and Old Monetary Aggregates

Aggregate and Component	Amount in billions of dollars (not seasonally adjusted) November 1979
Old M-1	382.6
Less demand deposits of foreign commercial banks and official institutions	10.4
Equals: New M-1A[1/]	372.2
Plus other checkable deposits	15.7
Equals: New M-1B	387.9
Old M-2	945.3
Plus savings and time deposits at thrift institutions	664.2
Equals: Old M-3	1609.5
Plus overnight RPs and Eurodollars	23.4
Plus money market mutual fund shares	40.4
Plus demand deposits at mutual savings banks[2/]	1.0
Less large time deposits at all depositary institutions in current M-3	151.2
Less demand deposits of foreign commercial banks and official institutions	10.4
Less consolidation component[3/]	2.7
Equals: New M-2	1510.0
Plus large time deposits at all depositary institutions	219.5
Plus term RPs at commercial banks and savings and loan institutions	29.8
Equals: New M-3	1759.1
Memo:	
Old M-2	945.3
Plus negotiable CDs at large commercial banks	95.9
Equals: Old M-4	1041.2
Old M-3	1609.5
Plus negotiable CDs at large commercial banks	95.9
Equals: Old M-5	1705.4

1/ Also includes a very small amount of M-1-type balances at certain U.S. banking offices of foreign banks outside New York City which were not in the old M-1 measure.

2/ Demand deposits at mutual savings banks were not included in any of the old monetary aggregates.

3/ Consists of an estimate of demand deposits included in M-1B that are held by thrift institutions for use in servicing their savings and small time deposits liabilities included in the new M-2.

M-5 measure than to the old M-4 (both shown as memo items on Table 2). Of course, the new M-3 aggregate is more inclusive than the old M-5, since it contains RPs, certain overnight Eurodollar deposits, and money market mutual fund shares.

Some of the new aggregates and their components will continue to be published on a weekly basis while others will be available only monthly. The publication schedule calls for publication of weekly and monthly data on the new M-1A and M-1B measures.[1/] Data on redefined M-2 and M-3 will be available only on a monthly basis, on a schedule similar to that of old M-3.[2/] In addition, data on the domestic commercial bank components of the new measures, together with currency, money market mutual fund shares, and overnight Eurodollars, will be published on a weekly basis, while the other components will be available only on a monthly basis.

III. Underlying Rationale

The organizing principle underlying the redefined monetary aggregates is that of combining similar kinds of monetary assets at each level of aggregation. This principle has the largest impact on the new M-1B, M-2, and M-3 measures. Thus M-1B combines checkable deposits at thrift instututions--NOW deposits, credit union share draft balances, and demand deposits at mutual savings banks--with demand, NOW, and ATS balances at

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1/ The Federal Reserve intends to publish M-1A and M-1B on Fridays (except occasionally when holiday periods are involved), for the statement week ending nine days earlier.

2/ Monthly data on the new M-2 and M-3 measures normally will be published about 10 to 15 days following the end of the month. Because of lengthier delays associated with some of the other components of L, this aggregate will be published about 6 to 8 weeks following the end of each month.

commercial banks.[1/] Ordinary savings and small-denomination time deposits at commercial banks and thrift institutions are included in the new M-2. Moreover, money market mutual fund shares, whose liquidity characteristics are most like those of savings accounts, are also included in this measure, as are overnight RPs and Eurodollars. M-3 includes large-denomination time deposits at both commercial banks and thrift institutions, as well as term RPs.[2/]

Two M-1 measures were adopted primarily because of uncertainties that would arise during a transition period should legislation be enacted that permits NOW accounts to be offered nationwide. NOW accounts have properties of both a transactions-type account and a savings-type account, and thus newly opened NOW accounts would tend to attract funds both from household demand deposits and from savings accounts and other liquid assets.[3/] Evidence based on the NOW account experience in New England and New York State clearly indicates that during the transition period, when the bulk of NOW accounts was opened, growth in total NOW balances was buoyed by shifts from savings balances and other liquid assets. This suggests that during a

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1/ The Federal Reserve intends to include the volume of travelers checks of nonbank issuers at the M-1 level at some future time, once all major issuers begin submitting such data regularly to the Federal Reserve and once these data have been thoroughly reviewed. Travelers checks likely will be added to the new aggregates in conjunction with a benchmark or annual revision.

2/ Available evidence indicates that savings and loan associations are the only thrift institutions with a significant amount of RP liabilities outstanding. Moreover, nearly all of the savings and loan RPs are believed to be of the term variety.

3/ Turnover data on NOW accounts corroborate this point. The turnover rate of NOW accounts at both commercial banks and thrift institutions is approximately 10 per year; for comparison, the turnover rate for ordinary savings accounts is about 3 per year and that of consumer demand deposit accounts is estimated to be about 35 per year.

conversion period associated with nationwide NOW accounts, growth in M-1B could significantly overstate underlying growth in the public's transactions balances.[1/] M-1A, by contrast, would tend to understate such growth, as households converted demand deposit balances into NOW accounts. In practice, since the extent of shifting from demand deposits or other accounts to NOW accounts is uncertain, the availability of both M-1 measures is expected to help in the interpretation of narrow money stock growth during the transition period, should NOW accounts be offered nationwide.

Some other financial assets have been recommended for inclusion at the M-1 level, but for several reasons were not added in the new M-1A or M-1B measures. The most common recommendations have involved shares in money market mutual funds, RPs, and certain Eurodollars owned by U.S. residents. Each of these assets has transactions-related characteristics. Many money market mutual funds offer their customers check-writing privileges--subject to a minimum amount per check which has typically been $500--while balances placed in overnight RPs and in certain overnight Eurodollars are available for spending the next business day.[2/]

1/ The problem of seasonal adjustment would also be magnified by nationwide NOW accounts; the currency and demand deposit components of M-1A can be seasonally adjusted using historical data but historical data on NOW accounts and these other checkable balances appearing in M-1B are not yet sufficient for reliable seasonal adjustment. Conversions from demand deposit accounts to NOW accounts could also influence the seasonal behavior of the demand deposit component of M-1A, should the funds shifted from demand accounts and those remaining have different characteristics.

2/ Only Eurodollars settled in same-day or immediately available funds meet this condition. By contrast, an overnight Eurodollar deposit arranged in clearing house funds is not available for spending for two business days. Because of time zone considerations and other conveniences, it is believed that the bulk of overnight Eurodollars arranged in immediately available funds is at Caribbean branches.

However, these instruments also have attractive characteristics as liquid investments and their behavior in many portfolios appears to be influenced by such considerations. Evidence on turnover rates indicates that balances in money market funds turn over much like balances in ordinary savings accounts--about three times per year--and thus on the average are not being actively used for transactions purposes.[1/] Professional opinion currently is divided over whether RPs are mainly liquid investments or transaction-type balances. Some observers hold that RPs are very similar to demand deposits and that the unexpected weakness that has emerged in the public's demand for M-1-type measures at times since the mid-1970s can be traced largely to the behavior of RPs. Others stress that in practice RPs are qualitatively different from demand deposits--that they are more like other short-term investments--and that recent weakness in the public's demand for the narrow money stock was not mirrored in any single liquid asset, including RPs.[2/]

1/ Furthermore, empirical research by the staff indicates that the addition of money market mutual fund shares to M-1B has not on balance enhanced the performance of this aggregate since mid-1974.

2/ For those studies emphasizing the transactions properties of RPs, see Peter A. Tinsley, Bonnie Garrett, and Monica Friar, "The Measurement of Money Demand," (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Special Studies Section, November 1978; processed); Gillian Garcia and Simon Pak, "Some Clues in the Case of the Missing Money," American Economic Review, 69 (May 1979), pp. 330-34; and John Wenninger and Charles Sivesind, "Changing the M-1 Definition: An Empirical Investigation" (Federal Reserve Bank of New York, April 1979; processed). An alternative interpretation can be found in Richard D. Porter, Thomas D. Simpson, and Eileen Mauskopf, "Financial Innovation and the Monetary Aggregates," Brookings Papers on Economic Activity 1: 1979, pp. 213-29; Richard D. Porter and Eileen Mauskopf, "Cash Management and the Recent Shift in the Demand for Demand Deposits" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Econometric and Computer Applications Section, November 1978; processed); and Thomas D. Simpson, "The Market for Federal Funds and Repurchase Agreements," Staff Studies 106 (Board of Governors of the Federal Reserve System, July 1979), pp. 43-58. A summary and evaluation of some research on this subject can be found in John H. Kalchbrenner, "Recent Innovations in Financial Markets and Their Relationship to Money Demand," paper presented at the XI Meeting of Technicians of Central Banks of the American Continent, Port-of-Spain, Trinidad, November 19-24, 1978 (Board of Governors of the Federal Reserve System, November 1978; processed).

Nevertheless, in recognition of the increasingly prominent role played by these assets and their potential tranactions-related features, data on overnight RPs and Eurodollars and money market mutual fund shares will be conveniently shown in conjunction with figures for M-1A and M-1B on the first page of the weekly money stock release containing the money stock measures. Also, these items will be included in the new M-2 measure, as noted above.

In addition to money market mutual funds and overnight RPs and Eurodollars, savings and small-denomination time deposits are included at the M-2 level. Savings deposits and small-denomination time deposits have different liquidity characteristics.1/ Nevertheless, recent innovations--most importantly the six-month money market certificate and more recently the two-and-one-half year variable-ceiling certificate--have substantially added to the availability of attractive alternatives to holding savings balances, and have led to shifts from savings to these new time deposits at all depositary institutions. In addition, the six-month money market certificate has tended to reverse a trend toward longer maturities of small-denomination time deposits and thus to increase the overall liquidity of such deposits.

The share of small-denomination time deposits at commercial banks has been affected by regulatory changes applying to the ceiling rates that commercial banks have been able to offer on certain time accounts relative to

1/ Customers can normally withdraw funds from ordinary savings accounts when they wish, often by telephone, although depositary institutions have the right to require a 30-day notification prior to withdrawal. Time deposits, by contrast, are subject to a substantial penalty for withdrawal prior to maturity.

ceilings applicable to thrift institutions.[1/] As a consequence, the historical relationship between the public's demand for small-denomination time deposits at commercial banks and at thrift institutions has been altered in ways that cannot be fully determined at this time. Because small-denomination time deposits at both commercial banks and thrift institutions are combined in the M-2 aggregate, along with the savings deposit liabilities of both, shifts of these kinds affect only the composition of M-2 and not its size or rate of growth. Similarly, the growing availability of money market mutual fund shares has tended to reduce the public's demand for savings and small-denomination time deposits at commercial banks and thrift institutions, but such shifts are captured within the new M-2 aggregate, inasmuch as it includes money market mutual fund shares.[2/] Furthermore, growth in new M-2 likely would not be affected much by conversions to NOW accounts, should they become available nationwide, because funds absorbed by these accounts would be drawn mainly from other kinds of accounts included in this aggregate.

1/ Thrift institution shares of small-denomination time deposits were augmented following the introduction of the six-month certificate by a regulatory ceiling that permitted them to offer the auction rate on six-month Treasury bills; by comparison, the ceiling rate on these deposits at commercial banks was 25 basis points below the auction rate. However, in March 1979 the differential on money market certificate ceiling rates was removed--for aution rates on six-month bills in excess of 9 percent--and the commercial bank share of these deposits subsequently tended to expand.

2/ Empirical analyses by the staff indicate that the behavior of new M-2 in recent years has generally not departed far from what would be expected on the basis of longer-term historical relationships, in contract to old M-2 and some other measures of money. See David J. Bennett, Flint Brayton, Eileen Mauskopf, Edward K. Offenbacher, and Richard D. Porter, "Econometric Properties of the Redefined Monetary Aggregates" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Econometric and Computer Applications Section, February 1980; processed).

By including large-denomination time deposits, the new M-3 is most comparable to the old M-5 measure. The new M-3 aggregate also includes term RPs which have some similarities to large time deposits. The new M-3 definition is based on the view that large-denomination time deposits and term RPs substitute for each other in many portfolios and that these items, especially negotiable CDs, are relatively liquid.

The liquid assets, or L, measure adds to M-3 other liquid assets held by the public. Some of these are liabilities of depositary institutions--term Eurodollars held by U.S. nonbank residents and bankers acceptances--while others are obligations of the U.S. Treasury--savings bonds and liquid marketable debt.[1/] The commercial paper component consists of obligations of a variety of issuers, both financial institutions and nonfinancial corporations. Some observers note such a broad measure of liquid assets is especially meaningful because many financial innovations in recent years have altered the public's demands for narrower measures. They argue that these kinds of shifts are absorbed in a very broad aggregate, such as L, because reductions in demands for narrower measures of money are mirrored in increases in the demands for other components of the broadest measure, leaving demand for the total unaffected. Others who focus on the volume of credit view such an aggregate as better reflecting the amount of credit extended to the economy, both through the commercial banking system and through other channels.

1/ Eurodollar deposits of U.S. nonbank residents other than those overnight Eurodollars that are already incorporated at the M-2 level might appropriately be included in the new M-3 measure, since they share many characteristics with domestically issued, large-denomination time deposits. However, lags on obtaining data on such Eurodollars are much longer than for the other components of this aggregate, and staff work suggests that estimations of this component based on information that might be available on an earlier schedule would be subject to large revisions.

IV. Historical Behavior of the New Aggregates

An examination of the growth rates and velocities of the new measures affords a better understanding of their behavior and their relationship to the old measures.[1/] Chart 1 shows growth rates of M-1A and M-1B in the upper panel, and old M-1 in the lower panel.[2/] All three narrow measures have generally moved closely together. In recent years, though, M-1B has tended to increase more rapidly than either M-1A or old M-1, because of growth of NOW and ATS accounts. During 1979, for example, with shifts in monetary asset holdings in response to the availability of new deposit services, M-1B expanded at a rate that was 2-1/2 percentage points faster than M-1A and old M-1; this difference reflected conversions to NOW accounts in New York State and to ATS accounts nationwide.[3/] Average rates of growth of these measures over two long time periods and several cycles are shown in Table 3. The growth rates for all three have been very similar, both on a trend and a cyclical basis, except in the most recent expansion when, because of adjustment by the public to new deposit services, average annual growth in M-1B exceeded growth in M-1A and old M-1 by slightly more than 3/4 percentage points. Should NOW account powers be extended to depositary institutions nationwide, a more substantial differential in rates of growth between M-1A and M-1B could persist for some time.

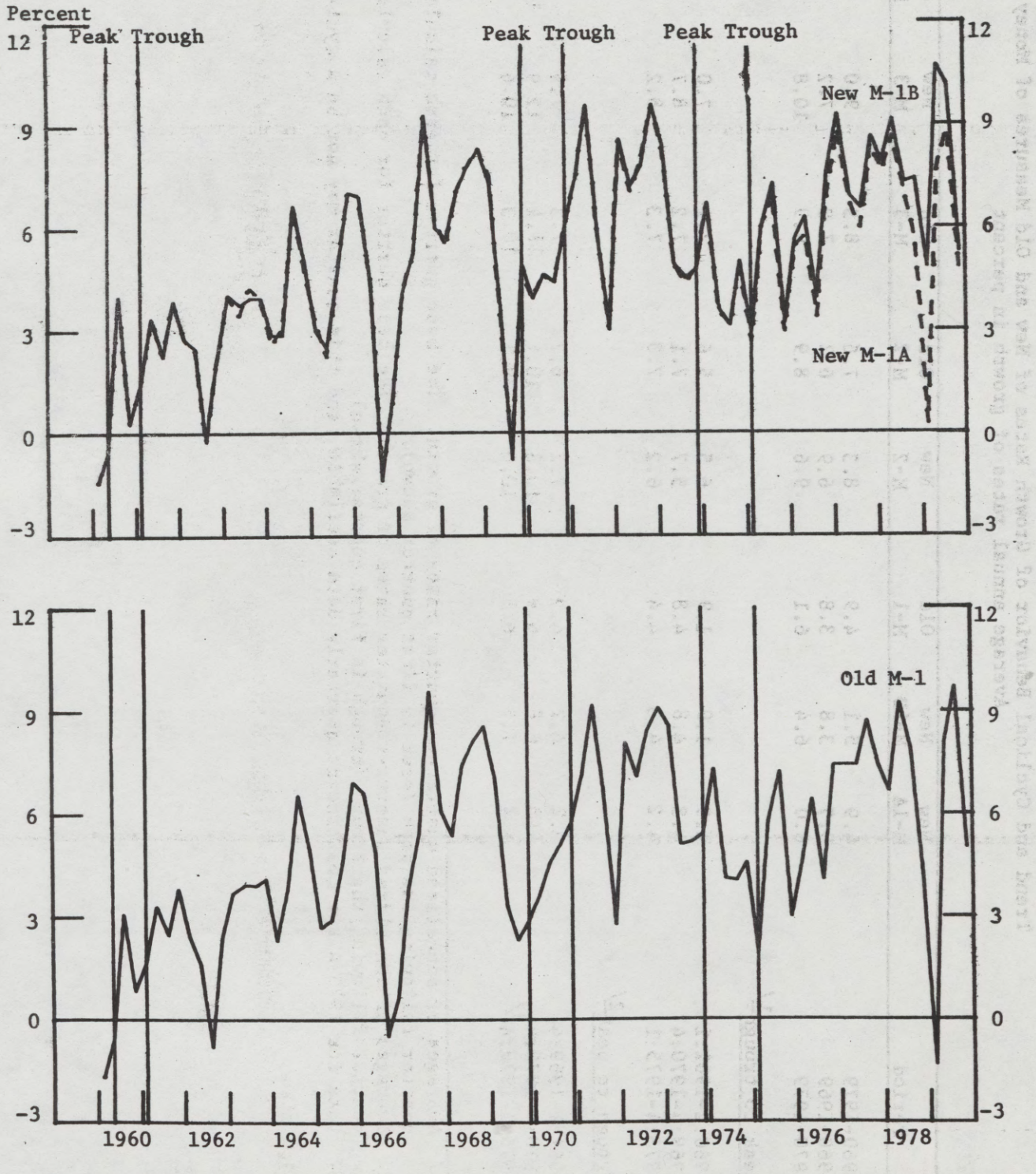
1/ For econometric evidence on the new aggregates, see Bennett and others, "Econometric Properties."

2/ Appendix Table 1 contains growth rates for these aggregates annually over the 1960 to 1979 period and quarterly for the years 1973 to 1979.

3/ A portion of this differential in growth rates can be attributed to conversions from demand deposit accounts to ATS and NOW accounts, and the remainder represents shifts from ordinary savings accounts and other liquid assets.

Chart 1

Rates of Growth of New and Old M-1 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

Table 3

Trend and Cyclical Behavior of Growth Rates of New and Old Measures of Money
Average annual rates of growth in percent

Period	New M-1A	New M-1B	Old M-1	New M-2	Old M-2	Old M-3	New M-3	Old M-4	Old M-5
1960-1979	4.9	5.1	4.9	8.3	7.6	8.5	9.0	8.1	8.8
1960-1969	3.7	3.8	3.8	6.9	6.2	7.0	7.2	6.5	7.2
1970-1979	6.0	6.4	6.1	9.6	8.9	9.9	10.8	9.6	10.3
Peak to trough[1/]									
1960:2-1961:1	1.9	1.9	1.9	6.5	5.6	7.1	7.0	5.7	7.2
1969:4-1970:4	4.8	4.8	4.8	5.7	7.1	7.2	8.7	9.8	8.9
1973:4-1975:1	4.2	4.3	4.4	6.2	7.3	7.3	8.2	9.7	8.8
Trough to peak[2/]									
1961:1-1969:4	4.2	4.2	4.2	7.2	6.7	7.3	7.5	7.0	7.5
1970:4-1973:4	6.8	6.8	6.9	10.8	10.1	11.4	12.9	11.8	12.5
1975:1-1979:4[3/]	6.2	7.1	6.3	10.6	9.1	10.3	10.6	8.1	9.7

1/ Averages of annualized quarter-to-quarter rates of growth. The base quarter for each calculation is the quarter following the peak (peak is first quarter shown).

2/ Averages of annualized quarter-to-quarter rates of growth. The base quarter for each calculation is the quarter following the trough (trough is first quarter shown).

3/ Data for 1979:4 are most recent quarterly data available, and this quarter may not be a cyclical peak.

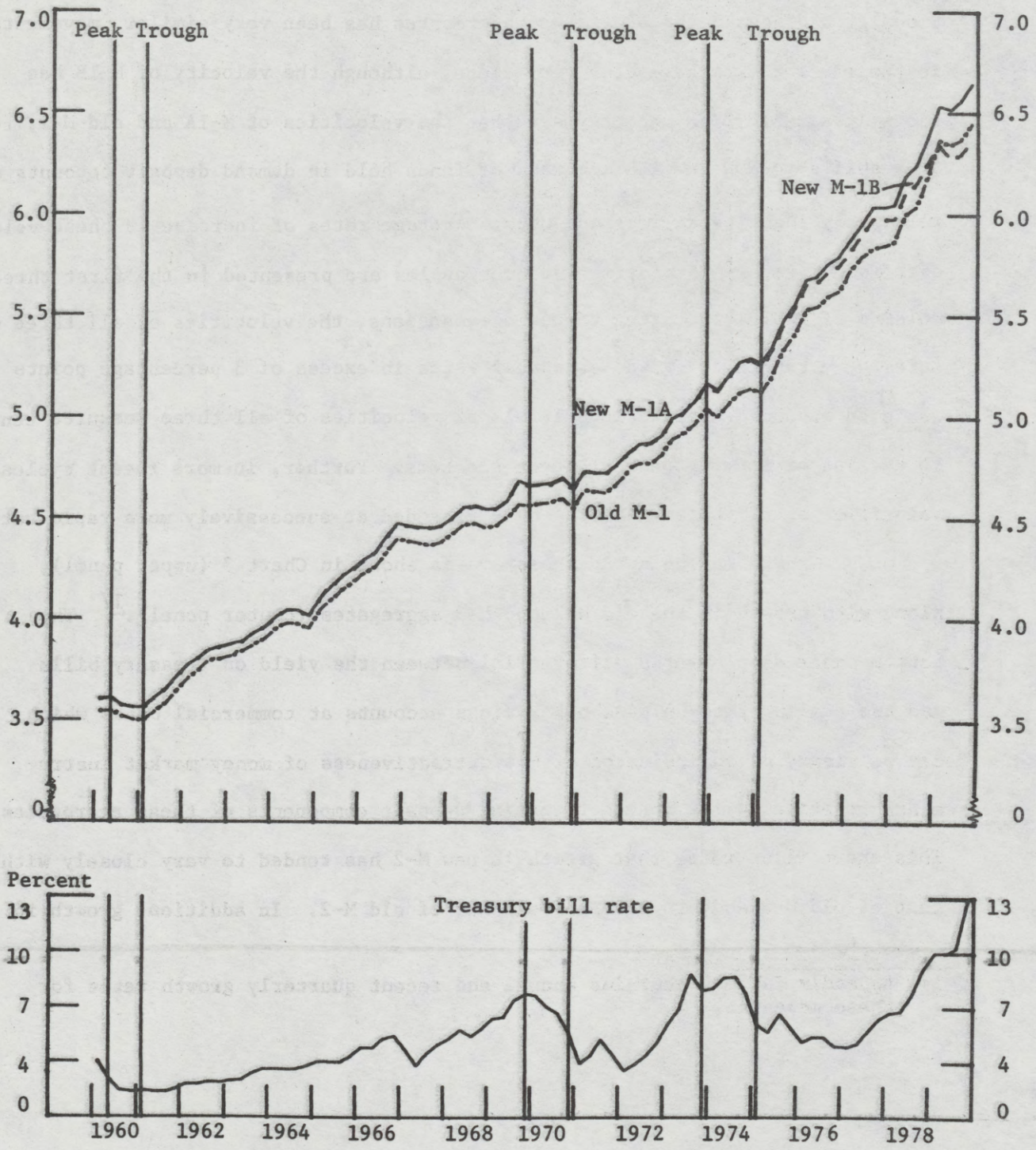
The public's demands for these M-1 measures relative to the gross national product vary inversely with their velocities, which are shown in the upper panel of Chart 2. Shown in the lower panel is the Treasury bill rate, representing the return on a money market alternative to holding M-1 balances. Since growth in all three of these aggregates has been very similar, movements in their velocities have been very close, although the velocity of M-1B has risen less rapidly in recent years than the velocities of M-1A and old M-1, reflecting shifts to NOW and ATS accounts of funds held in demand deposit accounts and in relatively inactive savings accounts. Average rates of increase in these velocities over longer intervals of time and over cycles are presented in the first three columns of Table 4. During economic expansions, the velocities of all three measures have tended to expand at annual rates in excess of 3 percentage points while in economic contractions levels of velocities of all three measures tend to decline or their growth at least slackens. Further, in more recent cycles the velocities of all three measures have expanded at successively more rapid rates.

Growth in the new M-2 measure is shown in Chart 3 (upper panel), along with growth in the old M-2 and M-3 aggregates (center panel).[1/] The bottom panel displays the differential between the yield on Treasury bills and the ceiling rate on passbook savings accounts at commercial banks which can be viewed as an indicator of the attractiveness of money market instruments relative to the interest-earning deposit components of these aggregates. This chart illustrates that growth in new M-2 has tended to vary closely with that of old M-3 and, to a lesser extent, of old M-2. In addition, growth in

1/ Appendix Table 2 contains annual and recent quarterly growth rates for these measures.

Chart 2

Velocities of New and Old M-1 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

Table 4

Trend and Cyclical Behavior of Velocities of New and Old Measures of Money
Average annual rates of growth in percent

Period	New M-1A	New M-1B	Old M-1	New M-2	Old M-2	Old M-3	New M-3	Old M-4	Old M-5
1960-1979	3.2	3.0	3.2	-0.1	0.5	-0.3	-0.8	0.1	-0.6
1960-1969	2.9	2.9	2.9	-0.2	0.4	-0.3	-0.6	0.1	-0.5
1970-1979	3.6	3.1	3.5	0.0	0.6	-0.3	-1.1	0.0	-0.7
Peak to trough[1/]									
1960:2-1961:1	-1.7	-1.7	-1.7	-6.3	-5.3	-6.8	-6.7	-5.5	-6.9
1969:4-1970:4	-0.3	-0.3	-0.3	-1.2	-2.6	-2.5	-4.1	-5.2	-4.3
1973:4-1975:1	1.5	1.4	1.3	-0.5	-1.5	-1.4	-2.4	-3.9	-3.0
Trough to peak[2/]									
1961:1-1969:4	3.1	3.1	3.1	0.1	0.6	0.0	-0.2	0.3	-0.2
1970:4-1973:4	3.6	3.5	3.5	-0.4	0.3	-1.0	-2.4	-1.4	-2.0
1975:1-1979:4[3/]	4.9	4.1	4.9	0.6	2.1	0.9	0.6	3.0	1.5

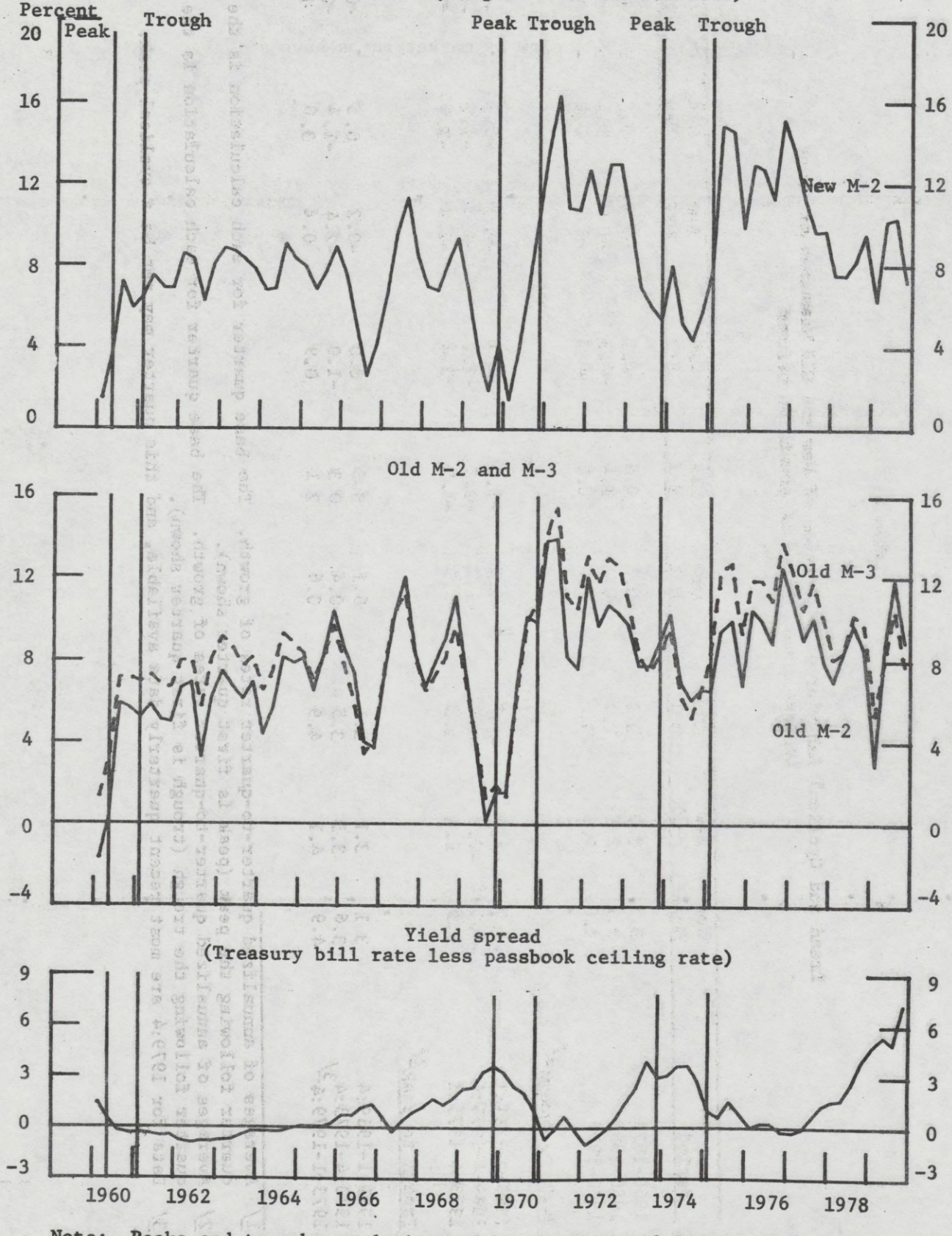
1/ Averages of annualized quarter-to-quarter rates of growth. The base quarter for each calculation is the quarter following the peak (peak is first quarter shown).

2/ Averages of annualized quarter-to-quarter rates of growth. The base quarter for each calculation is the quarter following the trough (trough is first quarter shown).

3/ Data for 1979:4 are most recent quarterly data available, and this quarter may not be a cyclical peak.

Chart 3

Rates of Growth of New M-2
and Old M-2 and M-3 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

new M-2, along with growth of the two other measures shown, has been sensitive to the yield spread, tending to slow as market rates have advanced above deposit ceiling rates. The interest sensitivity of new M-2, however, can be expected to moderate in the future, if the proportion of this aggregate accounted for by components with yields that vary with money market conditions continues to expand. As shown in Chart 4, the share of new M-2 in money market certificates has risen sharply since these accounts were introduced in mid-1978 and the money market mutual fund and overnight RP and Eurodollar shares have also increased in recent years. By contrast, the M-1A and ordinary savings account shares have generally declined.

Trend and cyclical growth rates of new M-2 and old M-2 and M-3 are shown in the middle three columns of Table 3. Over longer periods of time, especially during economic expansions, growth in new M-2 has been faster than old M-2. In comparison with old M-3, growth in new M-2 has been moderately slower, except during the most recent economic expansion when sharp increases in money market mutual fund shares and expansion in overnight RPs and Eurodollars contributed to somewhat more rapid growth in new M-2.[1/]

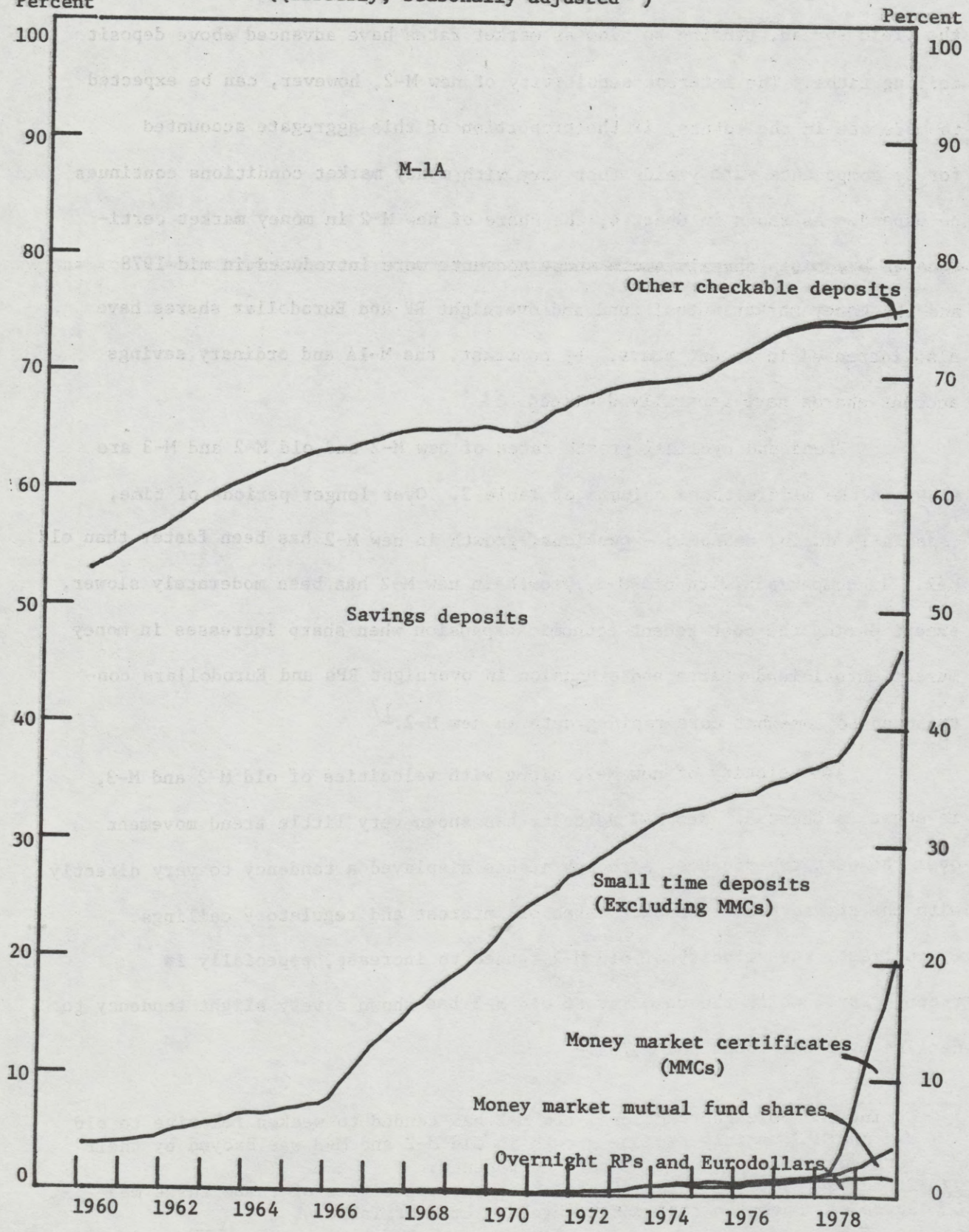
The velocity of new M-2, along with velocities of old M-2 and M-3, is shown in Chart 5. New M-2 velocity has shown very little trend movement over the past two decades, although it has displayed a tendency to vary directly with the spread between market rates of interest and regulatory ceilings. By contrast, the velocity of old M-2 tended to increase, especially in recent years, while the velocity of old M-3 has shown a very slight tendency to decline over the 1960s and 1970s.[2/]

1/ During economic contractions, new M-2 has tended to weaken relative to old M-2 and M-3, mainly because growth in old M-2 and M-3 was buoyed by their large-denomination time deposit components.

2/ Trend and cyclical rates of growth of the velocities of these three measures are shown in the middle three columns of Table 4.

Chart 4

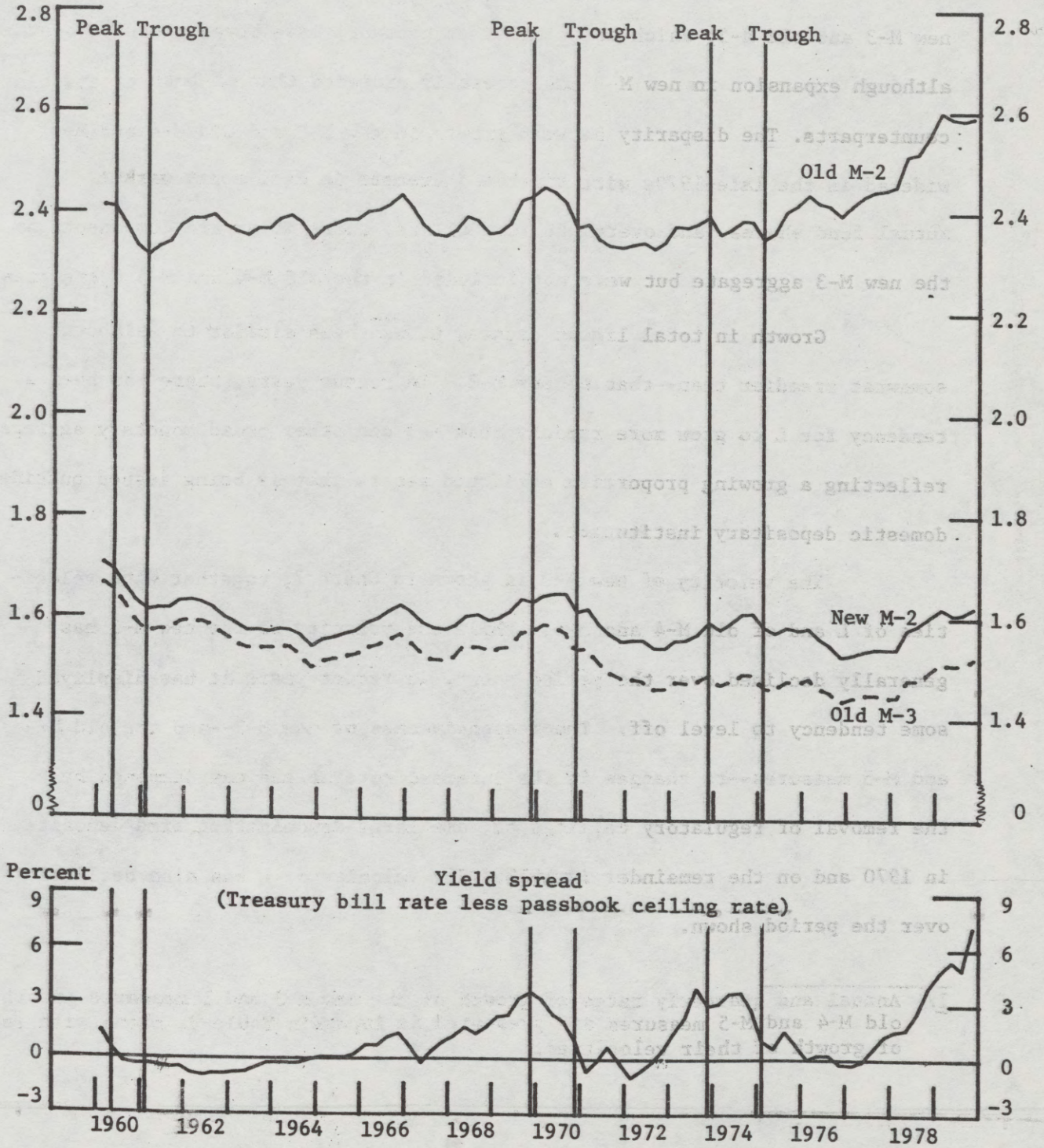
Principal Components of New M-2
As a percent of total
(Quarterly, seasonally adjusted 1/)



1/ Other checkable deposits, MMCs, money market mutual fund shares, and overnight RPs and Eurodollars are not seasonally adjusted.

Chart 5

Velocities of New M-2 and Old M-2 and M-3 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

The rate of growth of new M-3 is shown in Chart 6 (upper panel), along with rates of growth of the old M-4 and M-5 measures (center panel). Also shown in the upper panel of Chart 6 is the rate of growth of L, the broad measure of liquid assets.[1/] Chart 6 illustrates that growth rates of new M-3 and old M-5, which are similar in content, have moved closely together, although expansion in new M-3 has generally exceeded that of both of its old counterparts. The disparity between growth in new M-3 and old M-4 and M-5 widened in the late-1970s with sizable increases in RPs, money market mutual fund shares, and overnight Eurodollars; these items are components of the new M-3 aggregate but were not included in the old M-4 and M-5 aggregates.

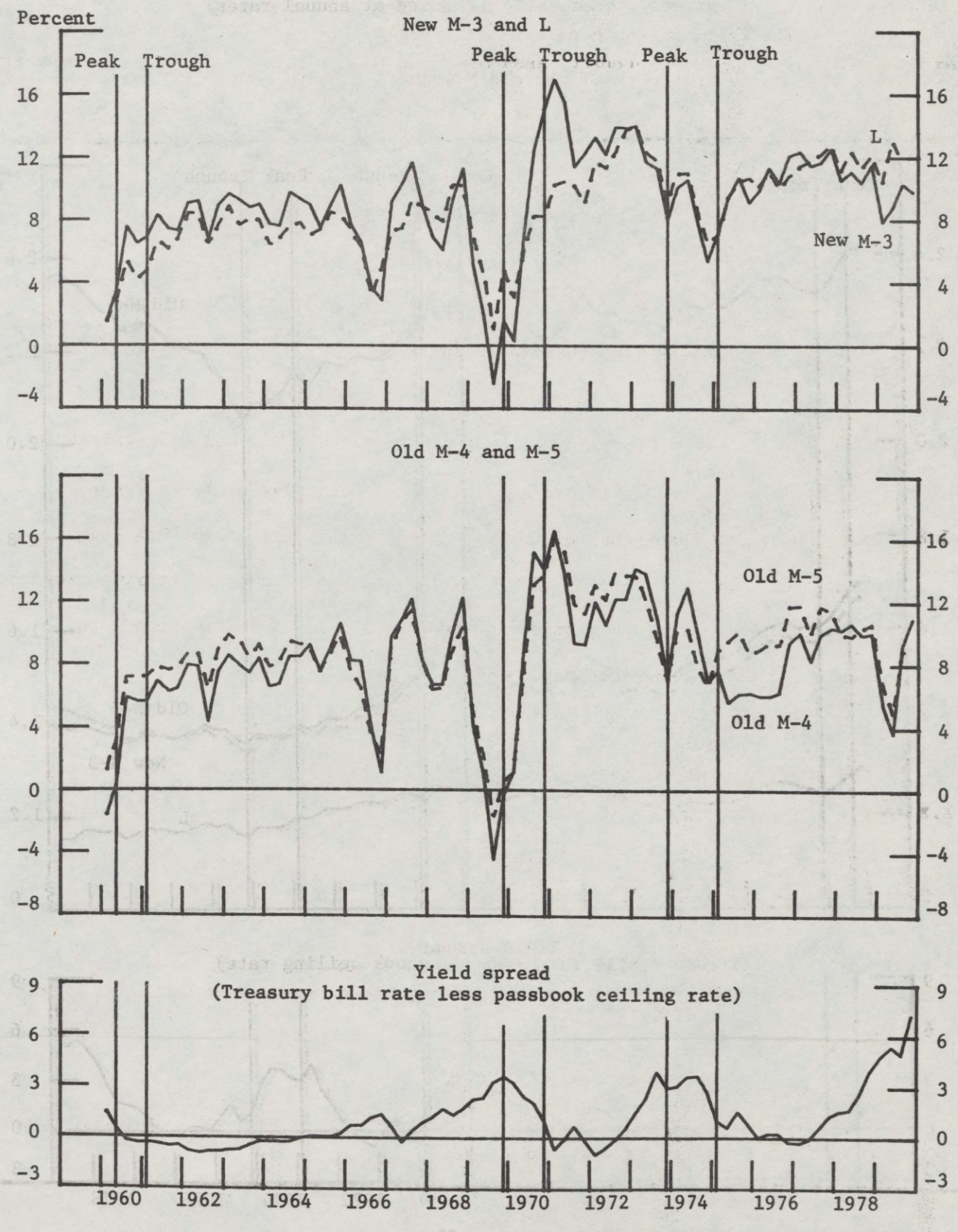
Growth in total liquid assets, L, has been similar to--although somewhat steadier than--that of new M-3. In recent years, there has been a tendency for L to grow more rapidly than M-3 and other broad monetary aggregates, reflecting a growing proportion of liquid assets that is being issued outside domestic depositary institutions.

The velocity of new M-3 is shown in Chart 7, together with velocities of L and of old M-4 and M-5. While the velocity of the new M-3 has generally declined over the period shown, in recent years it has displayed some tendency to level off. The responsiveness of new M-3--and the old M-4 and M-5 measures--to changes in the interest rate spread was dampened by the removal of regulatory ceilings on some large-denomination time deposits in 1970 and on the remainder in 1973. The velocity of L has also declined over the period shown.

1/ Annual and quarterly rates of growth of the new M-3 and L measures and the old M-4 and M-5 measures are presented in Appendix Table 3, along with rates of growth of their velocities.

Chart 6

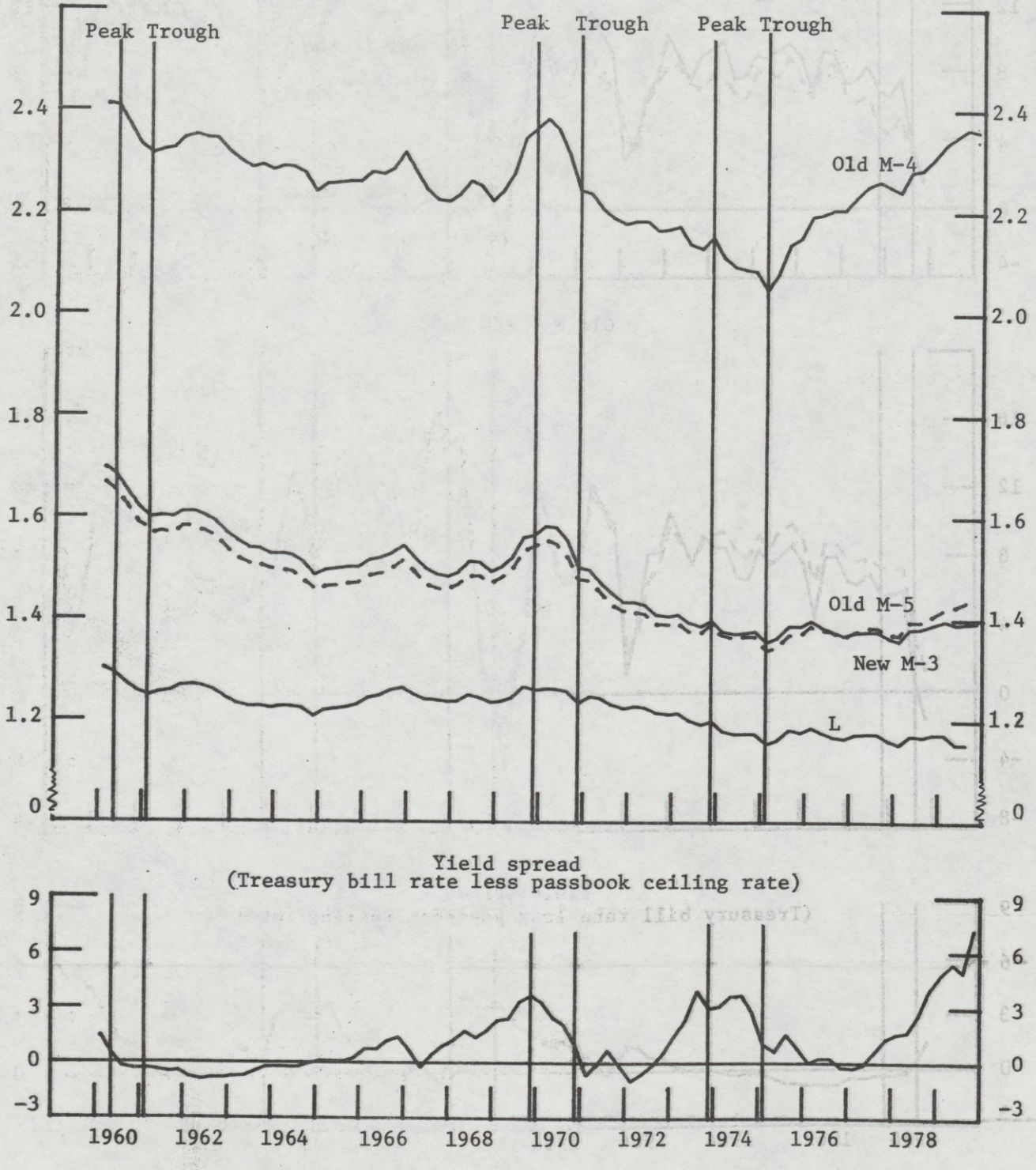
Rates of Growth of New M-3 and L and Old M-4 and M-5 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

Chart 7

Velocities of New M-3 and L and Old M-4 and M-5 Measures
(Quarterly, seasonally adjusted at annual rates)



Note: Peaks and troughs as designated by the National Bureau of Economic Research.

IV. Some Technical Issues

The new aggregates incorporate consolidation and seasonal adjustments. In addition, several new data sources are being used or will be used in their construction.

A. Consolidation

Consolidation adjustments have been made in the construction of each of the new measures, in order to avoid double counting of the public's monetary assets.[1/] A major consolidation adjustment involves the netting of deposits held by depositary institutions with other depositary institutions. In constructing M-1A, demand deposits held by commercial banks with other commercial banks have been removed. The procedure also calls for the removal from M-1B of those demand deposit holdings of thrift institutions that are estimated to be used in servicing their checkable deposits, although at present the amount is negligible. Similarly, at the M-2 level all other demand deposit holdings of thrift institutions are deducted; currently that means all such demand deposits are netted from M-2.[2/] Savings and time deposits held by depositary institutions are also appropriately netted at the M-2 and M-3 levels.

The other major kind of consolidation adjustment involves removing the assets held by money market mutual funds from several components appearing in the M-2, M-3, and L measures.[3/] These institutions issue shares to the public and use the proceeds to acquire a variety of liquid assets that are

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1/ A discussion of consolidation issues can be found in Advisory Committee on Monetary Statistics, Improving the Monetary Aggregates, pp. 12-14, 31-27, and in "A Proposal," pp. 32, 40-41.

2/ It has been assumed that all demand deposits owned by thrift institutions are held to service their checkable deposits and their ordinary savings deposits. The portion of thrift institution holdings of demand deposits to be removed at the M-1B level is determined by the ratio of checkable deposits at thrift institutions to the sum of their checkable and savings deposit liabilities.

3/ In general, the components against which a money market mutual fund adjustment is made exclude holdings by depositary institutions, the U.S. Government (including the Federal Reserve), and foreign commercial banks and official institutions.

components of the new M-2, M-3 and L measures. In order to avoid first counting these amounts as money market mutual fund shares and then counting them again as money market fund holdings of RPs, CDs, commercial paper, and so forth, holdings of each of these assets by money market funds are subtracted from the relevant components. Thus money market fund holdings of RPs are deducted in the construction of the public's overnight RPs that appear in M-2, holdings of domestic CDs are deducted from the large time deposit component of M-3, and holdings of each of the assets appearing in L are appropriately netted.

Each of the principal components of the new aggregates will be published on the money stock release on a consolidated--and not a gross--basis, as it appears in the new aggregates. Thus differences between the published M-1B and M-2 aggregates and the sum of their published components will equal the consolidation components associated with thrift institution demand deposits.

B. Seasonal Adjustment

The procedure for constructing the new seasonally adjusted aggregates has been to seasonally adjust each component--wherever possible--and then to sum each component in deriving the appropriate total. Some components, however, have not been seasonally adjusted because of insufficient historical data.[1/] They will be seasonally adjusted once adequate data are available. The most important of the components that have not yet been seasonally adjusted (and the aggregate in which they first appear) are as follows:

1/ In some cases, even though data are available for a sufficiently long period to technically perform a seasonal adjustment, the series are dominated by strong trend and thus it is unlikely that actual seasonal patterns can be measured accurately.

1. Other checkable deposits (M-1B)

2. Overnight RPs and Eurodollars (M-2)

3. Money market mutual fund shares (M-2)

4. Term RPs at both commercial banks and savings and loan associations (M-3)

5. Other Eurodollars held by U.S. residents (L).

A standard option of the Census X-11 program was used in the seasonal adjustment of the separate components of the new aggregates, following an examination of several alternative options. However, it should be noted that the overall issue of seasonal adjustment of the monetary aggregates has been under review by a panel of outside experts, The Committee of Experts on Seasonal Adjustment Techniques, under the chairmanship of Geoffrey H. Moore, which is scheduled to report to the Board in a few months.[1/]

C. New Data Sources

Several new data sources are being used in connection with the redefined aggregates. Most of these new sources are associated with components that are either new or appear separately for the first time, and they have been obtained in order to improve the accuracy and the timeliness of the redefined measures. It is felt that with them the quality of monetary statistics for the new measures will be at least comparable to that of the old measures.

1/ Other members of this committee are George Box, Hyman Kaitz, James Stephenson, and Arnold Zellner.

A number of new data series began around year-end 1979 and some others are scheduled to begin in early 1980.[1/] The most important new data sources are shown in Table 5. Most of these are collected on a sample basis, and are then benchmarked to less frequent reports of condition in order to obtain timely estimates of the total volume of each item. A sample of nonmember banks is being used to estimate demand deposits, other checkable deposits, and small and large-denomination time deposits on a weekly basis. Similarly, a sample of mutual savings banks, which began to be surveyed in early 1980, is being used to construct the various components of deposits at these institutions. In 1979, the Federal Home Loan Bank Board started collecting sample data three times a month from savings and loan associations on the various components of the new aggregates. A new sample of credit unions is scheduled for implementation in the spring of 1980 and should provide timely data on several components for these institutions. Data on money market mutual fund shares are being collected in a new weekly survey by the Investment Company Institute. In addition, in a monthly survey this institute collects data on the industry's holdings of various assets, for use in the consolidation process. Data on overnight Eurodollars at offices in the Caribbean are now being collected on a daily basis from all member banks with significant amounts of these deposits. Finally, a new daily report on selected federal funds and RP borrowings of 123 large member banks serves as the basis for the overnight and term RP series.

1/ Other data sources are discussed in "A Proposal," pp. 33-40.

Table 5

New Data Sources Being Used or Scheduled to be Used in Constructing the Redefined Monetary Aggregates

Component (Aggregate first appearing in)	Coverage	Frequency	Lag
Demand deposits (M-1A)			
Nonmember banks 1/	sample	weekly (daily avg)	2-3 weeks
Other checkable deposits (M-1B)			
Member banks (ATS & NOW)	universe	weekly (daily avg)	1 week
Nonmember banks (ATS & NOW)	sample	weekly (daily avg)	2-3 weeks
MSBs (NOW & demand deposits)	sample	weekly (Wednesday)	2-3 weeks
S&Ls (NOW)	sample	thrice-monthly	1 week
Credit unions (share drafts) 2/	sample	weekly (Wednesday)	2-3 weeks
Savings and small-denomination time deposits (M-2)			
Nonmember banks	sample	weekly (daily avg)	2-3 weeks
MSBs	sample	weekly (Wednesday)	2-3 weeks
S&Ls	sample	thrice-monthly	1 week
Credit unions 2/	sample	weekly (Wednesday)	2-3 weeks
Overnight repurchase agreements (M-2)			
Member banks	125 large member banks	weekly (daily avg)	1 week
Overnight Eurodollars at Caribbean branches (M-2)			
Member banks	approx. universe	weekly (daily avg)	1 week
Money market mutual funds shares (M-2)	universe	weekly (Wednesday)	1 week
Large-denomination time deposits (M-3)			
Nonmember banks	sample	weekly (daily avg)	2-3 weeks
MSBs	sample	weekly (Wednesday)	2-3 weeks
S&Ls	sample	thrice-monthly	1 week
Term repurchase agreements (M-3)			
Member banks	125 large member banks	weekly (daily avg)	1 week

1/ In addition, data on demand deposits of U.S. branches and agencies of foreign banks would be collected on a regulatory report of deposits with an application of reserve requirements to these institutions under the International Banking Act. At present, all U.S. branches and agencies of foreign banks report their deposits once each month and large institutions in New York City report deposits on a daily basis.

2/ Scheduled to begin in March 1980. Weekly sample consists of approximately 70 of the largest credit unions. In addition, a sample of smaller credit unions will be collected once each month, as of the last Wednesday of the month.

Appendix Table 1

Rates of Monetary and Velocity Growth for New and Old M-1 Measures

Year[1/]	Rates of Monetary Growth			Rates of Velocity Growth		
	New M-1A	New M-1B	Old M-1	New M-1A	New M-1B	Old M-1
1960	0.6	0.6	0.4	1.7	1.7	1.8
1961	2.8	2.8	2.8	4.3	4.3	4.2
1962	1.8	1.8	1.4	4.0	4.0	4.4
1963	4.0	4.0	4.0	2.6	2.6	2.6
1964	4.3	4.4	4.5	1.4	1.4	1.3
1965	4.4	4.4	4.3	5.8	5.8	5.8
1966	2.7	2.7	2.9	5.3	5.3	5.1
1967	6.4	6.3	6.4	-0.3	-0.2	-0.3
1968	7.4	7.4	7.6	1.8	1.7	1.6
1969	3.8	3.8	3.9	2.6	2.6	2.5
1970	4.8	4.8	4.8	-0.3	-0.3	-0.3
1971	6.6	6.6	6.6	2.7	2.7	2.8
1972	8.5	8.5	8.4	3.0	3.0	3.1
1973	5.7	5.8	6.2	5.2	5.1	4.6
1974	4.7	4.7	5.1	2.4	2.4	2.0
1975	4.7	4.9	4.6	5.1	4.9	5.2
1976	5.5	6.0	5.8	4.2	3.7	3.9
1977	7.7	8.1	7.9	4.2	3.9	4.0
1978	7.4	8.2	7.2	5.6	4.8	5.8
1979	5.5	8.0	5.5	4.2	1.8	4.2
Quarter[2/]						
1973--1	8.2	8.4	8.5	6.7	6.5	6.4
2	4.9	4.9	5.1	2.4	2.4	2.2
3	4.4	4.5	5.2	4.6	4.5	3.8
4	4.8	4.8	5.4	6.5	6.6	5.9
1974--1	6.7	6.7	7.3	-2.6	-2.6	-3.1
2	3.6	3.6	4.1	5.4	5.4	4.9
3	3.1	3.1	4.1	5.4	5.4	4.5
4	4.9	5.0	4.6	1.4	1.2	1.6
1975--1	2.6	2.9	2.0	-2.0	-2.3	-1.3
2	5.9	5.9	5.8	6.0	6.1	6.2
3	7.0	7.3	7.2	10.3	10.0	10.0
4	2.9	3.2	3.0	5.7	5.4	5.6
1976--1	5.4	5.7	4.6	8.4	8.1	9.2
2	5.8	6.3	6.4	1.3	0.8	0.7
3	3.4	3.9	4.1	4.3	3.8	3.6
4	7.0	7.6	7.4	2.4	1.8	1.9
1977--1	8.8	9.3	7.4	5.6	5.2	7.0
2	6.7	6.9	7.4	5.5	5.3	4.8
3	6.0	6.5	8.6	5.6	5.0	2.9
4	8.4	8.7	7.4	0.1	-0.2	1.1
1978--1	7.6	7.9	6.6	0.5	0.2	1.4
2	8.7	9.1	9.2	9.6	9.1	9.0
3	7.1	7.3	7.9	3.4	3.2	2.6
4	5.6	7.4	4.3	8.3	6.5	9.6
1979--1	0.2	4.8	-1.3	9.9	5.3	11.6
2	7.8	10.7	8.1	-1.2	-4.0	-1.5
3	8.8	10.1	9.7	2.6	1.3	1.7
4	4.7	5.3	5.0	5.1	4.6	4.8

1/ Fourth quarter over fourth quarter growth rate.
2/ Annualized growth rates based on seasonally adjusted data.

Appendix Table 2

Rates of Monetary and Velocity Growth for New M-2
and Old M-2 and M-3 Measures

Year[1]	Rates of Monetary Growth			Rates of Velocity Growth		
	New M-2	Old M-2	Old M-3	New M-2	Old M-2	Old M-3
1960	4.6	2.6	4.8	-2.3	-0.3	-2.4
1961	7.1	5.4	7.1	0.0	1.7	0.0
1962	8.0	5.9	7.7	-2.0	-0.0	-1.7
1963	8.6	7.0	8.7	-1.8	-0.3	-1.9
1964	7.9	6.7	8.3	-2.0	-0.8	-2.2
1965	8.0	8.6	8.6	2.2	1.7	1.7
1966	4.9	6.0	5.4	3.1	2.0	2.7
1967	9.3	9.9	9.7	-2.9	-3.4	-3.3
1968	8.0	9.0	8.1	1.2	0.3	1.1
1969	4.2	3.2	3.6	2.3	3.2	2.8
1970	5.8	7.2	7.2	-1.2	-2.6	-2.5
1971	13.5	11.3	13.5	-3.5	-1.6	-3.5
1972	12.9	11.2	13.3	-1.0	0.5	-1.3
1973	7.3	8.8	9.0	3.5	2.1	1.9
1974	6.0	7.7	7.1	1.1	-0.5	0.1
1975	12.3	8.4	11.1	-2.0	1.5	-1.0
1976	13.7	10.9	12.7	-3.3	-0.9	-2.5
1977	11.5	9.8	11.7	0.7	2.2	0.5
1978	8.4	8.7	9.5	4.6	4.3	3.6
1979	8.8	8.3	8.1	1.0	1.4	1.6
Quarter[2]						
1973--1	10.3	9.8	10.9	4.7	5.2	4.1
2	6.9	7.7	8.3	0.4	-0.4	-1.0
3	6.0	7.7	7.4	3.0	1.3	1.6
4	5.4	9.0	8.2	6.0	2.4	3.1
1974--1	8.0	10.3	9.6	-3.9	-6.1	-5.3
2	5.2	7.0	6.4	3.8	2.1	2.6
3	4.4	6.1	5.2	4.2	2.4	3.3
4	5.8	6.6	6.4	0.5	-0.4	-0.2
1975--1	7.8	6.4	8.2	-7.1	-5.7	-7.5
2	14.9	9.5	12.4	-2.7	2.5	-0.3
3	14.6	10.0	12.8	2.8	7.2	4.5
4	9.9	6.8	9.4	-1.1	1.9	-0.7
1976--1	13.0	10.5	12.0	0.9	3.3	1.9
2	12.7	10.0	11.9	-5.4	-2.8	-4.7
3	11.3	8.9	11.0	-3.4	-1.1	-3.1
4	15.2	12.6	13.8	-5.6	-3.1	-4.3
1977--1	13.7	10.9	12.4	0.9	3.6	2.1
2	11.2	9.0	10.5	1.0	3.2	1.7
3	9.6	10.1	11.8	1.9	1.5	-0.2
4	9.7	7.9	10.1	-1.2	0.5	-1.6
1978--1	7.5	7.0	8.1	0.6	1.1	0.0
2	7.5	8.4	8.4	10.8	9.9	9.8
3	8.2	9.8	10.3	2.3	0.8	0.3
4	9.5	8.5	9.8	4.4	5.4	4.1
1979--1	6.3	2.8	5.3	3.9	7.3	4.8
2	10.2	8.8	7.9	-3.5	-2.1	-1.3
3	10.3	11.9	10.5	1.1	-0.5	0.9
4	7.2	8.9	7.8	2.7	1.0	2.1

1/ Fourth quarter over fourth growth rate.
2/ Annualized growth rates based on seasonally adjusted data.

Appendix Table 3

Rates of Monetary and Velocity Growth for New M-3 and L and Old M-4 and M-5 Measures

Year[1/]	Rates of Monetary Growth				Rates of Velocity Growth			
	New M-3	New L	Old M-4	Old M-5	New M-3	New L	Old M-4	Old M-5
1960	4.8	3.5	2.6	4.8	-2.5	-1.2	-0.3	-2.4
1961	7.7	6.2	6.5	7.9	-0.5	0.9	0.6	-0.7
1962	8.8	8.0	7.1	8.5	-2.7	-2.0	-1.2	-2.4
1963	9.5	8.4	8.3	9.6	-2.6	-1.6	-1.6	-2.7
1964	8.9	7.3	7.8	9.0	-2.8	-1.4	-1.8	-2.9
1965	9.2	8.1	9.5	9.1	1.1	2.2	0.9	1.2
1966	5.2	5.5	5.5	5.0	2.8	2.5	2.6	3.0
1967	10.4	8.5	10.7	10.3	-3.9	-2.2	-4.2	-3.8
1968	8.7	9.5	9.3	8.3	0.6	-0.2	0.0	0.9
1969	1.5	4.4	0.1	1.5	5.0	2.0	6.4	4.9
1970	8.9	6.5	10.2	9.2	-4.1	-1.9	-5.1	-4.3
1971	14.8	10.4	12.8	14.3	-4.6	-0.8	-2.9	-4.2
1972	14.0	12.9	12.3	13.9	-2.0	-1.0	-0.5	-1.9
1973	11.7	12.3	12.0	11.0	-0.5	-1.1	-0.8	0.1
1974	8.7	9.6	10.7	9.0	-1.4	-2.2	-3.1	-1.7
1975	9.4	9.8	6.6	9.7	0.6	0.2	3.3	0.3
1976	11.4	11.0	7.1	10.2	-1.3	-1.0	2.6	-0.3
1977	12.6	12.6	10.1	11.7	-0.3	-0.3	2.0	0.5
1978	11.3	12.3	10.6	10.6	1.9	1.0	2.5	2.5
1979	9.5	n.a.	7.5	7.6	0.3	n.a.	2.2	2.1
Quarter[2/]								
1973--1	14.0	14.0	14.2	13.7	1.0	1.1	0.9	1.3
2	11.7	12.3	13.8	12.2	-4.3	-4.8	-6.3	-4.7
3	11.2	11.8	11.0	9.6	-2.2	-2.7	-1.9	-0.6
4	8.0	9.1	7.0	7.1	3.3	2.2	4.4	4.3
1974--1	10.1	11.0	11.4	10.2	-5.9	-6.7	-7.1	-6.0
2	10.6	11.1	12.8	10.3	-1.5	-1.9	-3.6	-1.2
3	7.7	8.4	9.9	7.8	0.9	0.1	-1.3	0.8
4	5.4	6.6	6.9	6.7	0.8	-0.3	-0.7	-0.4
1975--1	7.2	7.1	7.6	8.9	-6.4	-6.4	-6.9	-8.1
2	9.4	9.5	5.5	9.5	2.6	2.5	6.5	2.5
3	10.7	10.5	6.2	10.1	6.5	6.8	11.1	7.1
4	9.1	10.7	6.2	8.8	-0.4	-1.9	2.4	-0.1
1976--1	9.9	10.1	6.0	9.0	4.0	3.7	7.8	4.8
2	11.3	11.1	6.0	9.4	-4.1	-3.9	1.0	-2.2
3	10.3	10.0	6.3	9.2	-2.5	-2.2	1.5	-1.4
4	12.1	10.8	9.5	11.8	-2.6	-1.4	-0.1	-2.3
1977--1	12.4	11.5	10.1	11.8	2.2	3.0	4.4	2.7
2	11.4	11.8	8.3	10.0	0.8	0.4	3.9	2.2
3	11.7	12.2	10.0	11.7	-0.1	-0.6	1.6	-0.1
4	12.5	12.8	10.4	11.5	-3.9	-4.2	-1.9	-2.9
1978--1	10.5	11.2	10.2	10.0	-2.3	-3.0	-2.1	-1.8
2	11.1	12.4	10.6	9.8	7.2	5.9	7.6	8.4
3	10.3	11.3	9.9	10.4	0.2	-0.7	0.6	0.2
4	11.5	12.2	10.1	10.7	2.4	1.8	3.8	3.3
1979--1	7.9	10.4	5.4	6.8	2.3	-0.2	4.7	3.4
2	8.8	13.1	3.7	4.9	-2.2	-6.3	2.9	1.7
3	10.3	11.7	9.2	8.9	1.1	-0.3	2.2	2.5
4	9.8	n.a.	11.0	9.1	0.1	n.a.	-1.0	0.8

n.a.--Not available as data for December 1979 are incomplete.

1/ Fourth quarter over fourth quarter growth rates.

2/ Annualized growth rates based on seasonally adjusted data.

For use at 6:30 p.m.
Thursday, February 7, 1980

February 7, 1980

Redefined Money Stock and Liquid
Assets Measures and Components

Historical Monthly Data 1976 to 1979

TABLE 1
MONEY STOCK MEASURES AND LIQUID ASSETS
BILLIONS OF DOLLARS

		(SEASONALLY ADJUSTED)					(NOT SEASONALLY ADJUSTED)				
		M1-A	M1-B	M2	M3	L	M1-A	M1-B	M2	M3	L
		CURRENCY PLUS DEMAND DEPOSITS	M-1A PLUS OTHER CHECKABLE DEPOSITS	M-1B PLUS OVERNIGHT RP"S AND MMMF AND SAVINGS AND SMALL TIME DEPOSITS	M-2 PLUS LARGE TIME DEPOSITS AND TERM RP"S	M-3 PLUS OTHER LIQUID ASSETS	CURRENCY PLUS DEMAND DEPOSITS	M-1A PLUS OTHER CHECKABLE DEPOSITS	M-1B PLUS OVERNIGHT RP"S AND MMMF AND SAVINGS AND SMALL TIME DEPOSITS	M-2 PLUS LARGE TIME DEPOSITS AND TERM RP"S	M-3 PLUS OTHER LIQUID ASSETS
1976	JAN...	289.4	290.5	1033.4	1169.8	1379.3	293.8	294.9	1035.1	1172.7	1383.4
	FEB...	291.4	292.6	1048.3	1182.6	1393.7	285.7	286.9	1041.5	1175.7	1389.3
	MAR...	292.5	293.8	1057.5	1193.1	1406.1	288.0	289.3	1055.9	1191.3	1406.2
	APR...	294.1	295.6	1068.4	1204.4	1419.4	296.3	297.8	1075.8	1210.8	1426.2
	MAY...	296.0	297.6	1082.8	1217.0	1433.2	291.3	292.9	1081.6	1215.6	1431.6
	JUN...	295.9	297.6	1087.7	1224.6	1442.9	295.2	296.9	1091.2	1226.6	1442.7
	JUL...	296.4	298.4	1096.2	1234.4	1454.2	297.7	299.6	1101.3	1237.8	1455.9
	AUG...	298.2	300.2	1110.9	1248.0	1469.1	296.1	298.2	1108.9	1246.3	1466.7
	SEP...	298.7	300.9	1122.9	1257.6	1480.2	297.6	299.8	1119.7	1254.7	1474.7
	OCT...	301.6	304.0	1138.4	1270.1	1493.0	302.0	304.4	1135.9	1268.2	1490.5
	NOV...	302.3	304.8	1151.2	1283.2	1506.2	304.7	307.2	1148.2	1280.4	1505.1
	DEC...	305.0	307.7	1166.7	1299.7	1523.5	313.5	316.1	1169.1	1303.8	1527.1
1977	JAN...	307.6	310.4	1179.4	1310.9	1534.5	312.3	315.1	1181.6	1314.4	1539.2
	FEB...	309.9	312.8	1191.9	1324.5	1551.3	303.4	306.3	1184.3	1317.1	1546.6
	MAR...	311.6	314.6	1203.2	1336.9	1566.5	306.6	309.6	1201.4	1335.3	1566.6
	APR...	314.0	317.0	1214.6	1348.6	1581.0	316.8	319.9	1222.7	1355.6	1588.7
	MAY...	314.7	317.8	1225.7	1362.6	1597.4	309.7	312.8	1224.2	1360.5	1595.4
	JUN...	316.1	319.3	1234.5	1374.8	1611.5	315.3	318.5	1237.8	1376.6	1611.9
	JUL...	318.0	321.4	1244.1	1387.8	1626.8	319.5	322.9	1250.1	1392.3	1630.2
	AUG...	319.2	322.8	1254.3	1402.2	1645.1	317.4	320.9	1253.0	1400.9	1643.2
	SEP...	321.7	325.3	1264.7	1415.7	1664.1	321.0	324.7	1263.2	1414.1	1659.1
	OCT...	324.0	327.8	1274.9	1429.8	1680.1	325.2	329.1	1274.3	1429.6	1678.7
	NOV...	326.5	330.4	1285.5	1447.3	1698.6	328.8	332.7	1281.4	1443.6	1696.5
	DEC...	328.4	332.5	1294.1	1460.3	1715.5	337.2	341.3	1295.9	1464.5	1718.5
1978	JAN...	332.0	336.2	1302.6	1471.9	1729.7	336.4	340.6	1304.4	1475.4	1734.3
	FEB...	332.0	336.2	1308.0	1482.3	1743.9	324.9	329.1	1299.5	1474.1	1738.9
	MAR...	333.5	337.8	1316.4	1497.2	1762.8	327.6	331.9	1313.3	1494.8	1762.2
	APR...	337.0	341.6	1325.0	1511.4	1781.4	339.9	344.5	1332.8	1517.8	1788.7
	MAY...	339.9	344.6	1333.7	1526.5	1801.2	334.6	339.2	1331.6	1523.5	1798.8
	JUN...	342.2	347.0	1342.0	1536.7	1815.4	341.3	346.1	1344.7	1537.2	1815.0
	JUL...	343.5	348.4	1349.7	1549.0	1830.1	345.3	350.2	1356.1	1553.0	1833.3
	AUG...	344.9	349.9	1360.2	1564.3	1848.9	343.1	348.1	1358.7	1562.3	1846.5
	SEP...	348.7	353.8	1372.8	1579.6	1870.8	348.3	353.4	1371.9	1578.3	1864.9
	OCT...	349.3	354.5	1383.7	1591.9	1883.6	350.9	356.1	1383.8	1592.7	1882.5
	NOV...	350.7	357.3	1394.7	1613.9	1908.6	353.2	359.7	1390.4	1610.5	1906.8
	DEC...	351.6	359.9	1400.8	1622.2	1926.3	360.9	369.3	1402.9	1627.8	1929.8
1979	JAN...	350.1	360.0	1406.5	1630.0	1937.3	354.7	364.7	1409.0	1634.6	1943.0
	FEB...	350.0	360.7	1412.8	1640.2	1952.8	342.2	353.0	1404.3	1632.2	1948.7
	MAR...	351.9	363.9	1425.4	1652.6	1976.0	345.5	357.5	1422.2	1650.5	1976.1
	APR...	356.2	369.7	1440.2	1666.5	1998.1	359.5	373.0	1448.5	1673.1	2006.0
	MAY...	356.1	369.5	1448.3	1674.9	2016.7	350.5	363.9	1445.5	1671.1	2013.9
	JUN...	360.3	374.3	1464.5	1689.5	2043.0	359.3	373.4	1466.8	1689.4	2041.7
	JUL...	363.2	378.0	1476.4	1702.9	2057.3	365.1	379.9	1482.1	1706.1	2059.2
	AUG...	365.4	380.7	1489.5	1719.3	2074.9	363.2	378.6	1486.8	1716.3	2071.0
	SEP...	367.5	383.2	1499.7	1738.2	2103.3	367.0	382.7	1498.2	1736.1	2094.6
	OCT...	368.0	383.9	1507.2	1751.8	2115.4	369.7	385.5	1507.1	1752.4	2113.6
	NOV...	369.6	385.3	1514.5	1762.5	2124.8	372.2	387.9	1509.9	1759.1	2123.8
	DEC...	371.5	387.7	1523.9	1772.1		381.1	397.3	1526.0	1777.6	

TABLE 2
COMPONENTS OF MONEY STOCK MEASURES AND RELATED ITEMS
SEASONALLY ADJUSTED, BILLIONS OF DOLLARS

		CURRENCY	DEMAND DEPOSITS	SAVINGS DEPOSITS			SMALL TIME DEPOSITS		
				AT COMMERCIAL BANKS	AT THRIFT INSTS.	TOTAL	AT COMMERCIAL BANKS	AT THRIFT INSTS.	TOTAL
1976	JAN...	74.3	215.1	163.8	225.6	389.4	144.6	199.6	344.2
	FEB...	75.0	216.4	170.2	228.0	398.3	144.4	202.9	347.3
	MAR...	75.7	216.8	173.9	230.2	404.2	142.8	206.2	349.0
	APR...	76.4	217.7	177.0	232.1	409.0	142.8	210.0	352.8
	MAY...	77.2	218.8	179.8	233.6	413.4	145.1	213.7	358.8
	JUN...	77.6	218.3	180.6	235.0	415.6	145.6	216.9	362.5
	JUL...	78.2	218.3	182.2	236.7	418.9	147.3	220.0	367.2
	AUG...	78.7	219.5	184.5	238.8	423.3	149.9	223.3	373.2
	SEP...	79.2	219.5	187.6	240.8	428.4	153.1	227.1	380.2
	OCT...	79.9	221.7	191.9	243.9	435.8	155.2	230.9	386.1
	NOV...	80.2	222.1	195.9	245.3	441.2	156.7	234.6	391.3
	DEC...	80.7	224.4	200.5	247.2	447.7	157.9	238.7	396.6
1977	JAN...	81.3	226.4	204.3	249.4	453.7	159.3	242.4	401.8
	FEB...	81.9	228.0	206.9	251.2	458.2	160.6	246.0	406.6
	MAR...	82.4	229.2	208.7	252.4	461.1	162.6	249.7	412.3
	APR...	83.1	230.9	210.5	254.2	464.7	164.3	253.4	417.7
	MAY...	83.6	231.1	211.7	255.4	467.1	166.3	257.2	423.4
	JUN...	84.1	231.9	212.5	257.2	469.7	167.6	261.2	428.8
	JUL...	85.1	232.9	213.3	259.1	472.4	168.5	265.0	433.4
	AUG...	85.6	233.7	214.7	261.5	476.2	168.4	269.0	437.3
	SEP...	86.4	235.3	215.6	263.4	479.0	168.9	273.0	441.9
	OCT...	87.1	236.8	216.9	266.3	483.2	168.8	276.8	445.6
	NOV...	87.9	238.6	217.3	267.1	484.4	169.7	281.1	450.8
	DEC...	88.7	239.7	217.8	268.7	486.5	170.7	284.2	454.9
1978	JAN...	89.2	242.8	218.7	270.4	489.1	171.8	285.6	457.4
	FEB...	90.0	242.0	219.1	271.2	490.3	172.6	287.7	460.3
	MAR...	90.8	242.7	219.3	272.3	491.6	173.4	290.8	464.2
	APR...	91.2	245.8	219.8	272.4	492.1	174.1	294.1	468.2
	MAY...	92.1	247.9	220.3	272.4	492.8	174.7	297.2	471.9
	JUN...	92.8	249.4	221.2	271.4	492.6	176.1	303.1	479.2
	JUL...	93.4	250.1	220.1	268.6	488.7	178.0	310.4	488.3
	AUG...	94.1	250.8	220.3	267.9	488.1	179.4	316.3	495.7
	SEP...	95.0	253.7	221.0	267.6	488.6	181.5	322.1	503.6
	OCT...	95.9	253.5	221.4	267.4	488.9	183.6	328.7	512.3
	NOV...	96.7	254.0	219.0	263.1	482.1	186.3	338.1	524.5
	DEC...	97.6	253.9	216.1	259.9	476.0	187.8	346.0	533.8
1979	JAN...	98.2	251.9	212.5	255.5	468.0	193.6	352.7	546.3
	FEB...	98.9	251.1	209.9	250.7	460.6	195.6	360.3	555.9
	MAR...	99.6	252.3	207.8	249.1	456.9	198.1	367.4	565.6
	APR...	100.2	256.0	206.6	246.0	452.6	202.6	373.7	576.3
	MAY...	100.8	255.2	205.5	243.3	448.9	206.7	377.8	584.5
	JUN...	101.7	258.5	206.4	243.8	450.2	211.0	381.0	592.0
	JUL...	102.6	260.6	206.6	244.4	451.0	214.1	382.9	597.0
	AUG...	103.7	261.7	206.5	243.8	450.3	218.1	386.5	604.6
	SEP...	104.8	262.7	204.9	240.4	445.3	221.6	392.5	614.2
	OCT...	105.4	262.6	202.1	233.9	435.9	226.7	400.9	627.5
	NOV...	105.9	263.7	197.1	225.1	422.2	235.1	410.8	645.8
	DEC...	106.1	265.4	195.5	222.3	417.8	238.5	414.9	653.4

TABLE 3
COMPONENTS OF MONEY STOCK MEASURES AND LIQUID ASSETS
(BILLIONS OF DOLLARS, SEASONALLY ADJUSTED)

		LARGE TIME DEPOSITS						
		AT COMMERCIAL BANKS	AT THRIFT INSTITUTIONS	TOTAL	SAVINGS BONDS	SHORT-TERM TREASURY SECURITIES	BANKERS ACCEPTANCES	COMMERCIAL PAPER
1976	JAN...	120.8	6.4	127.2	67.6	77.1	8.5	48.0
	FEB...	117.9	6.5	124.4	68.0	77.5	8.8	48.3
	MAR...	118.9	6.5	125.4	68.3	78.3	8.9	48.8
	APR...	118.8	6.4	125.2	68.7	79.5	8.8	49.0
	MAY...	114.9	6.3	121.2	69.1	79.6	9.0	49.2
	JUN...	118.4	6.3	124.7	69.4	80.7	9.0	49.7
	JUL...	119.3	6.6	125.9	69.6	81.3	9.2	50.1
	AUG...	115.6	6.9	122.5	70.1	81.5	9.3	50.5
	SEP...	113.7	7.1	120.8	70.8	82.9	9.0	50.2
	OCT...	111.3	7.3	118.6	71.7	82.3	9.0	50.1
	NOV...	110.3	7.6	117.8	71.5	81.4	9.1	50.7
	DEC...	110.2	7.8	118.0	71.8	80.7	9.0	51.8
1977	JAN...	109.8	7.8	117.6	72.2	78.9	9.9	52.3
	FEB...	110.5	7.8	118.3	72.6	80.6	10.5	52.7
	MAR...	110.6	7.9	118.5	73.0	81.7	10.6	53.5
	APR...	110.6	8.1	118.7	73.4	82.5	10.7	54.7
	MAY...	110.9	8.4	119.2	73.8	82.9	10.9	55.7
	JUN...	114.4	8.5	123.0	74.1	82.6	11.2	57.5
	JUL...	117.3	8.8	126.2	74.3	83.4	11.2	58.2
	AUG...	120.2	9.1	129.3	74.6	85.2	11.4	59.0
	SEP...	122.6	9.3	131.9	75.3	88.6	11.7	60.0
	OCT...	126.4	9.5	135.9	76.7	87.3	11.9	61.5
	NOV...	131.2	9.8	141.0	76.3	87.1	12.1	62.3
	DEC...	135.0	10.2	145.2	76.6	89.5	12.3	63.1
1978	JAN...	138.1	10.7	148.8	77.0	89.1	13.0	64.6
	FEB...	142.0	11.3	153.2	77.4	89.9	13.8	65.2
	MAR...	146.8	11.8	158.6	77.8	91.5	14.4	65.9
	APR...	151.6	12.5	164.0	78.2	92.4	15.0	67.6
	MAY...	156.1	13.1	169.2	78.7	93.8	15.4	69.1
	JUN...	159.5	13.3	172.8	78.8	94.5	15.9	70.2
	JUL...	162.8	13.7	176.5	78.6	94.2	16.6	71.2
	AUG...	165.7	14.2	179.8	78.9	94.9	17.0	72.1
	SEP...	168.1	14.7	182.8	79.8	100.0	17.1	73.3
	OCT...	168.4	15.1	183.4	81.5	96.3	17.7	75.0
	NOV...	176.3	15.6	191.9	80.4	94.3	20.4	76.8
	DEC...	178.5	16.2	194.7	80.7	98.7	22.6	79.4
1979	JAN...	180.4	17.0	197.4	80.6	98.8	22.4	81.2
	FEB...	183.2	17.8	200.9	80.6	100.4	21.3	83.1
	MAR...	181.9	18.1	200.0	80.5	108.2	21.3	85.0
	APR...	179.9	18.5	198.4	80.6	114.2	21.1	86.6
	MAY...	178.1	19.2	197.3	80.6	122.3	21.0	88.2
	JUN...	175.0	20.4	195.4	80.4	131.2	21.5	90.4
	JUL...	175.6	21.8	197.4	80.0	128.8	22.6	91.8
	AUG...	177.5	22.9	200.4	80.0	123.2	25.0	93.6
	SEP...	183.3	24.1	207.4	80.6	128.6	26.6	95.7
	OCT...	187.8	25.9	213.6	82.2	124.4	27.2	96.4
	NOV...	190.1	28.2	218.3	80.3	123.5	28.6	95.5
	DEC...	187.6	30.3	217.9				

TABLE 4
COMPONENTS OF MONEY STOCK MEASURES AND LIQUID ASSETS
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)

			DEMAND DEPOSITS			OTHER CHECKABLE DEPOSITS			OVERNIGHT RP"S	
		CURRENCY	AT MEMBER BANKS	AT DOMESTIC NONMEMBER BANKS	AT FOREIGN RELATED BANKING OFFICES IN THE U.S.	AT COMMERCIAL BANKS	AT THRIFT INST	TOTAL	GROSS	NET
1976	JAN...	73.7	155.2	61.6	3.2	0.4	0.7	1.1	7.9	7.7
	FEB...	74.1	149.0	59.4	3.3	0.4	0.8	1.2	8.7	8.5
	MAR...	75.1	149.5	59.8	3.6	0.5	0.8	1.3	9.1	8.9
	APR...	76.3	154.9	61.9	3.2	0.6	0.9	1.5	9.7	9.5
	MAY...	77.1	150.0	60.6	3.6	0.7	0.9	1.6	11.8	11.6
	JUN...	77.8	152.1	62.0	3.4	0.8	0.9	1.7	10.8	10.7
	JUL...	78.7	152.9	62.6	3.5	0.9	1.0	1.9	10.8	10.7
	AUG...	78.9	151.6	62.3	3.3	0.9	1.1	2.1	13.2	13.0
	SEP...	79.0	151.7	63.3	3.6	1.0	1.2	2.2	12.5	12.3
	OCT...	79.6	154.5	64.3	3.6	1.1	1.3	2.4	11.7	11.6
	NOV...	80.8	155.0	65.2	3.7	1.2	1.3	2.5	12.9	12.8
	DEC...	82.1	161.0	66.8	3.5	1.3	1.4	2.7	13.8	13.6
1977	JAN...	80.7	160.0	67.2	4.3	1.4	1.4	2.8	12.5	12.4
	FEB...	80.9	153.6	64.8	4.1	1.4	1.5	2.9	12.9	12.8
	MAR...	81.7	155.1	65.8	3.9	1.5	1.5	3.0	13.7	13.6
	APR...	82.9	160.8	69.3	3.8	1.5	1.6	3.1	13.7	13.5
	MAY...	83.5	154.7	67.7	3.8	1.4	1.7	3.1	15.9	15.7
	JUN...	84.3	157.7	69.6	3.8	1.5	1.7	3.2	15.2	15.0
	JUL...	85.7	159.4	70.0	4.4	1.6	1.8	3.4	15.4	15.2
	AUG...	85.8	158.0	69.0	4.6	1.6	1.9	3.5	16.4	16.2
	SEP...	86.2	159.5	70.6	4.7	1.7	2.0	3.7	16.7	16.5
	OCT...	87.0	161.9	71.5	4.9	1.8	2.1	3.8	16.4	16.2
	NOV...	88.5	162.2	73.1	4.9	1.8	2.1	3.9	18.0	17.7
	DEC...	90.3	167.3	75.3	4.4	1.9	2.2	4.1	17.9	17.6
1978	JAN...	88.6	167.8	75.5	4.5	1.9	2.3	4.2	17.3	17.0
	FEB...	88.9	158.5	72.8	4.7	1.9	2.3	4.2	17.8	17.5
	MAR...	89.9	160.1	73.2	4.3	2.0	2.4	4.3	18.7	18.5
	APR...	90.9	167.1	77.0	4.9	2.1	2.6	4.6	18.5	18.2
	MAY...	91.9	162.7	75.4	4.5	2.0	2.6	4.7	19.3	19.0
	JUN...	92.9	165.8	77.9	4.8	2.1	2.7	4.8	17.5	17.2
	JUL...	94.0	168.0	78.7	4.6	2.1	2.8	4.9	18.2	17.9
	AUG...	94.3	166.3	78.0	4.5	2.2	2.8	5.0	19.7	19.3
	SEP...	94.9	168.1	80.4	5.0	2.3	2.8	5.1	19.4	19.0
	OCT...	95.7	169.1	81.3	4.9	2.3	2.9	5.2	20.0	19.7
	NOV...	97.4	167.8	83.0	4.9	3.6	3.0	6.6	22.3	22.0
	DEC...	99.4	171.5	84.8	5.2	5.3	3.1	8.3	21.6	21.3
1979	JAN...	97.5	168.5	83.3	5.4	6.8	3.1	9.9	21.0	20.3
	FEB...	97.7	159.1	80.5	4.9	7.7	3.1	10.8	21.6	20.9
	MAR...	98.7	160.4	81.2	5.2	8.8	3.2	12.0	22.4	22.0
	APR...	99.9	168.5	86.2	4.9	10.1	3.4	13.5	22.8	22.4
	MAY...	100.6	161.2	83.6	5.1	9.9	3.5	13.4	24.0	23.5
	JUN...	101.8	166.1	86.0	5.5	10.5	3.6	14.1	23.9	23.1
	JUL...	103.2	169.3	87.2	5.4	11.2	3.7	14.8	22.8	22.0
	AUG...	103.9	167.4	86.5	5.4	11.6	3.8	15.3	22.8	21.9
	SEP...	104.5	168.2	88.6	5.7	11.9	3.8	15.7	23.9	22.6
	OCT...	105.2	169.2	89.3	5.9	12.0	3.9	15.8	23.7	22.2
	NOV...	106.6	169.7	89.9	6.0	11.8	3.9	15.7	22.4	20.3
	DEC...	108.0	175.6	91.8	5.6	12.2	4.0	16.2	23.1	20.7

TABLE 5
COMPONENTS OF MONEY STOCK MEASURES AND LIQUID ASSETS
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)

		OVERNIGHT EURODOLLARS	MONEY MARKET MUTUAL FUNDS	SAVINGS DEPOSITS				
				AT COMMERCIAL BANKS	AT S&L"S	AT MSB"S	AT CREDIT UNIONS	TOTAL
1976	JAN...	0.0	3.7	163.0	122.3	69.4	32.5	387.1
	FEB...	0.0	3.7	169.4	123.4	69.8	32.9	395.6
	MAR...	0.0	3.6	174.8	125.9	70.8	33.7	405.1
	APR...	0.0	3.6	179.0	127.5	71.4	34.4	412.3
	MAY...	0.0	3.5	181.3	128.2	71.5	34.8	415.9
	JUN...	0.0	3.4	181.8	129.6	72.0	35.5	418.9
	JUL...	0.0	3.3	183.2	130.6	72.5	35.8	422.1
	AUG...	0.0	3.3	184.7	130.9	72.5	35.9	424.0
	SEP...	0.0	3.3	186.6	131.9	72.6	36.2	427.3
	OCT...	0.0	3.3	190.6	133.1	73.0	36.8	433.6
	NOV...	0.0	3.4	194.6	133.8	73.2	37.2	438.8
	DEC...	0.0	3.4	198.8	134.7	73.6	37.7	444.9
1977	JAN...	0.0	3.6	203.4	135.4	74.0	38.3	451.0
	FEB...	0.1	3.8	206.0	136.1	74.2	38.8	455.1
	MAR...	0.2	3.8	209.7	137.6	75.0	39.7	462.0
	APR...	0.3	3.7	212.6	139.4	75.7	40.3	468.0
	MAY...	0.4	3.6	213.3	139.8	75.7	40.8	469.5
	JUN...	0.5	3.5	213.5	141.5	76.1	41.8	472.8
	JUL...	0.5	3.4	214.7	142.9	76.4	42.3	476.2
	AUG...	0.6	3.4	215.1	143.4	76.4	42.3	477.3
	SEP...	0.7	3.5	215.0	144.3	76.7	42.9	479.0
	OCT...	0.8	3.5	215.9	145.2	76.8	43.6	481.5
	NOV...	0.9	3.6	215.7	145.2	76.7	44.0	481.6
	DEC...	1.0	3.8	215.8	145.8	77.0	44.7	483.2
1978	JAN...	1.1	4.2	217.7	146.0	77.1	45.2	486.1
	FEB...	1.1	4.8	218.1	146.0	77.0	45.8	486.8
	MAR...	1.2	5.3	220.1	147.6	77.5	46.8	492.0
	APR...	1.3	5.8	221.8	148.2	77.6	47.6	495.2
	MAY...	1.4	6.3	222.0	147.9	77.4	48.0	495.2
	JUN...	1.5	6.8	222.0	147.8	76.9	48.8	495.6
	JUL...	1.6	7.2	221.5	146.3	75.8	49.0	492.7
	AUG...	1.7	7.8	220.7	144.9	74.9	48.8	489.3
	SEP...	1.7	8.4	220.6	144.5	74.6	49.3	489.0
	OCT...	1.8	8.9	220.6	143.4	73.8	49.6	487.4
	NOV...	1.9	9.4	217.4	140.2	72.3	49.5	479.4
	DEC...	2.0	10.3	214.1	137.7	71.1	49.8	472.8
1979	JAN...	2.3	12.1	211.5	134.8	69.5	49.2	465.1
	FEB...	2.6	14.5	208.7	132.0	68.0	48.3	457.1
	MAR...	2.8	16.8	208.6	132.1	67.8	48.8	457.2
	APR...	2.8	19.2	208.5	131.2	67.2	48.4	455.3
	MAY...	2.8	21.8	206.9	129.9	66.5	47.5	450.9
	JUN...	2.9	24.6	207.2	131.0	66.7	48.0	452.9
	JUL...	3.0	28.0	207.7	132.1	66.6	47.9	454.4
	AUG...	3.3	31.2	206.7	131.4	65.9	47.2	451.1
	SEP...	3.5	33.7	204.5	129.4	65.0	46.7	445.6
	OCT...	3.4	36.9	201.3	124.8	62.9	45.5	434.6
	NOV...	3.2	40.4	195.8	119.6	60.7	43.9	420.0
	DEC...	3.5	43.6	193.6	118.1	59.9	43.3	414.9

TABLE 6
COMPONENTS OF MONEY STOCK MEASURES AND LIQUID ASSETS
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)

		SMALL DENOMINATION TIME DEPOSITS					LARGE DENOMINATION TIME DEPOSITS			
		AT COMMERCIAL BANKS	AT S&L"S	AT MUTUAL SAVINGS BANKS	AT CREDIT UNIONS	TOTAL	AT COMMERCIAL BANKS	AT S&L"S	AT MUTUAL SAVINGS BANKS	TOTAL
1976	JAN...	144.0	160.5	39.3	0.0	343.8	122.1	5.5	0.8	128.4
	FEB...	145.0	164.0	39.9	0.0	348.9	118.1	5.6	0.7	124.4
	MAR...	143.7	166.9	40.4	0.0	351.1	118.8	5.6	0.7	125.1
	APR...	143.4	170.2	41.1	0.0	354.7	117.9	5.6	0.7	124.2
	MAY...	145.7	172.5	41.7	0.0	359.8	114.8	5.6	0.7	121.1
	JUN...	146.3	174.9	42.2	0.0	363.5	116.8	5.7	0.7	123.2
	JUL...	147.4	177.7	42.7	0.0	367.8	117.5	6.0	0.7	124.2
	AUG...	149.7	179.7	43.2	0.0	372.7	115.7	6.3	0.8	122.8
	SEP...	153.0	182.3	43.9	0.0	379.2	113.7	6.5	0.8	121.0
	OCT...	155.5	185.4	44.6	0.0	385.5	111.7	6.7	0.8	119.2
	NOV...	155.4	187.7	45.2	0.0	388.3	110.5	6.8	0.8	118.0
	DEC...	156.3	191.1	46.1	0.0	393.5	112.1	6.8	0.8	119.7
1977	JAN...	158.9	196.0	47.0	0.0	401.9	111.3	6.8	0.8	118.9
	FEB...	161.3	199.7	47.6	0.0	408.6	110.8	6.8	0.8	118.4
	MAR...	163.4	203.0	48.2	0.0	414.6	110.9	7.0	0.8	118.7
	APR...	164.8	206.3	48.5	0.0	419.7	109.6	7.2	0.9	117.6
	MAY...	166.9	208.5	48.9	0.0	424.4	110.4	7.4	0.9	118.7
	JUN...	168.4	211.5	49.7	0.0	429.7	112.9	7.8	0.9	121.6
	JUL...	168.6	215.0	50.4	0.0	434.1	115.6	8.1	0.9	124.6
	AUG...	168.4	217.6	50.8	0.0	436.8	119.8	8.4	0.9	129.2
	SEP...	168.9	220.9	51.3	0.0	441.1	122.2	8.6	1.0	131.8
	OCT...	169.3	224.2	52.0	0.0	445.5	126.6	8.7	1.0	136.3
	NOV...	168.3	226.2	52.6	0.0	447.1	131.8	8.7	1.0	141.5
	DEC...	169.0	229.0	53.2	0.0	451.3	137.7	8.9	1.0	147.7
1978	JAN...	171.3	232.5	54.0	0.1	457.8	140.1	9.3	1.1	150.5
	FEB...	173.1	234.5	54.6	0.2	462.4	142.5	9.9	1.1	153.5
	MAR...	174.1	237.0	55.2	0.3	466.6	147.6	10.4	1.2	159.3
	APR...	174.2	239.6	55.7	0.4	470.0	150.3	11.1	1.2	162.7
	MAY...	175.4	240.7	56.1	0.6	472.8	155.4	11.7	1.3	168.3
	JUN...	177.0	244.8	57.3	0.7	479.8	157.1	12.2	1.3	170.6
	JUL...	178.1	250.8	59.2	0.8	488.9	160.2	12.6	1.4	174.2
	AUG...	179.2	254.4	60.2	0.9	494.8	164.8	13.1	1.5	179.4
	SEP...	181.7	258.7	61.3	1.0	502.7	167.3	13.5	1.6	182.4
	OCT...	184.2	264.2	62.8	1.2	512.4	168.7	13.7	1.6	184.0
	NOV...	184.8	269.6	64.6	1.3	520.3	177.3	13.9	1.7	192.9
	DEC...	185.9	275.8	66.6	1.4	529.8	182.4	14.1	1.7	198.2
1979	JAN...	193.0	283.3	69.0	1.8	547.1	182.9	14.8	1.8	199.5
	FEB...	196.2	289.1	70.9	2.4	558.6	184.1	15.5	1.8	201.4
	MAR...	198.7	294.3	72.4	3.0	568.4	183.3	15.9	1.8	201.1
	APR...	202.8	298.3	73.4	4.0	578.5	178.5	16.3	1.9	196.7
	MAY...	207.5	299.2	73.6	5.0	585.3	177.2	17.1	2.0	196.3
	JUN...	212.0	301.1	73.8	5.6	592.5	172.4	18.6	2.1	193.1
	JUL...	214.3	302.9	74.0	6.3	597.4	172.6	20.1	2.2	194.9
	AUG...	217.9	304.0	74.3	7.1	603.3	176.4	21.3	2.3	200.0
	SEP...	221.6	307.9	75.4	7.9	612.7	182.0	22.4	2.4	206.8
	OCT...	227.1	314.4	77.1	8.7	627.3	188.0	23.8	2.5	214.2
	NOV...	233.2	319.5	78.6	9.5	640.8	191.4	25.4	2.6	219.5
	DEC...	236.4	322.4	79.6	10.3	648.7	192.0	26.8	2.7	221.5

TABLE 7
COMPONENTS OF MONEY STOCK MEASURES AND LIQUID ASSETS
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)

		TERM RP"S						
		AT COMMERCIAL BANKS	AT THRIFT INSTS.	TERM EURODOLLAR	SAVINGS BONDS	SHORT-TERM TREASURY SECURITIES	BANKER"S ACCEPTANCE	COMMERCIAL PAPER
1976	JAN...	7.6	1.6	8.2	67.5	78.8	8.1	47.9
	FEB...	8.3	1.5	8.6	67.9	79.2	8.8	49.0
	MAR...	8.7	1.5	8.7	68.3	79.9	8.9	49.1
	APR...	9.3	1.6	8.9	68.7	80.1	8.9	48.9
	MAY...	11.3	1.6	9.3	69.1	79.0	9.2	49.5
	JUN...	10.4	1.8	9.5	69.5	78.4	9.1	49.6
	JUL...	10.4	1.9	9.7	69.8	79.3	9.4	49.9
	AUG...	12.6	2.0	9.8	70.3	80.8	9.5	49.9
	SEP...	12.0	1.9	9.7	70.8	81.0	9.2	49.3
	OCT...	11.2	1.8	9.9	71.1	82.3	9.1	49.9
	NOV...	12.4	1.8	10.2	71.5	82.6	8.9	51.5
	DEC...	13.2	1.8	10.3	71.8	80.9	8.4	51.8
1977	JAN...	12.0	1.9	10.3	72.2	80.7	9.5	52.1
	FEB...	12.4	1.9	10.5	72.6	82.4	10.7	53.3
	MAR...	13.2	2.1	10.7	73.0	83.1	10.8	53.7
	APR...	13.1	2.2	11.1	73.4	83.1	10.8	54.7
	MAY...	15.2	2.4	11.5	73.8	82.3	11.1	56.1
	JUN...	14.6	2.7	11.3	74.3	80.7	11.4	57.6
	JUL...	14.8	2.8	12.0	74.7	81.7	11.3	58.3
	AUG...	15.7	3.0	12.6	75.1	84.6	11.6	58.4
	SEP...	16.0	3.1	12.7	75.4	86.1	11.8	58.9
	OCT...	15.7	3.3	12.9	75.8	87.4	11.9	61.2
	NOV...	17.2	3.5	13.5	76.2	88.4	11.7	63.1
	DEC...	17.2	3.8	13.7	76.6	89.3	11.4	63.1
1978	JAN...	16.6	3.9	14.1	77.0	91.0	12.5	64.3
	FEB...	17.1	4.0	15.3	77.4	91.9	14.3	65.8
	MAR...	18.0	4.2	16.1	77.8	92.8	14.8	66.0
	APR...	17.8	4.6	16.7	78.2	93.2	15.2	67.6
	MAY...	18.5	5.0	17.8	78.6	93.4	15.7	69.7
	JUN...	16.8	5.1	19.3	79.0	92.8	16.2	70.6
	JUL...	17.5	5.2	20.5	79.3	92.5	16.6	71.4
	AUG...	18.9	5.3	21.6	79.6	94.3	17.3	71.4
	SEP...	18.6	5.4	21.0	79.8	96.6	17.2	71.9
	OCT...	19.2	5.6	21.2	80.1	96.5	17.6	74.4
	NOV...	21.5	5.8	23.0	80.4	95.7	19.6	77.6
	DEC...	20.8	5.9	22.8	80.6	98.4	20.8	79.4
1979	JAN...	20.2	5.9	24.4	80.6	100.7	21.6	81.0
	FEB...	20.8	5.7	27.1	80.6	102.8	22.3	83.7
	MAR...	21.5	5.7	28.4	80.6	109.6	22.0	85.0
	APR...	21.9	6.0	29.1	80.6	115.2	21.5	86.6
	MAY...	23.1	6.2	29.6	80.6	122.1	21.5	89.0
	JUN...	22.9	6.6	29.9	80.6	129.0	21.8	91.1
	JUL...	21.9	7.1	31.3	80.6	126.5	22.5	92.2
	AUG...	21.9	7.6	33.8	80.6	122.2	25.3	92.6
	SEP...	22.9	8.1	33.6	80.6	123.9	26.7	93.8
	OCT...	22.7	8.3	33.5	80.5	124.7	27.1	95.4
	NOV...	21.5	8.2	34.5	80.3	125.4	27.6	97.1
	DEC...	22.2	8.0	33.3				

TABLE 8
MEMORANDA ITEMS
(BILLIONS OF DOLLARS, NOT SEASONALLY ADJUSTED)

		DEMAND DEPOSITS DUE TO		TIME AND SAVINGS DUE TO FOREIGN OFFICIAL INSTI & BANKS	U.S. GOVERNMENT DEMAND DEPOSITS				U.S. GOVT. TIME AND SAVINGS DEPOSITS
		FOREIGN COMMERCIAL BANKS	FOREIGN OFFICIAL INSTITUTIONS		AT COMMERCIAL BANKS	AT FEDERAL RESERVE BANKS	NOTE BALANCES AT BANKS AND THRIFTS	TOTAL	
1976	JAN...	6.9	2.5	15.2	3.8	5.9	0.0	9.7	0.6
	FEB...	7.1	2.3	14.1	4.5	8.8	0.0	13.3	0.6
	MAR...	7.2	2.3	13.0	3.9	7.7	0.0	11.7	0.7
	APR...	7.2	2.2	12.0	3.9	5.2	0.0	9.0	0.6
	MAY...	7.3	2.3	12.3	3.8	7.3	0.0	11.0	0.7
	JUN...	7.4	2.4	13.0	4.8	6.8	0.0	11.6	0.7
	JUL...	7.6	2.5	13.0	3.5	7.4	0.0	10.8	0.8
	AUG...	7.4	2.4	12.4	3.7	7.8	0.0	11.5	0.8
	SEP...	7.7	2.3	12.4	5.0	8.2	0.0	13.2	0.8
	OCT...	7.7	2.4	12.3	4.0	9.2	0.0	13.2	0.7
	NOV...	8.1	2.5	11.7	4.1	6.7	0.0	10.8	0.7
	DEC...	8.3	2.8	12.2	4.4	6.1	0.0	10.5	0.7
1977	JAN...	8.1	2.8	12.0	3.9	7.9	0.0	11.8	0.7
	FEB...	8.0	2.2	11.4	4.2	10.7	0.0	14.9	0.7
	MAR...	8.0	2.3	11.2	4.3	8.5	0.0	12.8	0.7
	APR...	8.0	2.4	11.2	5.4	7.4	0.0	12.8	0.7
	MAY...	8.3	2.5	11.8	3.6	10.9	0.0	14.5	0.7
	JUN...	8.6	2.6	12.2	5.0	7.0	0.0	12.0	0.8
	JUL...	9.1	2.8	11.8	3.6	8.9	0.0	12.5	0.8
	AUG...	8.9	2.6	11.3	3.4	6.0	0.0	9.5	0.8
	SEP...	8.8	2.7	10.9	5.0	6.9	0.0	11.8	0.9
	OCT...	8.8	2.7	11.2	3.7	6.7	0.0	10.4	0.9
	NOV...	9.1	2.6	11.5	3.5	2.4	0.0	6.0	0.9
	DEC...	10.2	3.1	11.6	5.1	5.6	0.0	10.8	0.9
1978	JAN...	9.8	3.0	11.8	4.3	7.5	0.0	11.8	0.9
	FEB...	10.5	2.8	12.1	4.3	5.7	0.0	10.0	0.8
	MAR...	10.3	2.7	12.1	4.8	4.7	0.0	9.5	0.9
	APR...	9.9	2.9	11.7	5.0	5.2	0.0	10.2	0.9
	MAY...	10.2	2.6	11.4	4.0	6.4	0.0	10.4	1.0
	JUN...	10.2	2.5	11.3	6.2	7.5	0.0	13.7	1.0
	JUL...	10.0	2.6	10.9	4.4	10.6	0.0	15.1	1.0
	AUG...	10.1	2.6	10.9	3.5	9.9	0.0	13.5	1.0
	SEP...	9.9	2.6	11.2	6.2	11.0	0.0	17.2	1.0
	OCT...	10.0	2.7	11.2	4.3	15.0	0.0	19.3	0.9
	NOV...	10.2	2.6	11.8	2.7	8.2	5.6	16.5	0.9
	DEC...	10.9	2.8	11.6	3.3	4.0	7.0	14.3	0.9
1979	JAN...	10.3	2.6	11.6	2.6	3.4	9.5	15.4	1.0
	FEB...	10.2	2.7	11.0	2.5	3.5	5.9	11.9	1.0
	MAR...	9.7	2.7	10.9	2.5	3.1	4.1	9.6	0.9
	APR...	9.5	2.8	10.5	2.6	2.8	2.7	8.2	0.9
	MAY...	10.1	3.1	10.0	2.4	3.3	6.0	11.7	1.0
	JUN...	10.6	3.2	9.9	3.5	3.3	7.3	14.1	1.0
	JUL...	11.0	3.0	9.7	2.2	3.3	11.0	16.5	1.0
	AUG...	10.7	2.9	9.5	2.3	3.0	7.5	12.8	1.0
	SEP...	11.3	2.7	9.7	2.7	3.9	9.7	16.3	1.0
	OCT...	11.4	2.6	9.2	2.1	3.3	9.6	15.0	1.0
	NOV...	11.5	3.1	8.7	2.2	3.0	3.3	8.6	1.0
	DEC...	12.0	3.3	9.5	2.5	3.0	6.9	12.5	1.0

A Proposal for Redefining the Monetary Aggregates

This BULLETIN *article presents proposals by the staff of the Board of Governors for redefining the monetary aggregates. They were formulated by a board staff group chaired by Stephen H. Axilrod, Staff Director for Monetary and Financial Policy. The proposals raise important issues regarding the payments system, the evolving role of depositary institutions, and the basis upon which the public chooses to hold various financial assets. To aid in further consideration of these proposals, comments are invited from the public. Please address comments to Office of the Staff Director for Monetary and Financial Policy, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.*

Thomas D. Simpson, Senior Economist in the Banking Section of the Division of Research and Statistics, had principal responsibility for the preparation of this article. Others making major contributions to the formulation and analysis of these proposals were Edward C. Ettin, John H. Kalchbrenner, David E. Lindsey, Richard D. Porter, Peter Tinsley, Darwin Beck, and William Barnett. Research assistance was provided by Daniel Rudolph and Juan Perea.

Regulatory changes and financial innovations in recent years have fundamentally altered the character of the public's monetary assets. These developments are responsible for growing similarities among certain kinds of deposits, and, at the same time, for disappearing resemblances among other kinds. Moreover, the distinctions between the deposit liabilities of commercial banks and those of thrift institutions have become blurred.

With the authorization of negotiable order of withdrawal (NOW) accounts and credit union share drafts, some savings balances at thrift institutions and commercial banks now provide the same transactions services as demand deposits. In addition, preauthorization of bill payments and telephone transfer services have significantly increased the liquidity of savings deposits at both commercial banks and thrift institutions; and the automatic transfer from savings to demand accounts (ATS), recently authorized, has added substantially to the transactions-related character of savings deposits at commercial banks.[1]

Other developments have reduced similarities among various kinds of deposits, however. While savings balances at both commercial banks and thrift institutions have become more liquid in recent years, time deposits have generally become less liquid. Penalties for early withdrawal and the steady lengthening of maturities have reduced considerably the liquidity of small-denomination time deposits. As a consequence, the components of the M-2 and M-3 aggregates representing savings and small time deposits have become more dissimilar over time. Furthermore, a growing share of those time deposits included in M-2—and in M-3—is in large time deposits with denominations of $100,000 or more. Chart 1 shows that large time deposits currently make up a much larger proportion of M-2 than they did in the early 1970s. Moreover, such deposits have behaved much like a managed liability, and their movements have tended to offset cyclical movements in savings and small time deposits, also shown

[1] Some thrift institutions—those with third-party-payment powers—are also permitted to offer automatic transfers. Moreover, the Federal Home Loan Bank Board has recently proposed that federally chartered savings and loan associations be authorized to offer a new kind of third-party-payment account—a payment order account—on which funds could be withdrawn by nonnegotiable, nontransferable orders.

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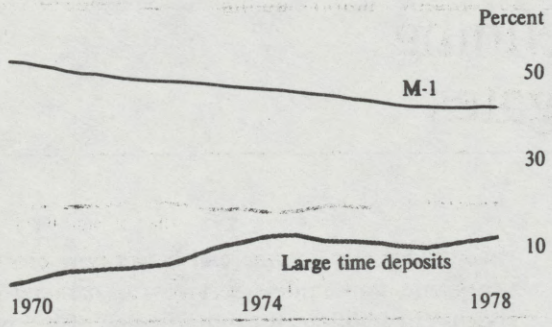


Quarterly averages, seasonally adjusted.

in the chart. Over the cycle, large time deposits included in M-2 have varied in much the same way as large negotiable time deposits (negotiable certificates of deposit) at large banks, which are excluded from the current M-2 and M-3 measures.

Commercial banks in recent years have also come to rely more heavily on some nondeposit liabilities, particularly security repurchase agreements (RPs).[2] From the standpoint of the customer, RPs are a relatively safe and liquid alternative to holding deposits with commercial banks and other depositary institutions.

Because of these developments, the meaning of measures of the monetary aggregates has been changing, and a revision in existing definitions appears needed. The definitions proposed by the board staff in this article reflect recent developments by grouping together similar kinds of deposits at all depositary institutions. While the proposals seek to bring the monetary aggregates up to date, no one aggregate or group of aggregates can satisfy all purposes and, at times, it is necessary to deal with their principal components, which would be published separately.[3] Moreover, in view of the ongoing nature of regulatory and financial innovation, further redefinitions might well be needed as the character of the public's monetary assets continues to change.

The most important financial developments affecting the monetary aggregates in recent years are discussed in the next section. This is followed by a presentation of the proposed measures of the monetary aggregates. The next two sections discuss the empirical relationships among the proposed aggregates and other important economic variables, and the Federal Reserve's ability to control the various monetary aggregates. Important consolidation issues arise in the construction of measures of the public's monetary assets and some of these are discussed next. The last section contains a brief discussion of the timeliness of the data and data requirements. The appendix describes in some detail the procedures used in constructing the proposed monetary aggregates and the basic data sources.

Recent Developments Affecting the Public's Monetary Assets

Since 1970 a large number of regulatory changes and other financial developments have affected the nature of the public's monetary assets. The most significant of these are listed in table 1. With the authorization of NOW accounts (line 2), credit union share drafts (line 6), and demand deposits at thrift institutions (line 9), new accounts subject to withdrawal by draft or check have appeared. NOW balances at commercial banks had grown to about $2 billion by June 1978, while NOW accounts at thrift institutions had grown to over $1 billion (table 2, last column). Balances in share draft accounts at credit unions (the third item in table 2), plus demand deposits at thrift institutions (the fourth item) equaled almost $1½ billion, or about one-half of total NOW balances at that time.

Preauthorized transfers from savings accounts at commercial banks (table 1, line 1), government and business savings accounts (line 7), telephone transfers (line 8), and, most recently, automatic transfer services (ATS, line 11) have substantially enhanced the liquidity and transactions character of commercial bank savings

[2] A security repurchase agreement is an arrangement whereby a bank "sells" a security in its portfolio—usually a treasury or federal agency security—to a customer and agrees to repurchase it at a specified price at some future date.

[3] In addition to the principal components of the proposed monetary aggregates, other pertinent deposit categories, such as U.S. Treasury deposits, interbank deposits, and deposits of foreign commercial banks and official institutions, would be published. Estimates of commercial bank repurchase agreements with the nonbank public would also be published.

1. Selected developments affecting the nature of the monetary aggregates

Development	Date	Deposit liability	Monetary aggregate containing deposit liability
1. Preauthorized transfers [a]	9/70, 4/75, 9/75	Savings balances at S&Ls and commercial banks	M-2, M-3
2. NOW accounts [b]	6/72, 9/72, 1/74, 2/76, 11/78	Savings balances at MSBs, S&Ls, and commercial banks	M-2, M-3[c]
3. 2½-year, 4-year, 6-year, and 8-year time deposits [d]	1/70, 7/73 12/74, 6/78	Time deposits at MSBs, S&Ls, and commercial banks	M-2, M-3
4. Substantial penalty on early withdrawal of time deposits	7/73	Time deposits at commercial banks, S&Ls, and MSBs	M-2, M-3
5. Point-of-sale terminals (POS) permitting remote withdrawals of deposits from savings	1/74	Savings balances at S&Ls	M-3
6. Credit union share drafts [e]	10/74, 3/78	Regular share accounts at federal credit unions	M-3
7. Savings accounts from domestic governments and businesses [f]	11/74, 11/75	Savings balances at commercial banks	M-2, M-3
8. Telephone transfers	4/75	Savings balances at commercial banks [g]	M-2, M-3
9. Demand deposits at thrifts [h]	5/76	Deposits of MSBs and S&Ls	M-3
10. 6-month money market certificates	6/78	Time deposits at S&Ls, MSBs, and commercial banks	M-2, M-3
11. Automatic transfer services (ATS)	11/78	Savings balances at commercial banks and thrifts having transactions balances	M-2, M-3
12. Payment order account (POA)	Proposed 11/78	Savings balances at S&Ls	M-3

[a] Savings and loans were permitted to make preauthorized nonnegotiable transfers from savings accounts for household-related expenditures in September 1970 and third-party nonnegotiable transfers from savings in April 1975. Commercial banks were authorized to make preauthorized third-party nonnegotiable transfers from savings in September 1975.

[b] State-chartered mutual savings banks began offering NOWs in Massachusetts in June 1972 and in New Hampshire in September 1972. In January 1974, depositary institutions in Massachusetts and New Hampshire were authorized to offer NOWs. In March 1976, NOWs were authorized at depositary institutions in Connecticut, Maine, Rhode Island, and Vermont; in November 1978, NOWs were authorized in New York State.

[c] NOWs at commercial banks appear in M-2 (and M-3), while NOWs a thrift institutions appear in M-3.

[d] The increase in interest rate ceilings on the two-and-one-half year deposit was approved in January 1970, the increase on the four-year time deposit was approved in July 1973, the increase on the six-year deposit in December 1974, and the increase on the eight-year time deposit in June 1978.

[e] Temporary experimental share draft programs were first approved for federal credit unions in October 1974; final regulations for permanent programs became effective in March 1978.

[f] Savings accounts for domestic government units were permitted in November 1974, and for businesses (up to $150,000 per account per customer) in November 1975.

[g] Telephone transfers from savings balances at thrift institutions have been allowed since the 1960s.

[h] State-chartered mutual savings banks and savings and loans in New York State were authorized to offer demand deposits in May 1976. Prior to this time, these institutions were permitted to offer payment orders of withdrawal (POW) deposits. In addition, thrift institutions in some other states have been permitted to offer non-interest-earning transactions balances to households.

balances. Telephone transfers and ATS permit savings balances to be shifted readily into demand accounts, while preauthorized transfers permit direct payments from customers' savings. The authorization of savings accounts for businesses and domestic governments gives these depositors a highly liquid interest-earning alternative to holding funds in demand accounts. Funds in domestic government and business savings accounts (shown in table 2) grew sharply just after being introduced but more recently have leveled off (business accounts) or declined (government accounts) in response to increases in market rates of interest. In late 1978, such balances amounted to about $14½ billion.

Evidence on debits to savings accounts, available since July 1977, indicates that activity in these accounts has increased recently. As shown below, turnover rates, defined as the

2. Selected deposit balances at commercial banks and thrift institutions

Millions of dollars, not seasonally adjusted

Type of deposit balance	June 1974	June 1975	June 1976	June 1977	June 1978
NOW accounts					
At commercial banks	13	211	804	1,501	2,080
At thrift institutions	178	369	611	875	1,181
Share draft balances at credit unions	...	3	61	234	576
Demand deposits at thrift institutions	...	166	314	594	864
Savings at commercial banks					
By domestic governments	...	336	3,440	6,282	4,878
By businesses	...	...	6,013	10,123	10,757
Small-denomination time deposits with maturities over four years					
At commercial banks [a]	21,027	35,956	49,890	66,151	74,396
At thrift institutions [b]	40,600	82,100	117,500	158,400	196,800

[a] Measured as of July of each year.

[b] Estimated as of March of each year for savings and loans and April of each year for mutual savings banks.

annual dollar volume of debits divided by average balances, have risen since the summer of 1977. (These data do not include NOW accounts.) Turnover rates for business savings

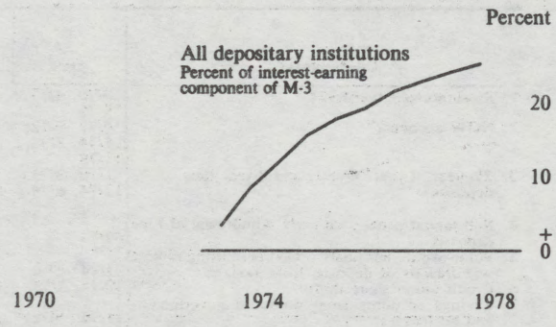
Month	Debits to savings deposits (billions of dollars at annual rates)		Savings deposit turnover (annual rates)	
	Business	Other	Business	Other
1977				
July	40.8	307.8	4.0	1.5
October ...	41.9	313.2	4.0	1.5
December	49.1	304.9	4.6	1.5
1978				
March	48.3	333.5	4.6	1.6
July	55.6	376.5	5.1	1.8
October ...	67.2	394.2	5.8	1.9

accounts advanced 45 percent from July 1977 to October 1978, while turnover rates for other savings accounts—mainly those of individuals and to a lesser degree domestic governments—rose about 25 percent.[4] To some extent, this increase in turnover rates might reflect higher market rates of interest, as some savings customers likely shifted their investment funds—relatively idle balances—to market instruments with higher yields. Nevertheless, savings balances of both businesses and others did expand between these dates, when turnover rates were rising, suggesting that any outflows of investment funds from savings were more than offset by inflows of more transactions-related funds.

Similarly, preauthorized and telephone transfers have enabled customers of thrift institutions to use their savings more effectively for transactions purposes. In addition, point-of-sale terminals (POS, table 1, line 5) have gone a step further by allowing these customers to make withdrawals and deposits from savings by using remote terminals placed at retailers. Most recently, the Federal Home Loan Bank Board has proposed that federally chartered savings and loan associations be permitted to offer a new "payment order account" (POA, line 12), which could be used for making third-party payments.[5]

[4] These turnover rates for savings deposits, however, are considerably smaller than turnover rates for demand deposits, which are about 100 per year for banks located outside New York City.

[5] The ceiling rate on POA accounts would, according to the proposal, be 5 percent, the same as that for all NOW accounts and ATS savings. The ceiling rate on share draft accounts at credit unions is 7 percent.



Original maturities of four years or longer. Commercial bank data are quarterly; observations for other depositary institutions are for March and September. Long-term time deposits at mutual savings banks and savings and loans have been estimated; those at credit unions, believed to be very small, are excluded.

In contrast to these developments, the increase in regulatory ceiling rates on four-, six-, and eight-year time deposits (line 3), which enabled depositary institutions to issue longer-term time deposits, has led to a significant reduction in the liquidity of time deposits by lengthening maturities at commercial banks, mutuals, and savings and loans. As chart 2 shows, from the early 1970s to mid-1978, commercial bank time deposits with maturities of four years or more advanced from less than 1 percent of total time and savings deposits included in M-2 to 15 percent; even more striking has been the trend in longer-term time deposits included in M-3, also shown in the chart, which jumped from modest proportions in 1973 to an estimated 25 percent of total time and savings deposits included in this aggregate by the spring of 1978. Dollar amounts of longer-term time deposits at commercial banks and at savings and loans and mutual savings banks are given in the last two rows of table 2. In mid-1978, such deposits accounted for about 45 percent of small-denomination time balances at commercial banks and about 70 percent of small time balances at savings and loans and mutual savings banks. The substantial penalty on early withdrawals of time deposits imposed in July 1973 has further reduced the liquidity of time deposits included in M-2 and M-3.[6]

[6] The depositor is required to forgo interest for 90 days and earns the passbook rate for the remaining time that the funds have been placed with the institution.

The introduction in June 1978 of the six-month variable-ceiling money market certificate (table 1, line 10) has tended to offset the trend toward longer average maturities of time deposits. This new deposit has attracted a sizable volume of funds at both commercial banks and thrift institutions in just a few months. By late December, seven months after the introduction of money market certificates, such deposits at commercial banks had expanded to 4½ percent of total time and savings deposits included in M-2; at both commercial banks and thrift institutions these certificates had risen by late December to about 6¾ percent of total time and savings deposits included in M-3.

In addition to these developments, in the past decade the public began to use cash management techniques more intensively. With the application of such techniques as lock boxes, wire transfers, information-retrieval systems, and cash-concentration accounts, the public—particularly businesses—has been able to make transactions using relatively smaller amounts of demand deposits. In extensive interviews with board staff, cash managers and commercial bankers indicated that their reliance on cash management intensified around the mid-1970s. Much of the funds "released" from demand deposits was used to acquire highly liquid interest-earning investments, such as repurchase agreements, commercial paper, and treasury bills.[7]

Proposed Monetary Aggregates

The four monetary aggregates being proposed by the board staff are presented in table 3. The new measures are designed to replace the current monetary aggregates, M-1 through M-5, shown in table 4. Proposed M-1, by including new transactions accounts and by excluding selected foreign deposits, is a more comprehensive measure of transactions balances held for domestic expenditures than current M-1. The next measure, M-1+, adds to M-1 all savings balances at commercial banks, which have become more transactions-related in recent years. Next, savings balances at thrift institutions, which have also become more liquid in recent years, are added to M-1+ in deriving proposed M-2. The fourth and broadest measure of the public's monetary assets, proposed M-3, adds to proposed M-2 time deposits at all depositary institutions, and has been designed to include all the deposit liabilities to the public of depositary institutions.

3. Proposed monetary aggregates

Dollar amounts in billions of dollars, not seasonally adjusted

Proposed aggregate	Components	Amount, June 1978
1. M-1	Current M-1	351.7
	PLUS: NOW balances	3.3[a]
	Credit union share drafts	.6
	Demand deposits at thrifts	.9
	ATS savings	0[b]
	LESS: Demand deposits of foreign commercial banks and official institutions	11.3
	Total[c]	345.0
2. M-1+	Proposed M-1	345.0
	PLUS: Savings balances at commercial banks[d]	221.6
	Total	566.6
3. M-2	Proposed M-1	345.0
	PLUS: Savings balances at all depositary institutions[e]	495.3
	Total	840.3
4. M-3	Proposed M-1	345.0
	PLUS: All time and savings deposits (including large time deposits) at all depositary institutions[e]	1,154.6
	Total	1,499.7

[a] Consists of NOW balances in New England states. In November 1978, NOW accounts were authorized in New York State and by January 10, 1979, the stock of NOW balances at depositary institutions in New York is estimated to have been $0.6 billion.

[b] Would also include payment order accounts (POA) at savings and loans, if the current Federal Home Loan Bank Board proposal is adopted. ATS savings were first offered on November 1, 1978, and by January 10, 1979, estimated ATS balances were $4 billion.

[c] Total does not equal the sum of the components because of other miscellaneous adjustments to the total (see the appendix).

[d] Excludes NOW and ATS savings balances at commercial banks.

[e] Excludes all NOW, ATS, POA (if introduced), and credit union share draft balances.

Two questions were asked in designing the proposed measures. First, do the assets included serve as a transactions balance or a medium of exchange? Are they, that is, generally accepted in exchange for goods, services, and other

[7] In a recent econometric study of money demand, Tinsley, Garrett, and Friar conclude that the bulk of the shortfall in the public's demand for deposits during this period was mirrored by acquisitions of transactions-related RPs. See P. A. Tinsley, B. Garrett, with M. E. Friar, "The Measurement of Money Demand" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Special Studies Section, November 1978; processed). An alternative interpretation of this period—one emphasizing the contribution of cash management services to reducing the variance of depositors' cash flow positions—can be found in Richard D. Porter and Eileen Mauskopf, "Cash Management and the Recent Shift in the Demand for Demand Deposits" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Econometric and Computer Applications Section, October 1978; processed).

4. Current monetary aggregates

Dollar amounts in billions, not seasonally adjusted

Current aggregate	Components	Amount, June 1978
1. M-1	Currency	92.9
	PLUS: Demand deposits at commercial banks	258.8
	Total	351.7
2. M-2	M-1	351.7
	PLUS: Savings balances at commercial banks	223.8
	Time deposits at commercial banks	352.8
	LESS: Negotiable CDs at large banks	86.3
	Total	842.0
3. M-3	M-2	842.0
	PLUS: Savings balances at thrift institutions	275.8
	Time deposits at thrift institutions	317.4
	Total	1,435.2
4. M-4	M-2	842.0
	PLUS: Negotiable CDs at large banks	86.3
	Total	928.3
5. M-5	M-3	1,435.2
	PLUS: Negotiable CDs at large banks	86.3
	Total	1,521.5

assets? Traditionally, currency and demand deposits at commercial banks—which make up current M-1—have been viewed as satisfying this condition. More recently, as noted earlier, other kinds of deposits, some of which are at other kinds of institutions, have come to meet this criterion. Thus, in defining the proposed M-1 measure, transactions balances of various kinds have been aggregated across depositary institutions.

Second, is the asset readily convertible into a transactions balance? Does the public view it, that is, as a highly liquid alternative to transactions balances? Many believe that those assets that the public considers close substitutes for transactions balances should be included in broader measures of the monetary aggregates. The current M-2 was designed to reflect this criterion by including savings and small time deposits at commercial banks along with conventional transactions media. This second criterion also implies limits to aggregation. Assets that are not viewed as close substitutes for media of exchange would be excluded from the monetary aggregates. In applying this criterion to the broader measures of the monetary aggregates, similar kinds of deposits at all depositary institutions have been combined.

Other considerations have influenced the design of the proposed monetary aggregates. One is data availability. For example, it can be argued that even though time deposits have generally become more illiquid over time, there are sizable amounts of short-term time deposits and they should be included with savings deposits in a measure of the money supply.[8] The problem with including time deposits is that data on remaining maturities are generally not available, and data on the original maturities of time deposits for some institutions, principally member banks, are available only for recent years.[9] The issue of data availability is discussed below and in the appendix.

Another consideration in selecting measures of the monetary aggregates is their empirical relation to other economic variables, particularly the gross national product. Normally, a measure of money would be more desirable the closer its past relationship to GNP and other economic variables. By fundamentally altering the nature of the public's monetary assets, however, recent financial developments have diminished the usefulness of statistical relationships based on longer-term experience as guides to selecting aggregates. Indeed, in large part it is because of these developments that new measures of the monetary aggregates are being proposed. Empirical evidence on this issue is presented below. Finally, the ability of the Federal Reserve to control an aggregate is another important consideration in making a selection. This issue, too, is discussed later.

The remainder of this section examines each of the proposed monetary aggregates in some detail.

[8] While short-term time deposits tend to be liquid in the sense that the date of maturity is near, with current interest penalties such deposits tend to become less liquid as they approach maturity in the sense that the effective yield declines more the closer withdrawal is to maturity.

[9] Timely data on the original maturity of member bank time deposits for three maturity categories—under six months, six months to four years, and over four years—have been available weekly since late 1974. Less timely breakdowns by maturity—estimated for all commercial banks—are available as of the end of each quarter, beginning in 1968; however, maturity breakdowns have changed occasionally during this period in connection with actions affecting regulatory ceilings on different maturities of time deposits. Indirect data for savings and loans and mutual savings banks are available semi-annually, beginning in 1973.

Proposed M-1

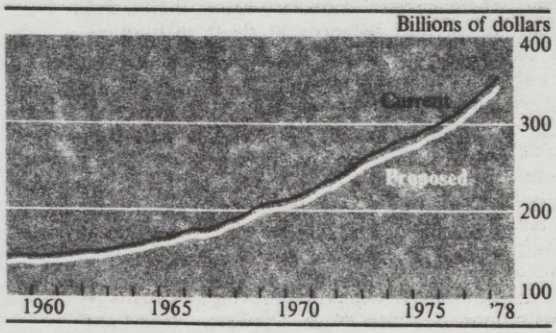
The proposed M-1 (line 1 of table 3) differs from the current M-1 in that it includes new transactions-related savings deposits at commercial banks and thrift institutions—such as NOW balances, ATS balances, share draft balances at credit unions—and demand deposits at thrift institutions, while it excludes demand deposits of foreign commercial banks and official institutions.[10] The Advisory Committee on Monetary Statistics (the Bach Committee) recommended this exclusion because such balances are held primarily as clearing balances for international transactions and international reserves.[11] Thus, compared with the present M-1, the proposed M-1 is a more comprehensive measure of domestically related transactions balances.[12] Proposed M-1 satisfies the medium-of-exchange criterion, which calls for a narrow measure of money to represent funds available for immediate payment for goods, services, and other assets. Such a measure can be expected to be closely related to domestic transactions.

As chart 3 reveals, proposed M-1 is somewhat smaller than current M-1, since the foreign-related demand deposits removed have exceeded the new transactions balances added. However, rates of growth (shown in chart 4) are very similar for the two measures.

The public's demands for these measures of money relative to GNP move inversely with their velocities (chart 5). The velocities for current and proposed M-1 move in close parallel. While the demands for both current and proposed M-1 relative to GNP appear to have decreased around 1975—at a time when market rates of interest were generally declining—econometric evidence indicates a slightly less pronounced decline for proposed M-1.[13]

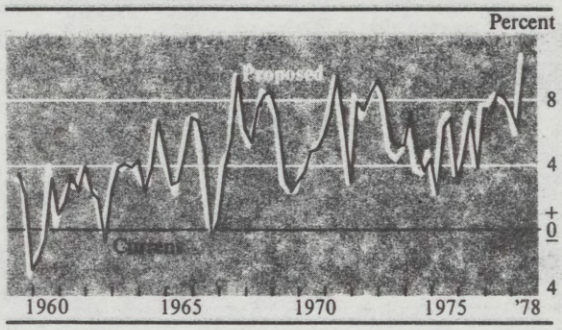
Although the more comprehensive measure of transactions balances, proposed M-1, has behaved much like present M-1, new developments are likely to cause the two to diverge. With ATS accounts growing in popularity, funds can be expected to shift from consumer demand balances to ATS savings, thereby depressing current M-1 relative to total spending.[14]

3. Current and proposed M-1



Quarterly averages, seasonally adjusted.

4. Rates of growth of current and proposed M-1



Seasonally adjusted at annual rates.

[10] If the Federal Home Loan Bank Board proposal to create a new payment order account (POA) is adopted, these balances would be included in proposed M-1.

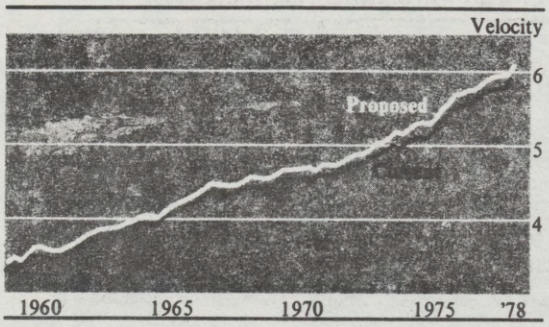
[11] See *Improving the Monetary Aggregates: Report of the Advisory Committee on Monetary Statistics* (Board of Governors of the Federal Reserve System, June 1976), p. 4. See also Helen T. Farr, Lance W. Girton, Henry S. Terrell, and Thomas H. Turner, "Foreign Demand Deposits at Commercial Banks in the United States," in *Improving the Monetary Aggregates: Staff Papers* (Board of Governors of the Federal Reserve System, November 1978), pp. 35–54.

[12] Some transactions balances—such as traveler's checks and money market mutual funds—are excluded from proposed M-1, primarily because data are unavailable.

[13] In simulations of money demand and reduced-form equations for both M-1 measures over the period from mid-1974 to mid-1978, presented below, simulation errors were marginally smaller for proposed M-1 than for current M-1.

[14] While shifts of funds from consumer demand deposits to ATS savings (and POA savings, if offered) will not affect proposed M-1, shifts of funds from other sources to ATS savings will cause this aggregate to rise relative to total spending. A break in the M-1 series can be expected regardless of whether ATS savings are included. If they are excluded, M-1 can be expected to decline relative to spending; if they are included, M-1 can be expected to increase.

5. Velocities of current and proposed M-1



Seasonally adjusted.

In addition, should the Congress and the various regulatory authorities continue to expand the opportunities of commercial banks and thrift institutions to offer new transactions accounts, further conversions from consumer demand deposits will reinforce the importance of broadening the coverage of M-1.

Since NOW accounts, ATS savings accounts, and share draft accounts at credit unions can serve as both transactions balances and more permanent interest-earning savings balances, consumers are likely to hold larger amounts of funds in these kinds of accounts than they would otherwise have held in demand deposits, and growth in proposed M-1 relative to GNP may be more rapid than historical growth of current M-1. Also, since the interest-earning savings component of these new accounts is likely to be sensitive to spreads between market rates of interest and regulatory ceilings, proposed M-1 may be more sensitive to changes in market interest rates than current M-1.[15]

M-1+

The second proposed monetary aggregate shown in table 3 (line 2) is M-1+, which consists of proposed M-1 plus savings balances at commercial banks.[16] As noted earlier, developments in recent years have significantly enhanced the liquidity of commercial bank savings accounts and have increased the similarities between such balances and demand deposits. Important among these developments have been the authorization of business and domestic government savings and preauthorized and telephone transfers, in addition to ATS and NOW accounts for individuals. The aggregation of savings at commercial banks and M-1 into a new measure of money was a possibility suggested for consideration by the Advisory Committee on Monetary Statistics.[17] Moreover, some empirical evidence, based on the period before ATS, suggests that savings balances at commercial banks have had a higher degree of liquidity, or "moneyness," than those at other institutions.[18]

Depending on the direction of developments, the proposed M-1+ aggregate may serve principally as a transitional measure. The importance of M-1+ as a narrower monetary aggregate is tied very closely to the emerging role of automatic transfers. During the transition, when conversions to ATS savings are occurring, the relationships between M-1+ on the one hand and GNP and interest rates on the other should resemble the historical pattern more than can

[15] Econometric evidence indicates that the demand for interest-earning savings balances is more responsive to changes in both income and interest rates than is the demand for demand deposits, and thus the demand for proposed M-1, by including savings-related funds, might be more income elastic and interest elastic than the demand for current M-1.

[16] The M-1+ measure described in this section differs from the one currently published basically by excluding demand deposits of foreign commercial banks and official institutions.

[17] *Improving the Monetary Aggregates: Report*, p. 11.

[18] William A. Barnett, "A Fully Nested System of Monetary Quantity and Dual User Cost Price Aggregates," Board of Governors of the Federal Reserve System, Division of Research and Statistics, Econometric and Computer Applications Section, November 1978; processed). In this paper, the author constructs an ideal index under aggregation—which might be interpreted as a measure of "moneyness"—based on recent advances in the theory of index numbers and on newly developed econometric methods. The evidence suggests that a dollar's worth of savings balances at commercial banks makes a larger contribution to the "liquidity" of consumers' monetary assets than a dollar's worth of savings balances at thrift institutions, perhaps because of the convenience of having savings balances at the same location where one conducts other business. Nevertheless, the author also finds a very high degree of substitutability between savings deposits at commercial banks and savings at thrift institutions. When similar methods are applied to the measurement of substitutability between savings deposits and transactions balances, it is discovered that savings deposits and transactions balances are not viewed by the public as being as substitutable for each other as savings deposits at commercial banks and savings deposits at thrift institutions. See also W. E. Diewert, "Exact and Superlative Index Numbers," *Journal of Econometrics*, vol. 4 (May 1976), pp. 115–45.

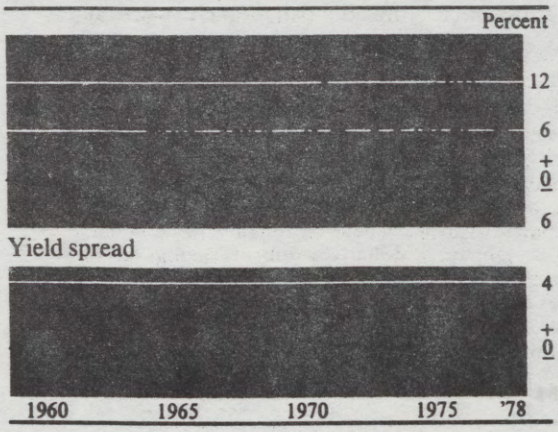
be expected for either current or proposed M-1. Although conversions from consumer demand balances to ATS savings will not disturb proposed M-1, shifts from ordinary savings balances to ATS savings will result in an expansion of proposed M-1 relative to GNP. Consequently, since shifts from ordinary savings to ATS savings would not affect the proposed M-1+ during the transition, M-1+ may serve as a useful supplement to proposed M-1 for interpreting underlying growth in the public's demands for transactions balances.[19]

Since savings balances are more sensitive than demand deposits to interest rates—particularly to the difference between the rate paid by commercial banks and short-term market rates—growth in M-1+ varies more over the course of the interest rate cycle than does growth in M-1. This difference can be seen in chart 6, which depicts the annualized rates of growth of proposed M-1 and M-1+ in the upper panel and the spread between the 90-day treasury bill rate and the ceiling rate on commercial bank passbooks in the lower panel. When market yields were low relative to the ceiling rate—as in the early 1960s, 1971–72, and 1976–77—growth in M-1+ was faster than growth in proposed M-1. Conversely, when market rates rose substantially above ceiling rates—as in 1966, 1969–70, and 1973—growth in M-1+ was slow relative to that of proposed M-1.

[19] Shifts of funds to ATS savings from sources other than demand deposits and ordinary savings deposits will tend to disturb the relationships among M-1+, GNP, and interest rates. Available evidence indicates, however, that shifts of funds to ATS savings from these other sources have been relatively small.

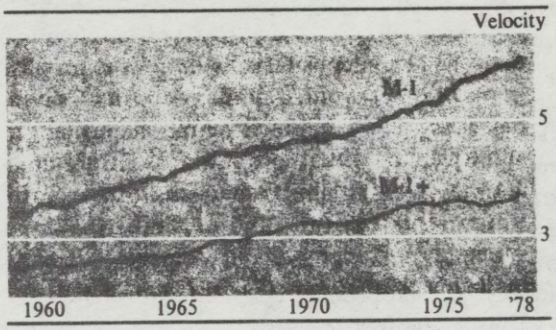
If POA accounts are authorized for savings and loan associations and if these accounts become popular, the usefulness of M-1+ as a supplemental aggregate will diminish. In this event, more attention could be given to proposed M-2.

6. Rates of growth of proposed M-1 and M-1+



Seasonally adjusted.

7. Velocities of proposed M-1 and M-1+



Seasonally adjusted.

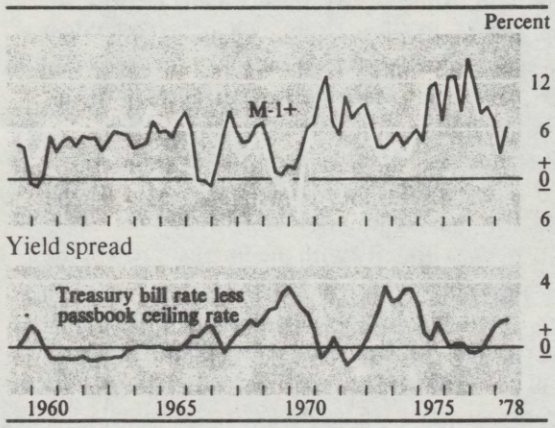
Because movements in market interest rates have a discernible influence on M-1+, the velocity of that aggregate—shown in chart 7—tends to vary directly with the interest rate cycle. The velocity of M-1+ has tended to increase over time—along with the general level of interest rates—as has the velocity of proposed M-1, also shown in the chart. In the period encompassing 1975 and 1976, however, the velocities of M-1+ and M-1 were somewhat disparate, with the M-1 velocity rising sharply—at a time when market rates were generally declining—while the M-1+ velocity was relatively steady. It appears that the expanding use of cash management techniques was largely responsible for the paring of transactions balances relative to GNP—particularly by large businesses—and for the corresponding jump in M-1 velocity;[20] by contrast, relatively low market rates of interest at this time evidently swelled savings balances at commercial banks, thereby offsetting a similar rise in M-1+ velocity.

[20] See Jared Enzler, Lewis Johnson, and John Paulus, "Some Problems of Money Demand," *Brookings Papers on Economic Activity*, 1:1976, pp. 261–80; Perry D. Quick and John Paulus, "Financial Innovations and the Transactions Demand for Money" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Banking Section, February 1977; processed); Porter and Mauskopf, "Cash Management;" and Tinsley and others, "Measurement of Money Demand."

M-2

Proposed M-2, shown in table 3, adds savings deposits at all depositary institutions to proposed M-1. In other words, similar deposits—savings balances—are combined across depositary institutions to obtain proposed M-2; to obtain current M-2 dissimilar deposits—savings and time deposits—at commercial banks are summed.[21] A comparison of tables 3 and 4 indicates that proposed M-2 and current M-2 are of comparable size.

8. Rates of growth of proposed M-2 and M-1+

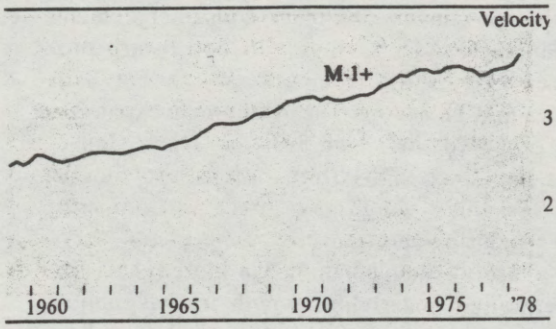


Seasonally adjusted.

The discussion in an earlier section noted that many developments that have increased the liquidity of savings deposits at commercial banks have also enhanced the liquidity of savings deposits at thrift institutions. Because of these developments, the interest-earning savings balances of the public can now perform many of the functions previously reserved for demand deposits. Some empirical evidence suggests that, while the public may consider savings at commercial banks to be more liquid than savings at thrift institutions, a relatively high degree of substitutability exists between the two kinds of savings, and that savings at all depositary

[21] Savings are distinct from time deposits on liquidity grounds. In practice, funds in savings accounts are usually available immediately while funds in time deposit accounts are available with a delay or are subject to a substantial early-withdrawal penalty.

9. Velocities of proposed M-2 and M-1+



Quarterly, seasonally adjusted.

institutions can be linearly combined in a monetary aggregate.[22] The combination of all savings balances with M-1 was also a possibility suggested for consideration by the Advisory Committee on Monetary Statistics.[23]

As might be expected, the behavior of proposed M-2 is very similar to that of M-1+. Chart 8 shows this relation in the upper panel and also contains the spread between the treasury bill rate and the ceiling rate on commercial bank passbooks in the lower panel. Growth in both measures tends to be sensitive to movements in the rate spread. The velocities of proposed M-2 and M-1+—presented in chart 9—have both trended upward over time and have had synchronous movements over the interest rate cycle.

M-3

Proposed M-3 consists of proposed M-2 along with all time deposits of all depositary institutions, regardless of denomination, maturity, or negotiability. Once again, similar deposits—in this instance, time deposits—have been aggregated across depositary institutions. Table 3

[22] Barnett, "A Fully Nested System of Monetary Quantity," concludes that, in such an aggregate, savings deposits at commercial banks would receive a higher weight than savings at thrift institutions. Indeed, the weight attached to a dollar's worth of savings at commercial banks would be roughly twice as large as the weight on a dollar's worth of savings at thrifts. Nevertheless, such a weighted series produces growth rates that have been very similar to a series that simply adds savings at commercial banks to savings at thrift institutions.

[23] *Improving the Monetary Aggregates: Report,* p. 11.

shows that proposed M-3 is considerably larger than proposed M-2 and also larger than current M-3, shown in table 4.

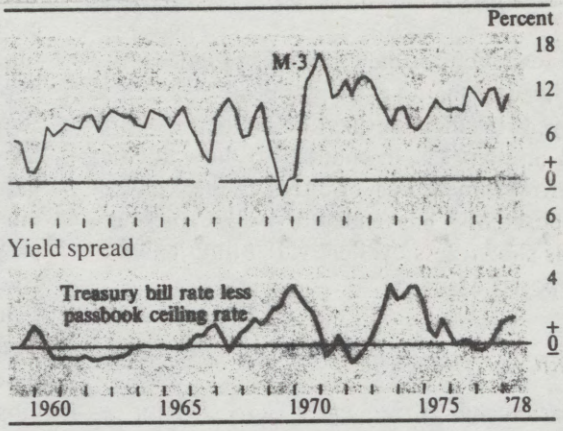
M-3 is in effect a broad monetary aggregate that includes all liabilities of depositary institutions to the public. In principle, nondeposit liabilities of these institutions would be included along with their deposit liabilities. Among the most important nondeposit liabilities are security repurchase agreements (RPs).[24] As noted earlier, RP liabilities have become more important in recent years and tend to be viewed by the public as highly liquid alternatives to deposits. In practice, however, current data limitations militate against their inclusion in proposed M-3. The board's staff has constructed an RP series using available information, and it would be published separately; but the estimates are inferior to those for other components of the monetary aggregates.[25] Once more complete data are collected, RPs could be added to M-3 or perhaps to a narrower measure of money, if that is suggested by subsequent research.[26]

[24] Depositary institutions also attract nondeposit funds from other sources. However, much of the funds from such sources comes from other depositary institutions, domestic and foreign, and hence would be removed either by consolidation or by procedures that exclude those liabilities due to foreign banking offices. For example, commercial banks attract a sizable amount of federal funds from sources other than commercial banks, but the bulk comes from other depositary institutions—savings and loans and mutual savings banks. Also, commercial banks attract nondeposit funds in the form of Eurodollars, which are obtained from banking offices abroad.

[25] RP data are collected by the Reserve Banks on a regular basis from a sample of approximately 46 large banks that are estimated currently to have roughly 60 percent of all commercial bank RP liabilities to the nonbank public. However, unlike the data on commercial bank deposits that appear in the monetary aggregates, universe call report data are not available for RPs; commercial bank RPs with the nonbank public have not appeared as a separate item on the call report and indirect methods, subject to considerable error, must be used to estimate the universe. As a result, given the size and variability of commercial bank RPs, the dollar magnitude of estimation errors in the series for all commercial banks is probably very large. See also Tinsley, Garrett, and Friar, "Measurement of Money Demand," pp. A1–A10.

[26] Another candidate for inclusion in proposed M-3 is Eurodollar deposits held by the U.S. nonbank public. Data on such holdings, however, are not available on a timely basis and are incomplete.

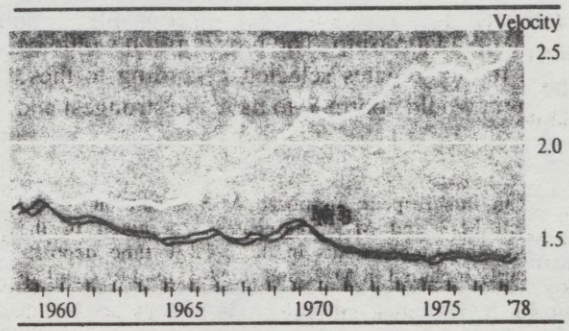
10. Rates of growth of proposed M-2 and M-3



Seasonally adjusted.

Chart 10 shows that rates of growth of proposed M-3 tend to be higher and generally steadier than those of proposed M-2. This relative stability reflects largely the actions of depositary institutions, mainly commercial banks, to offset over the course of the interest rate cycle changes in inflows of savings and small time deposits—subject to interest rate ceilings—through the issuance of large time deposits that are free of such ceilings. When inflows of small time and savings deposits weaken because market rates rise considerably above regulatory ceilings, these institutions tend to step up the issuance of large time deposits; conversely, when inflows of other deposits strengthen, reliance on these managed liabilities is reduced. As a result, growth in this broader aggregate tends to be less variable than growth in aggregates

11. Velocities of proposed M-2 and M-3



Quarterly, seasonally adjusted.

that are strongly influenced by regulatory ceilings.[27]

The tendency for the growth of proposed M-3 to be steadier than that of proposed M-2 is also displayed in their respective velocities, presented in chart 11. In contrast to the velocities of narrower measures of money, the velocity of proposed M-3 has tended to decline over time and has shown less cyclical variability than that of proposed M-2.

Empirical Evidence

A criterion that is frequently suggested for selecting among alternative measures of monetary aggregates is the degree to which each is linked to the ultimate targets, such as GNP. In a variety of theories of aggregate economic activity, the stock of money is related to GNP and to other economic variables, with changes in the stock of money causing changes in GNP and some other economic variables. Such theories, while not providing much a priori guidance to precise definitions of monetary aggregates, imply that the more stable and predictable is the public's demand for a monetary aggregate, the more predictable will be the impact of changes in the supply of this aggregate, other influences remaining the same, on GNP and these other economic variables.

Econometric techniques can be used to correlate changes in alternative measures of the money stock with changes in GNP, while removing the contribution of other influences, and to estimate demand functions for alternative measures of money. Normally, the definitions selected that rely on this approach would be those that had been most strongly correlated with GNP or had displayed the most stable demand relationship. The presumption would be that the aggregates selected according to these criteria would continue to have the strongest and most predictable relationship with GNP. However, since recent financial innovations have fundamentally altered the characteristics of the public's monetary assets, the usefulness of such econometric evidence is limited. In these cases, an important econometric postulate—that the public view the aggregate being demanded (in this case money) as having homogeneous properties over the sample period—may be violated. Moreover, given recent innovations and regulatory changes, a monetary aggregate selected for its desirable econometric properties based on past relationships may no longer be closely linked with the ultimate targets; while another, having weaker econometric properties in the past, may now be more tightly linked with the ultimate targets. Indeed, a reexamination of the definitions of the monetary aggregates is warranted precisely because the established relationships among the aggregates and other economic variables have been altered by recent developments.

Another empirical basis for selecting measures of the monetary aggregates is their usefulness as indicators of the underlying state of the economy. Information on the public's holdings of currency and deposit balances is generally available on a more timely basis than information about the behavior of the economy. As a consequence, incoming information on the monetary aggregates can be used to make inferences regarding developments in the economy before direct information is available.[28] For example, a slowing of monetary growth may be interpreted to mean that total spending or GNP is weakening. If the behavior of an indicator is believed to be highly reliable, monetary policymakers may wish to adjust the posture of policy in the light of this development—before direct information on the state of the economy is available—should they judge it unhealthy for

[27] In this respect, proposed M-3 is similar to the current M-2 and M-3 aggregates. As noted in the introduction, movements in those large time deposits currently included in M-2, and in M-3, tend to stabilize M-2 growth by offsetting movements in savings and small time deposits.

[28] The indicator criterion is very similar to the previous criterion relating to linkages with ultimate targets. In the case of the linkage criterion, causality running from money to the ultimate target is presumed. In the case of the indicator criterion, no causality is presumed. Changes in money may cause changes in economic activity, or changes in economic activity may cause changes in money, or both may be affected by some third factor.

the economy. Again, changes in the character of monetary assets may tend to undermine the value of some indicators selected on the basis of historical evidence.

In the remainder of this section, demand properties of the various measures of money are first examined. Next, reduced-form equations relating GNP to alternative definitions of money and selected other variables are presented. Finally, the usefulness of the various measures as indicators of economic activity is discussed.

Properties of Money Demand

Properties of the demands for the proposed monetary aggregates are shown in table 5 and those of the current aggregates are shown in table 6.[29] Each money demand equation relates the public's demand for an aggregate, on a quarterly basis, to GNP, a market rate of interest, the rate on commercial bank passbook savings, and, in the case of the broader aggregates, a rate representing the yield on commercial bank time deposits.[30] In each instance, the public is assumed to adjust its actual money balances partially to a desired level—based on GNP and interest rates—and the coefficient of the lagged dependent variable can be used for inferring the speed of adjustment.[31] For each monetary aggregate, two demand equations are reported. Both are estimated using a sample period beginning in late 1960, but the first ends in mid-1978 while the second ends in mid-1974; as noted earlier, the pace of financial developments in recent years has been particularly rapid, and many believe that historical statistical relationships have changed since 1974, particularly the public's demand for demand deposits. In all but the M-3 equations, coefficient estimates for the independent variables are short-run or impact elasticities; they indicate how the demand for money responds in the current period, in percentage terms, to a 1 percent change in GNP or interest rates.[32]

Summary statistics for each aggregate are presented in the last three columns of tables 5 and 6. The R^2 statistic indicates the proportion of the variation in the demand for the monetary aggregate that is explained by GNP, interest rates, and the lagged dependent variable; and the standard error of estimate is a measure of the amount by which money demand estimated from the equation differs from the actual money stock. For example, the standard error of estimate for proposed M-1 over the longer sample period (equation 5.1a) is 1.8 percent, expressed at an annual rate, which suggests that about two-thirds of the estimation errors for proposed M-1 are smaller than 1.8 percent. The final column provides an indication of how well the money demand equation has predicted the rate of growth of the money stock in the period from mid-1974 to mid-1978;[33] the smaller the root

[29] More extensive evidence on the properties of money demand functions for current and proposed aggregates, over a variety of sample and postsample periods, is discussed in Richard D. Porter, Eileen Mauskopf, David E. Lindsey, and Richard Berner, "Current and Proposed Monetary Aggregates: Some Empirical Issues" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Econometric and Computer Applications Section, January 1979; processed).

[30] For all of the monetary aggregates except proposed and current M-3, the money stock and GNP are divided by the implicit GNP price deflator. Also, the lagged dependent variable in each case is divided by current, and not lagged, prices, in order to permit the equation to pick up potential lagged responses in the public's demands for money to changes in the price level. All of the variables in these equations are entered in logarithmic form and thus coefficient estimates are short-run elasticities. In the case of both the proposed and the current M-3 measures, the money variable and GNP are divided by current wealth, as is the lagged dependent variable in these equations. In all cases, the Cochrane-Orcutt adjustment for serial correlation has been used.

[31] The coefficient of adjustment is equal to 1 minus the coefficient of the lagged dependent variable. For example, if the coefficient of the lagged dependent variable has a value of 0.9, the public removes 10 percent of the discrepancy between its actual and its desired money balances in any one quarter; thus, about one-half of the adjustment to desired money balances is completed in two years. Implied speeds of adjustment for the monetary aggregates are all apparently very slow.

[32] Long-run elasticities are derived by multiplying each coefficient by the reciprocal of 1 minus the coefficient of the lagged dependent variable.

[33] Root mean-square errors are for dynamic simulations expressed in rates of growth; in other words, simulated levels of the money stock are converted to rates of growth and errors are computed on the basis of implicit simulated money growth and actual growth.

5. Representative money demand equations for proposed monetary aggregates[a]

Proposed monetary aggregate[b]	Independent variable						Summary statistic		
	Constant	GNP	Treasury bill rate	Commercial bank passbook saving rate	Commercial bank time deposit rate[c]	Lagged dependent variable	Adjusted R^2	Standard error of estimate (annual percentage rate)	Root mean-square error of annualized growth rate[d] (annual percentage rate)
M-1[e]									
5.1 a	−.791	.042	−.010	−.009	...	1.020	.9902	1.80	...
	(−2.439)	(3.184)	(−2.709)	(−.696)		(34.842)			
5.1b	1.359	.144	−.011	−.024	...	.733	.9934	1.66	3.29
	(1.614)	(3.632)	(−2.382)	(−1.359)		(6.936)			
M-1+[e]									
5.2a	.208	.067	−.021	.027	−.009	.912	.9945	1.91	...
	(.624)	(3.378)	(−3.956)	(1.398)	(−.627)	(24.172)			
5.2b	−.138	.072	−.020	.032	−.019	.934	.9954	1.64	2.81
	(−.339)	(2.876)	(−3.715)	(1.495)	(−1.045)	(19.991)			
M-2[e]									
5.3a	−.042	.046	−.027	.034	−.012	.957	.9943	1.99	...
	(−.139)	(2.681)	(−4.514)	(1.540)	(−.824)	(41.560)			
5.3b	−.446	.055	−.025	.042	−.031	.979	.9960	1.76	3.44
	(−1.342)	(2.723)	(−4.144)	(1.776)	(−1.599)	(39.100)			
M-3[f]									
5.4a	−.0009	.0005	−.0007	.004	−.0003	.961	.9974	1.86	...
	(−.116)	(.012)	(−3.049)	(3.412)	(−.463)	(20.171)			
5.4b	.0006	−.054	−.001	.004	.0002	1.035	.9960	1.90	3.96
	(.068)	(−1.225)	(−3.989)	(2.732)	(.278)	(19.913)			

[a] The numbers in parentheses are *t*-statistics.

[b] The a and b equations differ in sample period. The period for equation 5.1a, 5.2a, and so on, is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

[c] The time deposit rate used is the one for the time deposit maturity having the highest yield, after adjusting for the prevailing term structure of interest rates.

[d] The root mean-square error for dynamic simulations over 1974Q3 to 1978Q2. Simulated levels of the money stock are converted to annual rates of growth and errors are computed on the basis of implicit simulated money growth and actual growth.

[e] The dependent variable and GNP are divided by the GNP deflator. The lagged dependent variable is divided by the GNP deflator in the current period. The specification of the equation is double logarithmic.

[f] The dependent variable, lagged dependent variable, and GNP variable are divided by current nominal wealth.

mean-square error for an aggregate, the better is that aggregate's forecasting record during this volatile period.[34]

Equations 5.1a, 5.1b, 6.1a, and 6.1b suggest that the demands for current and proposed M-1 are similar. The impact of GNP and other explanatory variables is nearly the same for each narrow measure of money. Moreover, the coefficients of GNP in equations 5.1a and 6.1a show a marked decline, respectively, from 5.1b and 6.1b in the impact of GNP on each aggregate, while the coefficient of the lagged dependent variable for both M-1 measures rose substantially over the longer sample period. This contrast appears to reflect a decrease in the public's demand for demand deposits—which make up a considerable share of each M-1 aggregate—and is believed to have been an outgrowth of the more intensive use of cash management around 1974, particularly by businesses. Although the prediction performance of each measure of transactions balances has been poor in the post-1974 period, proposed M-1 has a slightly better record than current M-1.

The second monetary aggregate presented in table 5 is M-1+. As might be expected, the demand for this aggregate tends to increase with increases in the commercial bank passbook rate, while it declines in response to increases in the treasury bill rate and the yield on time deposits. In contrast to the demand for both M-1 measures, the demand for M-1+ has not demonstrated a noticeable tendency to shift in the period since mid-1974; coefficient estimates for each explanatory variable, with the possible exception of the time deposit rate, are very similar for the two sample periods. Moreover, the predictive power of the M-1+ demand equation during this period, indicated by its root mean-square error, was better than that of both M-1 measures.

The demand properties of the proposed M-2 aggregate are similar to those of M-1+. Coefficient estimates indicate that the sensitivity of proposed M-2 to interest rates and GNP is nearly

[34] The prediction performance of all the monetary aggregates is relatively weak. However, the 1974–78 period is believed to have seen substantial changes in the characteristics of many of the deposit liabilities appearing in these monetary aggregates.

6. Representative money demand equations for current monetary aggregates[a]

Current monetary aggregate[b]	Independent variable						Summary statistic		
	Constant	GNP	Treasury bill rate	Commercial bank passbook saving rate	Commercial bank time deposit rate[c]	Lagged dependent variable	Adjusted R^2	Standard error of estimate (annual percentage rate)	Root mean-square error of annualized growth rate[d] (annual percentage rate)
M-1[e]									
6.1a	−.832	.044	−.009	−.015		1.022	.9916	1.74	...
	(−2.381)	(3.151)	(−2.347)	(−1.089)		(29.795)			
6.1b	1.530	.163	−.010	−.031		.699	.9946	1.58	3.39
	(1.848)	(3.987)	(−2.215)	(−1.865)		(6.549)			
M-2[e]									
6.2a	−.405	.166	−.025	−.004	.023	.856	.9994	1.68	...
	(−1.991)	(2.629)	(−4.944)	(−.187)	(1.605)	(13.625)			
6.2b	−.699	.190	−.028	.009	.014	.853	.9993	1.65	2.35
	(−2.759)	(2.335)	(−5.145)	(.395)	(.790)	(11.126)			
M-3[f]									
6.3a	.004	−.010	−.0009	.003	.0004	.964	.9972	1.54	...
	(.643)	(−.307)	(−5.184)	(3.612)	(.861)	(21.270)			
6.3b	.002	−.044	−.001	.003	.0009	1.033	.9966	1.47	2.01
	(.340)	(−1.171)	(−5.521)	(2.232)	(1.349)	(19.829)			

[a] The numbers in parentheses are *t*-statistics.

[b] The a and b equations differ in sample periods. The period for the a equations is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

[c] The time deposit rate used is the one for the time deposit maturity having the highest yield, after adjusting for the prevailing market term structure of interest rates.

[d] The root mean-square error for dynamic simulations over 1974Q3 to 1978Q2. Simulated levels of the money stock are converted to annual rates of growth and errors are computed on the basis of implicit simulated money growth and actual growth.

[e] The dependent variable and GNP are divided by the GNP deflator. The lagged dependent variable is divided by the GNP deflator in the current period. The specification of the equation is double logarithmic.

[f] The dependent variable, lagged dependent variable, and GNP variable are divided by current nominal wealth.

the same as that of M-1+. While the coefficients of the two equations for proposed M-2 shown in table 5 are very similar, other results for the 1960s, on the one hand, and the 1970s, on the other, suggest that proposed M-2 has become more transactions-related in the 1970s; in particular, the demand for proposed M-2 appears to have become more responsive to GNP in the 1970s, and the speed of adjustment of actual to desired proposed M-2 balances appears to have increased.[35] The prediction performance of proposed M-2 in the post-1974 period is not so good as that of M-1+, and proposed M-2 has a larger forecast error than current M-2 (table 6).

The demand for proposed M-3 is shown in the last two equations of table 5. As might be expected of any broad measure of money, the demand for this aggregate is not so strongly influenced by GNP as are the more narrow, transactions-related measures. In relative terms, the rate of interest and the wealth variables are more important determinants of the public's demand for this aggregate. The properties of the public's demand for current M-3 and proposed M-3 are in many respects similar, as shown in tables 5 and 6.

Reduced-Form Equations

Reduced-form equations that relate the annualized percentage change in GNP, measured in current dollars, to current and lagged annualized percentage changes in monetary growth, current and lagged values of a fiscal variable, and a strike variable are presented in tables 7 through 10.[36] Tables 7 and 8 contain reduced-form equations and corresponding lag coefficients using the proposed monetary aggregates, and tables 9 and 10 contain results for the current measures. Reduced-form results are used by some to infer the impact of money growth on

[35] See Porter and others, "Current and Proposed Monetary Aggregates," pp. 8, 17–18. The evidence presented in this paper also suggests that the demand for M-1—both the current and the proposed measure—has become more sensitive to the passbook savings rate, implying that savings balances may have become more substitutable for transactions balances in the 1970s.

[36] More detailed evidence on the reduced-form equations for current and proposed aggregates over a variety of sample and postsample periods is discussed in Porter and others "Current and Proposed Monetary Aggregates."

7. Reduced-form equations relating percentage change in nominal GNP to percentage changes in proposed monetary aggregates, a fiscal variable, and a strike variable[a]

Proposed monetary aggregate[b]	Independent variable				Summary statistic		
	Constant	Sum of money coefficients	Sum of fiscal coefficients[c]	Strike variable[d]	Adjusted R^2	Standard error of estimate (annual percentage rate)	Root mean-square error[e] (annual percentage rate)
M-1							
7.1a	2.197	1.175	1.138	−4.667	.492	2.67	...
	(2.198)	(6.133)	(3.031)	(−4.069)			
7.1b	2.508	1.067	.983	−3.666	.432	2.50	3.77
	(2.586)	(5.459)	(2.363)	(−2.611)			
M-1+							
7.2a	3.317	.801	.900	−4.807	.454	2.77	...
	(3.412)	(5.244)	(2.223)	(−4.159)			
7.2b	2.455	.997	.503	−2.743	.407	2.55	4.16
	(2.126)	(4.637)	(1.138)	(−1.899)			
M-2							
7.3a	4.945	.521	.838	−4.997	.352	3.02	...
	(4.541)	(3.149)	(1.718)	(−4.116)			
7.3b	5.400	.417	.473	−3.857	.256	2.86	3.94
	(4.339)	(1.937)	(.813)	(−2.646)			
M-3							
7.4a	3 228	.540	.934	−5.076	.357	3.01	...
	(2.020)	(3.098)	(1.945)	(−4.182)			
7.4b	3.290	.494	.501	−3.731	.314	2.74	4.30
	(2.205)	(2.956)	(.935)	(−2.545)			

[a] The equations were estimated using a third-order polynomial distributed lag with money and fiscal variables lagged five quarters and the coefficients of the final lagged variables constrained to be zero. The numbers in parentheses are *t*-statistics.

[b] The a and b equations differ in sample periods. The period for the a equations is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

[c] The fiscal variable is the change in the high-employment federal deficit as a percent of nominal potential GNP.

[d] The strike variable is the change in manhours lost due to strikes as a percentage of manhours worked.

[e] Root mean-square error for dynamic simulations over the period 1974Q3 to 1978Q2 are based on coefficient estimates for the sample period ending 1974Q2.

GNP, although considerable care must be used in interpreting such results.[37]

The reduced-form results for proposed M-1 are given in equations 7.1a and 7.1b. As in the case of the money demand estimates, two equations are presented for each aggregate. Both sample periods begin in late 1960, but the first ends in mid-1978 while the second ends in mid-1974. In addition, the last column contains the root mean-square error for postsample forecasts over the period from mid-1974 to mid-1978, and indicates the recent forecasting record of the monetary aggregate.

The sum of the coefficients of proposed M-1 —shown in the second column—is near unity, the value suggested by some economic theories. Also, the results for proposed M-1 are very similar to those for current M-1, shown in table 9.[38] For both proposed and current M-1, about 40 percent of the estimated impact of the monetary aggregate on GNP is felt in the current quarter, but much of this may also reflect reverse causality running from GNP to money. A comparison of the root mean-square errors shows that predictions based on proposed M-1 have been marginally better than those based on current M-1.

The sum of the money supply coefficients for the broader proposed monetary aggregates is smaller than the sum for proposed M-1. However, the contemporaneous relationship between money and GNP is less strong for these broader aggregates than for M-1, and a relatively large share of the overall measured contribution of money growth to GNP growth is attributed to prior changes in money. The predictive power of M-1+ is somewhat weaker than that of proposed M-1. Proposed M-2 appears to pre-

[37] Reduced-form estimates of the contribution of changes in money to changes in GNP can be artificially strengthened by reverse causality, running from GNP to money. This is a problem primarily of interpreting the coefficient of the money variable for the current quarter, but also the R^2 and standard error of estimate. In addition, should changes in a particular measure of money tend to smooth growth in GNP, the estimated impact of this variable on GNP in a reduced-form equation would be understated.

[38] In both instances, the sum of money coefficients does not differ much for the two sample periods. This result contrasts with those for the M-1 demand equations, which suggest a shift in the relationship between money and GNP in the post-1974 period. This matter is discussed in more detail in Porter and others, "Current and Proposed Monetary Aggregates."

8. Individual lag coefficients for proposed monetary aggregates and a fiscal variable from reduced-form equations [a]

Lag length	Proposed M-1				Proposed M-1+				Proposed M-2				Proposed M-3			
	Equation 7.1a		Equation 7.1b		Equation 7.2a		Equation 7.2b		Equation 7.3a		Equation 7.3b		Equation 7.4a		Equation 7.4b	
	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable
0	.444	.180	.373	.370	.259	.057	.326	.186	.156	.050	.120	.105	.011	.088	.060	.169
	(2.936)	(1.481)	(2.362)	(2.131)	(1.826)	(.457)	(1.953)	(1.085)	(1.024)	(.367)	(.659)	(.553)	(.064)	(.653)	(.365)	(.922)
1	.231	.245	.225	.076	.043	.203	.099	−.029	.049	.176	.041	−.077	.129	.235	.082	−.006
	(2.201)	(2.135)	(2.126)	(.528)	(.455)	(1.678)	(.922)	(−.199)	(.501)	(1.228)	(.382)	(−.424)	(1.263)	(1.659)	(.844)	(−.034)
2	.173	.278	.177	.087	.078	.259	.119	.012	.066	.236	.056	.014	.168	.269	.116	.030
	(1.807)	(2.626)	(1.782)	(.672)	(.897)	(2.287)	(1.252)	(.088)	(.729)	(1.728)	(.547)	(.085)	(1.737)	(1.986)	(1.238)	(.188)
3	.177	.260	.165	.208	.195	.236	.219	.141	.121	.227	.098	.186	.147	.221	.132	.136
	(2.434)	(2.614)	(2.385)	(1.800)	(3.285)	(2.194)	(3.327)	(1.133)	(1.932)	(1.777)	(1.393)	(1.164)	(2.442)	(1.716)	(2.417)	(.890)
4	.150	.174	.127	.243	.225	.146	.234	.193	.128	.149	.102	.245	.085	.121	.103	.173
	(1.561)	(1.748)	(1.360)	(1.910)	(2.514)	(1.397)	(2.383)	(1.459)	(1.322)	(1.257)	(.917)	(1.560)	(.875)	(1.003)	(1.122)	(1.122)

[a] The numbers in parentheses are *t*-statistics. See table 7 for regression results. The a and b equations differ in sample period. The sample period for the a equations is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

9. Reduced-form equations relating percentage change in nominal GNP to percentage changes in current monetary aggregates, a fiscal variable, and a strike variable [a]

Current monetary aggregate [b]	Independent variable				Summary statistic		
	Constant	Sum of money coefficients	Sum of fiscal coefficients [c]	Strike variable [d]	Adjusted R^2	Standard error of estimate (annual percentage rate)	Root mean-square error [e] (annual percentage rate)
M-1							
8.1a	2.382	1.129	1.184	−4.987	.473	2.72	...
	(2.346)	(5.833)	(3.093)	(−4.328)			
8.1b	2.656	1.016	1.047	−4.075	.424	2.51	3.90
	(2.842)	(5.492)	(2.553)	(−2.897)			
M-2							
8.2a	.681	.955	.997	−5.142	.452	2.78	...
	(.496)	(5.504)	(2.583)	(−4.413)			
8.2b	1.090	.877	.614	−3.454	.413	2.54	4.03
	(.820)	(4.996)	(1.466)	(−2.405)			
M-3							
8.3a	1.418	.769	.971	−5.239	.431	2.83	...
	(1.015)	(4.841)	(2.368)	(−4.451)			
8.3b	1.863	.699	.610	−3.633	.361	2.65	3.88
	(1.203)	(3.755)	(1.288)	(−2.479)			

[a] The equations were estimated using a third-order polynomial distributed lag with money and fiscal variables lagged five quarters and the coefficients of the final lagged variables constrained to be zero. The numbers in parentheses are *t*-statistics.

[b] The a and b equations differ in sample period. The period for the a equations is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

[c] The fiscal variable is the change in the high-employment federal deficit as a percentage of nominal potential GNP.

[d] The strike variable is the change in manhours lost due to strikes as a percentage of manhours worked.

[e] Root mean-square errors for dynamic simulations over the period 1974Q3 to 1978Q2 are based on coefficient estimates for the sample period ending 1974Q2.

10. Individual lag coefficients for current monetary aggregates and fiscal variable from reduced-form equations [a]

Lag length	Current M-1				Current M-2				Current M-3			
	Equation 8.1a		Equation 8.1b		Equation 8.2a		Equation 8.2b		Equation 8.3a		Equation 8.3b	
	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable	Money	Fiscal variable
0	.405	.178	.292	.375	.191	.107	.205	.253	.030	.114	.078	.184
	(2.626)	(1.431)	(1.869)	(2.148)	(1.309)	(.863)	(1.395)	(1.477)	(.184)	(.875)	(.437)	(1.035)
1	.257	.263	.264	.109	.163	.267	.131	.058	.162	.260	.097	.022
	(2.400)	(2.262)	(2.494)	(.773)	(1.782)	(2.330)	(1.488)	(.422)	(1.575)	(2.120)	(.903)	(.144)
2	.192	.297	.218	.114	.196	.290	.159	.051	.223	.279	.157	.059
	(1.962)	(2.768)	(2.214)	(.903)	(2.289)	(2.701)	(1.921)	(.395)	(2.294)	(2.434)	(1.525)	(.419)
3	.161	.271	.157	.215	.224	.222	.204	.116	.215	.213	.200	.160
	(2.199)	(2.672)	(2.342)	(1.890)	(3.977)	(2.129)	(3.863)	(.943)	(3.599)	(1.958)	(3.256)	(1.187)
4	.113	.175	.084	.235	.181	.110	.179	.137	.140	.105	.168	.186
	(1.143)	(1.732)	(.892)	(1.856)	(2.168)	(1.059)	(2.262)	(1.040)	(1.455)	(.991)	(1.672)	(1.327)

[a] The numbers in parentheses are *t*-statistics. See table 8 for the regression results. The a and b equations differ in sample period. The sample period for the a equations is 1960Q4 to 1978Q2; the period for the b equations is 1960Q4 to 1974Q2.

dict GNP growth slightly better than does current M-2, while the recent prediction record for proposed M-3 is poorer than that of current M-3.

Indicator Properties

Since measures of the monetary aggregates are available with a relatively short lag, they may serve as valuable indicators of the current state of the economy, before direct information is available, and thus permit more timely adjustments of policy.[39] Table 11 contains estimates of the various current and proposed measures of money as indicators of GNP growth for three periods—the period of the 1960s, the period of the 1970s, and the entire sample period.[40] In essence, the numbers show the extent to which deviations in the rate of growth of GNP from trend can be detected using deviations in the rates of growth of alternative measures of money from trend. A higher indicator value for a monetary aggregate means that more can be inferred from it about current growth in GNP. In the limit, with an indicator value of 100, variations in monetary growth would serve as perfect indicators of both the direction and the magnitude of variations in GNP growth.

In general, the narrower measures of money contain more useful information about underlying GNP growth than do the broader aggregates. For the proposed aggregates, indicator values generally decline with each successive level of aggregation. In addition, proposed M-1 tends to be a better indicator of GNP growth than is current M-1, particularly during the 1970s. While the indicator value of proposed M-2 was very low for the 1960s, it increased considerably in the 1970s; indeed, for the period of the 1970s, proposed M-2 had a higher indicator value than current M-2. As an indicator of GNP growth, current M-3 tends to outperform proposed M-3.[41]

[39] Some nonfinancial variables, such as retail sales, are also available with a relatively short lag and can be used as indicators of movements in economic activity.

[40] See P. A. Tinsley, P. A. Spindt, with M. E. Friar, "Indicator and Filter Attributes of Monetary Aggregates: A Nit-Picking Case for Disaggregation" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Special Studies Section, October 1978; processed). The authors conclude that more useful information about the state of the economy can be obtained by using the components of monetary aggregates jointly than by using the aggregates themselves.

11. Monetary Aggregates as Indicators of GNP Growth

Percent

Monetary aggregate	Indicator value[a]		
	1960Q4–1978Q2	1960Q4–1969Q4	1970Q1–1978Q2
Proposed			
M-1	33	18	36
M-1+	22	6	17
M-2	13	*	18
M-3	11	*	7
Current			
M-1	29	15	30
M-2	17	5	13
M-3	14	*	11

SOURCE: Based on P. A. Tinsley, P. A. Spindt, with M. E. Friar, "Indicator and Filter Attributes of Monetary Aggregates: A Nit-Picking Case for Disaggregation" (Board of Governors of the Federal Reserve System, Division of Research and Statistics, Special Studies Section, October 1978; processed), pp. 31–32.

[a] The percentage by which the variance of the forecast error of the growth rate of nominal GNP can be reduced using current observations on the growth rate of the corresponding monetary aggregate. These values were obtained by regressing the percentage change in nominal GNP on the percentage change in the corresponding monetary aggregate. The R^2 statistic, adjusted for degrees of freedom, is then a measure of the percentage by which the variance of forecasted GNP can be reduced by observing the change in the monetary aggregate.

* Negligible.

Controllability

Another important consideration in selecting monetary aggregates is how well the Federal Reserve can control their size and rate of growth. Some aggregates, while closely linked to ultimate targets, may be difficult to control with the available instruments of monetary policy. To a considerable extent, the Federal Reserve's control over a monetary aggregate will depend on the system's operating procedures—whether its operating target is reserves or short-term interest rates.

[41] Note that the indicator results are for a highly simplified situation, one for which no specific model of the economy is utilized. Alternatively, econometric models of the economy, such as the board's quarterly model, can be used to relate forecast errors in money growth to forecast errors in GNP growth; in this way, the accuracy of GNP forecasts can be improved as information on money growth becomes available. Estimations of the indicator value of alternative measures of money using more sophisticated procedures yield results that are qualitatively similar to the ones discussed here.

Under a reserves operating target, a key factor in monetary control is the nature of the reserve requirements applied to the components of the monetary aggregate. Deposits that are subject to reserve requirements established by the Federal Reserve and for which required reserves must be held as vault cash or deposits with the Federal Reserve are generally those that can be controlled best through use of a reserves aggregate.[42] Although other deposits—those of nonmember institutions—may be backed indirectly by reserves at the Federal Reserve through deposit balances held with member bank correspondents, the slippage between the provision of reserves by the Federal Reserve and the volume of such deposits is typically more pronounced than the slippage for deposits directly subject to the system's reserve requirements.

Table 12 shows the proportions of each of the proposed (and current) measures of money that are subject to reserve requirements established by the Federal Reserve. Larger proportions of the proposed M-1 and M-1+ measures than of the proposed broader aggregates are subject to Federal Reserve reserve requirements. A comparison of the proposed aggregates with their current counterparts reveals that by and large smaller percentages of the proposed aggregates are subject to system reserve requirements. Thus, with a reserves operating target, control might be weaker over the proposed aggregates than over the current aggregates, unless legislation were approved extending reserve requirements to the monetary liabilities of nonmember institutions.

With an interest rate operating target, control over a monetary aggregate depends on whether the demand for that aggregate is sensitive to changes in short-term interest rates.[43] A desired change in the quantity of a monetary aggregate is achieved by varying the attractiveness of holding the monetary aggregate through changes in short-term interest rates.

12. Proportion of monetary aggregates subject to reserve requirements set by the Federal Reserve, June 1978

Percent

Aggregate	Total aggregate [a]	Deposits
Proposed		
M-1	75.8	66.9
M-1+	73.2	67.9
M-2	49.3	43.0
M-3	44.7	41.0
Current		
M-1	76.4	67.9
M-2	70.2	66.5
M-3	41.8	37.1

[a] Currency is treated as subject to a 100 percent Federal Reserve reserve requirement.

Although a change in interest rates will have a greater effect on those aggregates that are most interest sensitive, what is important from the standpoint of controlling money using interest rates is whether the particular aggregate under consideration is in fact sensitive to interest rates. Indeed, economic theory establishes that in achieving some desired monetary stimulus the quantities of monetary aggregates that are highly sensitive to changes in interest rates must be changed by more—in relative terms—than aggregates that are less sensitive to interest rates; hence, while a given change in interest rates will have a greater impact on the quantities of highly interest-sensitive monetary aggregates, a larger change in their quantities is needed to obtain an economic objective.

All of the proposed monetary aggregates move inversely to changes in the treasury bill rate and thus can be controlled using an interest rate operating traget (see table 5, column 3). Proposed M-1 is less sensitive to current changes in interest rates than are M-1+ and

[42] Required reserve ratios are also important for monetary control. In general, with higher ratios the control over monetary aggregates is strengthened with a reserves operating target. Also, monetary control under a reserves operating target is enhanced when similar ratios are required for the various deposits included in the aggregate. See Kenneth J. Kopecky, "The Relationship between Reserve Ratios and the Monetary Aggregates under Reserves and Federal Funds Rate Operating Targets," Staff Economic Studies 100 (Board of Governors of the Federal Reserve System, December 1978).

[43] In addition, control over a monetary aggregate under an interest rate operating target is importantly influenced by the ability to forecast the impact of other factors, particularly GNP, on the public's demand for this aggregate. In other words, the stability of the relationship between the public's demand for an aggregate and the explanatory variables, such as GNP and interest rates, together with the accuracy of projections of explanatory variables other than interest rates, determines the potential controllability of this aggregate.

proposed M-2. In addition, a comparison of tables 5 and 6 suggests that the impact of changes in interest rates on the proposed monetary aggregates is about the same as that on their current counterparts. Thus, with an interest rate operating target, controlling the proposed monetary aggregates would likely be no more difficult than controlling the current measures.[44]

Consolidation

The monetary aggregates being proposed by the board staff have been constructed using principles of account consolidation to exclude those deposits held by depositary institutions with other depositary institutions that would otherwise lead to double counting. In particular, at each level of aggregation an attempt has been made to net out deposits maintained by depositary institutions for purposes of servicing other deposits included in the measure.[45] This procedure yields a more accurate estimate of the public's monetary assets.

Consolidation involves primarily the appropriate netting out of some or all demand deposits at commercial banks owned by commercial banks and, for the broader measures, by other depositary institutions. A depositary institution can increase the liquidity, and thus the attractiveness, of its deposit liabilities by maintaining demand balances that can be used to meet the withdrawal requests of its customers; such demand balances may also serve as clearing balances. For example, commercial banks hold demand balances with other commercial banks, a large portion of which is used for conducting their own demand deposit business. Simply combining all demand deposits at all commercial banks would overstate the public's holdings of demand balances by the amount of such interbank demand balances, because demand balances held by commercial banks for use in their own demand deposit business would be counted once when they were deposited by the public and again when they were redeposited at other banks. Similarly, demand deposits maintained by commercial banks and thrift institutions for conducting their savings business would be netted out from proposed M-2, and demand balances maintained by depositary institutions for conducting their time deposit business would be netted from proposed M-3.

Consolidation similarly involves the netting out of some savings and time deposits in constructing the broader monetary aggregates. This matter is described in more detail in the appendix.

While in principle this kind of consolidation is straightforward, in practice data limitations necessitate some compromises. For example, although demand deposits between commercial banks can be estimated with some precision, the proportions held for conducting demand, savings, and time deposit business are unknown. As a consequence, the conventional practice of deducting all interbank demand deposits from gross demand deposits has been followed here, although it tends to understate somewhat the appropriate measure of the public's demand deposits. In addition, shortcomings in the data render it difficult to measure and to allocate by function all demand deposits owned by thrift institutions, although an effort was made to allocate by function demand deposits owned by mutual savings banks. These and other issues regarding the mechanics of consolidation are discussed in the appendix.

Data Availability and Data Needs

All proposed monetary aggregates are available on a monthly basis from existing sources.[46] Data

[44] Another consideration in controlling a monetary aggregate with an interest rate target is the influence of unpredictable factors on the demand for that aggregate. The greater the influence of unpredictable factors on money demand, the less precise is monetary control. Standard errors of estimate presented in tables 5 and 6, which reflect the impact of factors other than explanatory variables on money demand, suggest that the effects of unpredictable influences have been roughly similar on the proposed monetary aggregates and on their current counterparts, particularly in the cases of the narrower aggregates.

[45] This is in line with the recommendation of the Advisory Committee on Monetary Statistics. This recommendation served as a guide in consolidating accounts in the proposed monetary aggregates. See *Improving the Monetary Aggregates: Report*, pp. 12–17.

[46] Preliminary historical data on the proposed monetary aggregates and related series are available from the Board of Governors of the Federal Reserve System, Division of Research and Statistics, Banking Section.

on total deposits for thrift institutions—the sum of savings and time deposits—are available as of the end of each month with a lag of about one week.[47] At that time, savings deposits at thrift institutions can be crudely estimated for inclusion in M-2, until actual figures on savings are available about one month later. Breakdowns of total savings deposits at thrift institutions into transactions balances—for inclusion in proposed M-1—and ordinary savings balances must be estimated until figures are available on NOW accounts and share draft balances at credit unions, which involves an additional two-month lag. The lack of timely data on the breakdown of savings and transactions balances at thrift institutions does not affect the estimation of proposed M-3, since total deposits at these institutions are included in this aggregate.

In addition to monthly availability, commercial bank demand deposits, savings deposits, and time deposits are estimated weekly with a lag of one week. However, with existing data, any weekly estimations of thrift institution deposits would likely be subject to unusually large estimation errors.

Should the proposed monetary aggregates be adopted and current data flows used, the quality of initially published estimates of M-1 and M-2 is likely to deteriorate and such estimates are likely to be subject to greater revisions than is currently the case.[48] In order to reduce the size and frequency of such revisions, publication of the monetary aggregates could be delayed from the current schedule or, alternatively, new data could be collected; in particular, timely data on ATS balances, NOW account and other transactions balances, and savings and time balances at thrift institutions would be needed.[49] The collection of such data from nonmember institutions would require the cooperation of the Federal Deposit Insurance Corporation, the Federal Home Loan Bank Board, and the National Credit Union Administration. Moreover, an accurate and comprehensive series on commercial bank repurchase agreements with the nonbank public would require the collection of new data.

[47] However, sample data on total deposits at thrift institutions are available more promptly and can be used to prepare early estimates of the monetary aggregates.

[48] See the appendix section on timeliness of data.

[49] Also, data on the deposit holdings of savings and loans and credit unions would be needed in order more accurately to consolidate accounts and improve measures of the public's money holdings. As noted in the previous section, only an incomplete consolidation can be done using existing data on the deposit holdings of thrift institutions.

Appendix: Data Sources and Construction of the Proposed Monetary Aggregates

This appendix describes in detail the data sources and the construction of the components of the monetary aggregates being proposed by the board staff. Some of these components were called for by the exclusion from the proposed aggregates of deposits of foreign banks and official institutions, others by the grouping of similar deposits across depositary institutions in the proposed aggregates. Still others were developed to meet the concept of consolidation used in this redefinition of the monetary aggregates.

While the new series have been carefully constructed, they should be regarded as preliminary until the staff has received comments on them and has made a final review of the data. The first section of this appendix lists the components of each of the proposed aggregates; it is followed by a discussion of the timeliness of the data on the components and by a description of current data sources. The next section discusses consolidation of interinstitution deposits, and the final section briefly describes the seasonal adjustment of the new series.

NOTE. This appendix was prepared by Neva Van Peski, Economist, Banking Section, Division of Research and Statistics. Norman Mauskopf and Nancy Hill assisted in constructing the proposed monetary aggregates and related series.

A1. Components of the Monetary Aggregates

Component	June 1978 average (millions of dollars)[a]	Treatment in monetary aggregate[b]		Frequency and timing of current data[c]	First inclusion in proposed aggregate
		Proposed	Current		
				M-1	
Currency					
Currency outside Treasury, Federal Reserve, and vaults of commercial banks	92,923	I	I	Daily (1-week lag)	1/59
Demand deposits					
Commercial banks					
Demand deposits adjusted, excluding all bank and foreign official deposits[d]	241,584	I	I	Daily, member banks (1-week lag) Quarterly, nonmember banks (4-month lag)	1/59
Due to mutual savings banks	1,408	I	I	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Due to foreign banks	7,303	E	I	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Due to banks in territories and possessions	235	E	I	Quarterly (4-month lag)	1/59
Due to foreign official institutions	1,285	E	I	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Federal Reserve float	-5,149	I	I	Daily (1-week lag)	1/59
Cash-items-bias adjustment	8,152	I	I	Daily (1-week lag)	1/59
Foreign-related institutions[e]					
Demand deposits adjusted, excluding banks and foreign official deposits	1,409[f]	I	I[g]	Daily (1-week lag)	1/59
Due to foreign banks and official institutions	2,055	E	I	Monthly (6-week lag)	1/71
Other deposits subject to transfer by draft					
Demand deposits at mutual savings banks	864	I	E[h]	Quarterly (3-month lag)	1/63
NOW accounts					
At commercial banks	2,080	I	E[h]	Daily, member banks (1-week lag) Monthly, other banks (3-month lag)	1/74
At savings and loans	311	I	E[h]	Monthly (3-month lag)	1/74
At mutual savings banks	870	I	E[h]	Monthly (3-month lag)	1/73
Credit union share draft accounts	576	I	E[h]	Quarterly (3-month lag)	1/76
Federal Reserve					
Foreign and international deposits at Federal Reserve Banks	448	E	I	Daily (1-week lag)	1/59
				M-1+	
Savings deposits					
Commercial banks					
Total excluding all bank, foreign official, and U.S. government deposits, and NOW accounts	221,282	I	I	Daily, member banks (1-week lag) Quarterly, nonmember banks (4-month lag)	1/59
Due to banks and foreign official institutions	29	E	I[i]	Weekly, large banks only (1-week lag)	11/75
Due to U.S. government	62	E	I[i]	Quarterly (4-month lag)	1/76
Foreign-related institutions	278	I	E	Monthly (6-week lag)	1/73
				M-2	
Savings deposits					
Commercial banks					
Total excluding all bank, foreign official, U.S. government deposits, and NOW accounts	221,282	I	I	Daily, member bank (1-week lag) Quarterly, nonmembers (4-month lag)	1/59
Due to banks and foreign official institutions	29	E	I[j]	Weekly, large banks only (1-week lag)	11/75
Due to U.S. government	62	E	E	Quarterly (4-month lag)	1/76
Foreign-related institutions	278	I	E	Monthly (6-week lag)	1/73
Thrift institutions[k]					
Mutual savings banks, excluding NOW accounts	76,901	I	E	Monthly (6-week lag)	1/59
Savings and loans, excluding NOW accounts	147,949	I	E	Monthly (4-week lag)	1/59
Credit union shares, excluding share draft accounts	50,857	I	E	Monthly (4-week lag)	1/59
Savings of credit unions at credit unions	-1,168	I	E	Annually (6-month lag)	1/64
Consolidation component: demand deposits due to mutual savings banks held at commercial banks to back savings deposits	-802	I	E	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59

Components of the New Aggregates

Table A1 lists the components of the proposed monetary aggregates. The table gives the June 1978 average for each component and indicates whether it was used in the construction of the proposed aggregate and the comparable current aggregate; a negative sign attached to the June average indicates that the item enters the calculation as a subtraction from the total. Also shown are the frequency and timeliness of the basic data and the date when the component was first included in the aggregates. With few exceptions, new components were included in the

A1. Continued.

Component	June 1978 average (millions of dollars)[a]	Treatment in monetary aggregate[b] Proposed	Current	Frequency and timing of current data[c]	First inclusion in proposed aggregate
	M-3				
Time deposits					
Commercial banks					
Total excluding all bank, foreign official, and U.S. government deposits	335,699	I	([l, m])	Daily, member banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Due to domestic commercial banks	6,862	E	E	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Due to foreign and mutual savings banks, and foreign official institutions	9,232	E	I	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Due to U.S. government	942	E	E	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/59
Foreign-related institutions[e]					
Total, excluding all bank and foreign official deposits	8,184	I	I[n]	Monthly (6-week lag)	1/59
Due to foreign banks and official institutions	2,236	E	I[n]	Monthly (6-week lag)	1/59
Due to domestic commercial banks	792	E	E[n]	Monthly (6-week lag)	1/73
Thrift institutions					
Mutual savings banks	59,057	I	I	Monthly (6-week lag)	1/59
Savings and loans	257,015	I	I	Monthly (4-week lag)	1/59
Consolidation component: demand deposits due to mutual savings banks held at commercial banks to back time deposits	-605	I	I	Weekly, large banks (1-week lag) Quarterly, other banks (4-month lag)	1/61
MEMO: Over $100,000 included in total	165,320[m]	I	([l, m])	Weekly, large banks (1-week lag)[o] Monthly, foreign-related institutions (6-week lag) Quarterly, other banks (4-month lag)	1/59

NOTES TO TABLE A1

[a] A minus sign indicates that the component was subtracted in calculating the total; all other components were added.

[b] "I" indicates the component was used in the construction of the aggregate; "E" means the component was not used.

[c] "Frequency" refers to the frequency with which basic data are reported; "timing" refers to the lag between the date for which data are reported and availability of final data. For many components, preliminary estimates are made based on sample data or related series and revised when final data become available.

[d] "Demand deposits adjusted" is elsewhere defined as gross demand deposits less deposits of domestic commercial banks, U.S. government deposits, and cash items in the process of collection. The item shown here also excludes deposits of foreign banks and official institutions and mutual savings banks.

[e] Includes agencies and branches of foreign banks, Edge Act corporations engaged in banking, and New York State foreign investment companies. A portion of demand deposits at Edge corporations is included in the cash-items-bias adjustment.

[f] This item is slightly larger in the proposed M-1 than in the current M-1 because of a technical adjustment, so that the components shown do not add exactly to the current M-1.

[g] A small amount of demand deposits adjusted held by Edge Act corporations outside New York is not included in the current aggregates, but is included in the proposed aggregates.

[h] These components are excluded from the current M-1 but included in M-1+. NOW accounts at commercial banks are included in the current M-2 and NOW accounts at savings and loans and mutuals are included in the current M-3.

[i] Time and savings deposits due to domestic commercial banks and the U.S. government are excluded from the current M-2. Because most of such deposits are time deposits, no adjustment was made to the current M-1+ for the savings portion of the amount excluded; this adjustment is made in the proposed M-1+.

[j] A small portion of this item, savings due to domestic commercial banks, is excluded from the current M-2.

[k] Includes mutual savings banks, savings and loan associations, and credit unions. Savings component excludes NOW accounts, which appear in the proposed M-1.

[l] Partly excluded.

[m] Large (over $100,000) negotiable CDs issued by large banks are excluded from the current M-3 but included in the current M-4 and M-5; other large time deposits are included in current M-2 and M-3.

[n] In the current M-2 and M-3, time deposits at branches of foreign banks (the bulk of the figures shown) are included along with those of other noninsured banks; such deposits include deposits of foreign banks and official institutions, but exclude deposits of domestic banks. Time deposits at the other foreign-related institutions are not included in the current aggregates.

[o] Total time deposits are available daily with a one-week lag from member banks; the division between large and small time deposits is based on weekly data from large banks and quarterly data from other banks.

measures of the aggregates in January of the year in which they first exceeded $50 million.

For components based on monthly, quarterly, or semi-annual observations, monthly and weekly averages were derived by interpolating between observations or by applying ratios interpolated between benchmark observations to related series. For series with single-day observations each week (Wednesday), the single-day figures were used for the weekly series, and monthly averages were derived by a proration of the weeks; that is, the levels for the previous six days were assumed to equal the Wednesday observation, and the daily values thus assumed were averaged over the month.

Table A1 shows that the proposed M-1, like the current M-1, includes currency and demand deposits adjusted at commercial banks and foreign-related institutions, plus adjustments for Federal Reserve float and cash items bias. The proposed M-1 differs from the current M-1 by (1) excluding demand deposits due to foreign banks and official institutions, (2) excluding deposits held at the Federal Reserve by foreign official and international institutions, (3) including transactions-related savings balances—

NOW accounts at both commercial banks and thrift institutions and share draft accounts at credit unions, and (4) including demand deposits at mutual savings banks.[50]

The proposed M-1+ adds savings at commercial banks to the proposed M-1 series. It differs from the current M-1+ in that it includes savings at all foreign-related institutions engaged in banking in the United States; that is, savings at agencies of foreign banks and New York State foreign investment corporations have been added to the proposed M-1+ while only savings at branches of foreign banks were in the current M-1+. In addition, the proposed M-1+ excludes demand and savings deposits due to foreign banks and foreign official institutions. Also, a technical correction is made to exclude small amounts of savings due to domestic commercial banks and the U.S. government that are now included in M-1+.

The proposed M-2 adds to proposed M-1 savings deposits (net of transactions-related savings already in proposed M-1) at commercial banks, foreign-related banking institutions in the United States, and thrift institutions. The major difference from the current M-2 is that savings deposits at thrift institutions (mutual savings banks, savings and loan associations, and credit unions) are included, while time deposits at commercial banks are excluded. Other differences are the inclusion of savings deposits at agencies of foreign banks and New York investment companies, the subtraction of a consolidation component (discussed below), and the exclusion of savings deposits due to foreign banks and official institutions.

The proposed M-3 comprises proposed M-2 plus time deposits at all commercial banks, foreign-related institutions in the United States, and thrift institutions. The major differences from the current M-3 are the inclusion of negotiable certificates of deposit (CDs) at large commercial banks, the inclusion of time deposits at foreign-related institutions, and the exclusion of deposits due to foreign banks and official institutions. Also, a consolidation component has been removed; it is discussed below.

[50] The proposed M-1 also includes ATS savings deposits and similar transactions-related savings at thrift institutions.

Timeliness of Data

Table A1 also shows the lag in availability of data for the components of the proposed monetary aggregates. For commercial banks, data for member banks and large weekly reporting banks are available with a one-week lag following the close of the statement week on Wednesday. Preliminary estimates of deposits at nonmember banks are made weekly from data on small member banks, using the latest quarterly call report as a benchmark. Final data on nonmember banks are available with about a four-month lag.[51]

For savings and loan associations and mutual savings banks, preliminary estimates of total deposits are made from early data on deposit flows available from a sample of these institutions: data for deposit flows at mutual savings banks in New York State (accounting for a substantial part of the total) during the first 23 days of the month are available before month-end, and deposit flows (for the sum of time and savings deposits) from a sample of savings and loan associations for the entire month are available within a week of month-end. Final month-end data for thrift institutions, including a savings and time deposit breakdown, are available within four to six weeks.

The schedule of the availability of data—expressed as a percentage of the total of each aggregate—is summarized in table A2 for both the proposed and the current monetary aggregates. The major timing difference between the two sets of aggregates occurs in M-2: because of the inclusion of thrift savings deposits in the proposed M-2, a smaller percentage of final data is available on a timely basis than was available for the current M-2, which includes only com-

[51] Currently, the reliability and timeliness of a sample of nonmember banks reporting weekly are being tested. The incorporation of these sample data for nonmember bank deposits is expected to improve the early estimation of this component.

A2. Timing of final data availability, proposed and current monetary aggregates

Based on data for June 1978

Aggregate and component	Per cent of actual data available, by lag		
	One week[a]	Four to six weeks[a]	Four months[b]
Proposed			
M-1 = currency and checkable deposits	**75.4**	**0.6**	**24.0**
Savings deposits component of M-1+	69.3	0.1	30.6
M-1+ = M-1 plus bank savings	**72.9**	**0.4**	**26.6**
Savings deposits component of M-2[c]	30.5	55.5	13.7
M-2 = M-1 plus all savings deposits[c]	**49.1**	**32.7**	**18.0**
Time deposits component of M-3	36.1	48.7	15.2
M-3 = M-2 plus all time deposits[c]	**43.4**	**39.7**	**16.8**
Current			
M-1 = Currency and bank demand deposits	**76.9**	**0.0**	**23.1**
Savings and checkable deposits in M-1+	68.4	0.0	31.6
M-1+ = M-1 plus checkable deposits at thrift institutions and commercial bank savings	**73.6**	**0.0**	**26.4**
Time and savings deposits component of M-2	63.8	0.0	36.2
M-2 = M-1 plus commercial bank savings and time deposits excluding large negotiable CDs	**69.3**	**0.0**	**30.7**
Thrift institution component of M-3	0.0	100.0[d]	0.0
M-3 = M-2 plus thrift institution deposits	**40.8**	**41.2**	**18.1**
Large negotiable CDs at large commercial banks	100.0	0.0	0.0
M-5 = M-2 plus large negotiable CDs at large commercial banks	**44.1**	**38.9**	**17.0**

[a] Estimates of all monetary aggregates are made one week after the Wednesday close of the week based on past patterns of behavior and, in some cases, early estimates from a sample of institutions. Most of the data available in four to six weeks are from thrift institutions and foreign-related banking institutions.

[b] Most of the data available with a four-month lag are from quarterly condition statements submitted by nonmember banks. Earlier estimates of these data are made from member bank data and benchmark ratios from the latest condition report.

[c] In the proposed M-2 and M-3 aggregates, percentages sum to slightly less than 100 because one part of the savings deposit component is available with a six-month lag.

[d] Very good estimates of total deposits at savings and loan associations and mutual savings banks are available one week after the end of the month. Final data become available four weeks after month-end for savings and loans, and six weeks after month-end for mutual savings banks.

mercial bank deposits. Currently, the timing of data availability for the proposed M-1 and M-1+ is very close to that for the current M-1 and M-1+, although as NOW account balances and other transactions-related savings deposits grow in importance, either more timely data will be required or the proportion of the aggregate requiring estimation will increase. Data for the proposed M-3 are available on approximately the same schedule as data for the current M-3 and M-5 aggregates.

Current Data Sources for New Components

Most of the data for the proposed aggregates are generated from a few basic sources. For several components of these aggregates, current data come from sources that have been in existence only a few years, and back data were estimated using a variety of sources and statistical procedures.[52]

Banking Institutions

The primary data sources for commercial banks are the report of deposits filed weekly by member banks, the weekly report of condition, and the quarterly report of condition (call report).

Report of Deposits. The daily report of deposits is submitted weekly to the Federal Reserve by all member banks to provide the information necessary for the computation of reserve requirements. It provides daily figures from which weekly averages are derived of the major categories of bank deposits—demand, savings, and time—plus certain cash assets that are also used in the construction of the money stock measures.

Weekly Report of Condition. The weekly report of condition is a detailed balance sheet submitted by a group of large commercial banks as of the close of business each Wednesday. The number of weekly reporting banks varied over the 1959-78 period but always included more than 300 banks; at the end of 1978, 312 banks were in the sample, and these banks had 50 percent of the total deposits of all commercial banks.[53]

[52] A description of the calculation of the back data is available from the Board of Governors of the Federal Reserve System, Division of Research and Statistics, Banking Section.

[53] Beginning in January 1979, the weekly reporting panel was revised to include only those banks having more than $750 million in domestic office assets as of December 31, 1977. The new panel has approximately 50 percent of the assets of all commercial banks.

Quarterly Report of Condition. The condition report (or call report) is a detailed balance sheet submitted by all insured commercial banks four times each year and by noninsured commercial banks and mutual savings banks twice each year.[54]

Member bank demand deposits adjusted, savings deposits, and time deposits come from the daily report of deposits. For nonmembers, deposits are estimated using reported deposits of small member banks, and are benchmarked to the quarterly call report. Most other items are taken from the weekly condition reports of large banks and are estimated for other commercial banks using quarterly call report relationships. The items estimated in this fashion in constructing proposed M-1 are demand deposits due to foreign official institutions and due to mutual savings banks; in constructing proposed M-2, savings deposits due to banks and foreign official institutions; in constructing proposed M-3, time deposits due to the U.S. government, mutual savings banks, foreign banks, and domestic commercial banks; in constructing both proposed M-2 and M-3, the demand, savings, and time deposits due to mutual savings banks used in consolidation. Savings deposits due to the U.S. government are estimated from the call reports for all commercial banks.

NOW Accounts. NOW accounts are reported at month-end to the Federal Reserve Bank of Boston by all institutions in New England that offer them. Data for NOWs at commercial and mutual savings banks in New York State are estimated from a sample of institutions that report weekly to the Federal Reserve Bank of New York. In addition, daily data on NOWs of member banks in the First Federal Reserve District are available on the daily report of deposits. As noted in the text, NOW accounts have been permitted only fairly recently; mutual savings banks in some New England states first offered them in June 1972, and commercial banks and savings and loan associations in New England began offering them in 1974.

Condition Reports of Foreign-Related Banking Institutions. Foreign-related institutions—agencies, branches, and domestic banking subsidiaries of foreign banks—have submitted monthly reports of condition as of the last Wednesday, or last day of the month, since November 1972.[55] Edge Act corporations also submitted the reports monthly from November 1972 until March 1977, after which they submitted them quarterly.

Currently, these reports are the source of all of the new components derived from foreign-related institutions that enter into the calculation of the proposed monetary aggregates.[56] The following items are collected from condition reports: in proposed M-1, demand deposits of foreign official institutions and foreign banks (subtracted from total demand deposits) and M-1-type deposits of Edge Act corporations outside New York; in proposed M-2, savings; in proposed M-3, time deposits.

Many of the deposit liabilities of foreign-related institutions were not large enough (that is, they were less than $50 million) to be included in the monetary aggregates before 1972.[57]

Mutual Savings Banks

The basic data for deposits at mutual savings banks come from the monthly *Research Analysis* report published by the National Association of Mutual Savings Banks for deposits as

[54] The June and December call reports are generally filed as of the last days of those months. Until recently, the spring and fall call dates varied, but generally occurred in March or April for the spring call and September or October for the fall call. Since September 1975, spring and fall call dates have been set on the last day of March and September, respectively.

[55] June and December reports have always been as of the last day of the month. Since March 1976, the March and September reports have also been as of the last day of the month. All other reports are as of the last Wednesday of the month. Daily M-1-type deposits at these institutions have been available for several years and are included in both the current and the proposed aggregates.

[56] Edge Act corporations engaged in banking submit a daily deposit report to the Federal Reserve weekly. Other foreign-related institutions report M-1-type deposits daily by telephone.

[57] Until 1972, deposits of branches of foreign banks in New York, which formed the major portion of deposit liabilities of foreign-related institutions, were included in the monetary aggregates on the same basis as those of other nonmember banks; after 1972, they were estimated separately. Other deposit liabilities for which pre-1972 data were estimated are discussed in the description of back data cited in note 52 above.

of month-end, based on a sample of about 340 mutual savings banks accounting for 85 percent of total time and savings deposits of these institutions. In June and December, data are collected by the NAMSB from all institutions and are used to benchmark the series. Currently, "savings," "time," and "other" deposits are reported separately on the monthly report.[58] Savings deposits included in the proposed M-2 are derived from this report. Deposits included in the time deposit components of the proposed M-3 are the sum of time deposits from the monthly report, and school and club accounts; the latter are currently available from a quarterly survey of deposit ownership at all mutual savings banks, conducted by the FDIC.[59] That quarterly survey is also the current source of data on demand deposits at all mutual savings banks. Before June 1975, when the survey began, demand deposits were estimated from semi-annual call reports.

NOW accounts of mutual savings banks in New England are reported as of month-end, as mentioned above, to the Federal Reserve Bank of Boston, and weekly to the Federal Reserve Bank of New York by a sample of mutual savings banks in New York State.

Savings and Loan Associations

Deposits at savings and loan associations are estimated from two monthly reports published by the Federal Home Loan Bank Board. The monthly *News* contains balance sheet data based on month-end reports submitted by all insured savings and loans associations, accounting for 98 percent of all savings and loan deposits. Since July 1968, it has separated total deposits into those paying the regular rate or less and those paying more than the regular rate; the former are assumed to be savings deposits, the latter, time deposits. The second report, the monthly *Selected Balance Sheet Data, All Operating Savings and Loan Associations,* gives estimated total deposit data as of month-end for all operating savings and loan associations, based on the monthly reports of the insured associations and annual reports of all associations. For the purpose of allocating total deposits between proposed M-2 and M-3, deposits at all associations have been allocated between savings and time deposits using the appropriate proportions for insured associations.

The estimation of deposits at savings and loan associations before July 1968 is discussed in the description of back data cited in note 52 above.

NOW accounts of savings and loan associations in New England, as mentioned above, are reported as of month-end to the Federal Reserve Bank of Boston.

Credit Unions

Credit union share deposits as of month-end are available in the *Monthly Statistical Release* issued by the National Credit Union Administration (NCUA) showing major asset and liability items of credit unions. This release is based on monthly reports from 1,200 relatively large credit unions (60 percent of which are federal, and the remainder of which are state credit unions) accounting for 30 percent of total credit union assets, plus annual data submitted by all credit unions. The NCUA also publishes two annual reports—one for federal credit unions, the other for state-chartered credit unions. Summaries of the annual year-end balance sheets published in these reports include, for most credit unions, balances held with other credit unions. These balances are deducted from total savings of credit unions to avoid double counting.[60]

Data on share draft accounts at credit unions are available from the NCUA for federally chartered credit unions only. Share draft accounts were first authorized for federally chartered institutions in November 1974. End-of-month data were reported by credit unions offering share draft accounts from May 1975 to September 1976. After September 1976 only end-of-quarter data are available.

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[58] "Other" deposits include demand deposits, school and club accounts, non-interest-bearing NOWs, and other accounts.

[59] The estimation of savings and time deposits before 1971, and of club and school accounts before 1975, is discussed in the description of data cited in note 52 above.

[60] The estimation of balances of credit unions with other credit unions in earlier years is discussed in the description of back data cited in note 52.

Repurchase Agreements

Security repurchase agreements (RPs) with the nonbank public—a major nondeposit liability of commercial banks—have not been included in the proposed M-3 measure on the grounds that available data are incomplete and any RP estimates are likely to contain significantly more estimation error than the deposit components do. Nevertheless, it is believed that RPs have come to play an important role in the monetary system and an historical RP series has been constructed using available information. To create a monthly series for security repurchase agreements of all commercial banks with the nonbank public extending back to November 1969, monthly RP borrowings of 46 large banks, based on daily averages and net of interbank borrowing, were benchmarked to adjusted call report data. Monthly RP data for the 46 banks go back to November 1969.

Since the call report combines federal funds and RP borrowings from both bank and nonbank sources, the procedure for benchmarking first involved the removal of interbank federal funds and RP borrowings. Beginning in 1976, interbank federal funds and RP borrowings have been available directly from the call report. However, to obtain interbank federal funds and RP borrowings for earlier periods, it was necessary to construct estimates.[61] The next step in benchmarking involved the removal of federal funds borrowed from sources other than commercial banks; this was done using federal funds lent by the principal institutions placing federal funds with banks.[62] The resulting series, estimated RP borrowings by all banks net of interbank borrowings, was then divided by RP borrowings of the 46 banks as of the call dates to obtain blowup factors that were applied to the monthly RP borrowings of the 46 RP reporters. These factors are semi-annual until 1972 and quarterly thereafter.

Consolidation of Interinstitution Deposits

Insofar as was possible, components of the proposed monetary aggregates were consolidated rather than combined, in line with the recommendations of the Advisory Committee on Monetary Statistics.[63]

The committee recommended that in constructing the monetary aggregates, accounts of financial institutions should be consolidated rather than combined. Furthermore, the committee recommended that in each monetary aggregate only those interinstitution deposits should be removed by consolidation that are held for servicing other deposits included in that aggregate. For example, mutual savings banks hold demand deposits with commercial banks; the committee recommended that the portion of these deposits that is held for servicing the demand deposit liabilities of mutual savings banks be excluded from M-1 because the demand deposit liabilities of mutual savings banks are included in the proposed M-1, and to include that portion would be to double count. However, demand deposits that mutual savings banks hold at commercial banks on account of their savings deposit liabilities should not be excluded from M-1, but should be removed from proposed M-2. Similarly, demand deposits held on account of time deposit liabilities should be removed from proposed M-3. Since it is not possible to determine what portion of these

[61] Interbank borrowing is estimated to have been 110 percent of interbank lending, which is available from the call report before 1976; this ratio is based on the average relation between these two series for the ten call reports ending with June 1978. (Interbank borrowing and interbank lending are not identical because the call report instructions define banks for the purposes of the borrowing item to include several financial institutions other than commercial banks.)

[62] Federal funds lending by mutual savings banks, savings and loans, and the Federal Home Loan Bank System are available over much of the period for which the benchmarks are needed. These data, however, include all federal funds lending, whereas the federal funds borrowing listed by banks on the call report includes only one-day and continuing-contract federal funds. The remaining "term" federal funds borrowing constituted about 25 percent of all federal funds borrowing as of April 1974 and December 1977. Accordingly, the data on federal funds lending are multiplied by three-fourths before being subtracted from the call data on federal funds and repurchase agreements. The data for federal funds lending by mutual savings banks begins in December 1971; for savings and loans, in March 1974; and for the Federal Home Loan Bank System, in June 1974.

[63] *Improving the Monetary Aggregates: Report*, pp. 12–14.

A3. Series not consolidated in the construction of the proposed monetary aggregates

Aggregate, type of deposit, and holder	Estimated size: Millions of dollars	Estimated size: Date of estimate	Reason for not consolidating
M-2			
Savings held at commercial banks			
Credit unions	97	December 1976	Infrequency
Mutual savings banks	1	June 1978	Smallness
Savings and loan associations	n.a.	...	Unavailability
Savings held at thrift institutions			
Mutual savings banks	n.a.	...	Unavailability
Savings and loan associations	89	March 1977	Unavailability[a]
M-3			
Time deposits held at commercial banks			
Credit unions	707	December 1976	Infrequency
Savings and loan associations	6,019	March 1978	Infrequency
Time deposits at thrift institutions			
Credit unions	1,383	December 1976	Infrequency
Mutual savings banks	n.a.	...	Unavailability
Savings and loan associations	465	March 1978	Infrequency
M-2 and M-3 consolidation component			
Demand deposits held at commercial banks			
Savings and loan associations	700	March 1978	Infrequency
Credit unions	700	December 1976	Infrequency

[a] These data were available until March 1977.

n.a. Not available.

demand deposits are held to back each type of deposit liability at mutual savings banks, as an approximation the proportion of each type of deposit liability—demand, savings, or time—to total deposit liabilities was used.[64] For example, in June 1978, the ratio of savings deposits to total deposits at mutual savings banks was approximately 57 percent; it was estimated that this proportion of mutual savings banks' demand deposits at commercial banks was held to back savings deposits, and they were removed from proposed M-2; the balance was removed from proposed M-3.

The only thrift institution deposit holdings for which data are adequate for consolidation purposes are deposits of mutual savings banks at commercial banks (both demand and time), and savings of credit unions at other credit unions. Because of the lack of adequate data, other components that these principles suggest should be removed by consolidation were not removed. Table A3 shows the estimated size of interinstitution-consolidation components. In most cases, data are available only semi-annually or annually. Most components are too large and variable to be included on the basis of such infrequent observations. For other components, data are not available at all.

[64] Because demand deposits are such a small proportion of the total deposit liabilities of mutual savings banks, no adjustment was made for demand deposits held by mutual savings banks to service their demand deposit liabilities.

The effect of combining rather than consolidating certain accounts is to raise the measured levels of proposed M-2 and M-3 from their true levels. The effect on M-1 is negligible. Table A3 suggests that the size of the components that should be removed by consolidation from proposed M-2 and M-3, but are not removed because the data are lacking, is not negligible.

Seasonal Adjustment

Components of the proposed aggregates were seasonally adjusted using standard options in the Census X-11 program. The seasonal adjustment routine was applied to the proposed aggregates as follows:

The currency and the demand deposit components (covering commercial and mutual savings banks, and foreign-related institutions) of the proposed M-1 were each seasonally adjusted separately. Newly introduced checkable deposits—NOW accounts and share draft accounts at credit unions—were not seasonally adjusted. These latter series are of such recent origin that there are not yet enough observations to establish a seasonal pattern. The commercial bank savings deposit component was adjusted separately and added to the seasonally adjusted

M-1 to construct M-1+. The savings of all depositary institutions, taken as a whole, were seasonally adjusted and added to M-1 to construct M-2. Similarly, time deposits for all institutions, taken as a whole, were seasonally adjusted and added to M-2 to construct M-3.

The seasonal adjustments presented here should be regarded as preliminary. For the current monetary aggregates, seasonal adjustment involves examination of alternative adjustments made by selecting different options available in the X-11 program, as well as judgmental adjustment of the output of X-11, in order to take account of the effects of policy changes and other factors in seasonal patterns that are not fully captured by X-11. Thus far no such examination has been made for the proposed aggregates, nor has the X-11 output undergone judgmental review. In addition, seasonal adjustment of some disaggregated components, such as savings deposits at savings and loan associations and at mutual savings banks, should be reviewed before a final seasonally adjusted series is available. □

The New Federal Reserve Technical Procedures for Controlling Money

As part of its anti-inflationary program announced on October 6, 1979, the Federal Reserve changed open market operating procedures to place more emphasis on controlling reserves directly so as to provide more assurance of attaining basic money supply objectives. Previously, the reserve supply had been more passively determined by what was needed to maintain, in any given short-run period, a level of short-term interest rates, in particular a level of the federal funds rate, that was considered consistent with longer-term money growth targets. Thus, the new procedures entail greater freedom for interest rates to change over the short-run in response to market forces. 1/

This note describes the new technical operating procedures and how the linkage between reserves and money involved in the procedures is influenced by the existing institutional framework and other factors. This linkage is relatively complicated and variable, particularly over the short-run, so that, for example, it does not necessarily follow that rapid expansion of reserves would be accompanied by, or would presage, rapid expansion of money. The exact relationship depends on the behavior of other factors besides money that absorb or release reserves, and consideration must also be given to timing problems in connection with lagged reserve accounting.

In setting reserve paths to control money under existing conditions account must be taken of: (i) the prevailing reserve requirement structure, with varying reserve requirements by type of deposit (some of which may not be included in targeted money measures) and by size of deposit; (ii) the public's demand for currency relative to deposits; (iii) availability of reserves at bank initiative from the discount window; (iv) lags in response

1/ Consistent with this, the federal funds rate range adopted by the Federal Open Market Committee for an intermeeting period has been greatly widened.

on the part of the public and banks to changes in reserve supply through open market operations; (v) the growing amount of money-supply type deposits at institutions not subject to reserve requirements set by the Federal Reserve; (vi) lagged reserve accounting. To help insure that operations are undertaken most effectively, the Federal Reserve has the new operating technique and related factors under continuous examination in light of experience gained. At present, studies are under way on such elements as lagged reserve accounting and the role of the discount window. Possible changes in other elements involved with the technique would require Congressional action--such as extending reserve requirements to nonmember institutions and certain aspects of simplifying reserve structure.

The principal steps in the new procedure are outlined below.

(1) The policy process first involves a decision by the Federal Open Market Committee on the rate of increase in money it wishes to achieve. For instance, at its October 6 meeting, taking account of its longer-run monetary targets and economic and financial conditions, the Committee agreed upon an annual rate of growth in M-1 over the 3-month period from September to December on the order of 4½ percent, and of M-2 of about 7½ percent, but also agreed that somewhat slower growth was acceptable.

(2) After the objective for money supply growth is set, reserve paths expected to achieve such growth are established for a family of reserve measures. These measures consist of total reserves, the monetary base (essentially total reserves of member banks plus currency in circulation), and nonborrowed reserves. Establishment of the paths involves projecting how much of the targeted money growth is likely to take the form of currency, of deposits at nonmember institutions, and of deposits at member institutions (taking account of differential reserve requirements by size of demand deposits and between the demand and time and savings deposit components of M-2).

Moreover, estimates are made of reserves likely to be absorbed by expansion in other bank liabilities subject to reserve requirements, such as large CD's, at a pace that appears consistent with money supply objectives and also takes account of tolerable changes in bank credit. Such estimates are necessary because reserves that banks use to support expansion of CD's, for example, would not be available to support expansion in M-1 and M-2. Thus, if the reserves required behind CD's were not provided for in the reserve path, expansion in M-1 and M-2 would be weaker than desired. The opposite would be the case if the reserve path were not reduced to reflect contraction of large CD's. For similar reasons, estimates are also made of the amount of excess reserves banks are likely to hold.

(3) The projected mix of currency and deposits, given the reserve requirements for deposits and banks' excess reserves, yields an estimate of the increase in total reserves and the monetary base consistent with FOMC monetary targets. The amount of nonborrowed reserves--that is total reserves less member bank borrowing--is obtained by initially assuming a level of borrowing near that prevailing in the most recent period. For instance, following the October 6 decision, a level of borrowing somewhat above that of September was initially assumed. Following subsequent meetings, the assumed level of borrowing for the nonborrowed path was always close to the level prevailing around the time of the FOMC meeting, though varying a little above and below that level.

(4) Initial paths established for the family of reserve measures over, say, a 3-month period are then translated into reserve levels covering shorter periods between meetings. These paths can be based on a constant seasonally adjusted rate of growth of the money targets on, say, a month-by-month basis, or can involve variable monthly growth rates within the 3-month period if that appears to facilitate achievement of the longer-run money targets.

(5) Total reserves provide the basis for deposits and thereby are more closely related to the aggregates than nonborrowed reserves. Thus total reserves represents the principal over-all reserve objective.[1/] However, only nonborrowed reserves are directly under control through open market operations, though they can be adjusted in response to changes in bank demand for reserves obtained through borrowing at the discount window.

(6) Because nonborrowed reserves are more closely under control of the System Account Manager for open market operations (though subject to a small range of error because of the behavior of non-controlled factors affecting reserves, such as float), he would initially aim at a nonborrowed reserve target (seasonally unadjusted for operating purposes) established for the operating period between meetings. To understand how this would lead to control of total reserves and money supply, suppose that the demand for money ran stronger than was being targeted--as it did in early October of last year. The increased demand for money and also for bank reserves to support the money would in the first instance be accompanied by more intensive efforts on the part of banks to obtain reserves in the federal funds market, thereby tending to bid up the federal funds rate, and by increased borrowing at the Federal Reserve discount window. As a result

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1/ In the control process, the monetary base in practice is given less weight than total reserves. This is principally for a technical reason. If currency, the principal component of the base, is running stronger than anticipated, achievement of a base target would require a dollar-for-dollar weakening in member bank reserves. But, because of fractional reserve requirements, the weakening in reserves would have a multiple effect on the deposit components of the monetary aggregates (it could weaken the demand deposit component by about 6 times the decline in reserves). Achievement of a base target in the short run could therefore lead, in this example, to a much weaker money supply than targeted. If a total reserve target were achieved, the money supply would be stronger than targeted, but only by the amount by which currency is stronger than expected. Thus, the variation from a money supply target would be less under total reserves than under a monetary base guide. Of course, should currency persistently run stronger or weaker than expected, compensating adjustments could be made to either a total reserves or monetary base target.

of the latter, total reserves and the monetary base would for a while run stronger than targeted. Whether total reserves tend to remain above target for any sustained period depends in part on the nature of the bulge in reserve demand--whether or not it was transitory, for example--and in part on the degree to which emerging market conditions reflect or induce adjustments on the part of banks and the public. These responses on the part of banks, for example, could include sales of securities to the public (thereby extinguishing deposits) and changes in lending policies.

(7) Should total reserves be showing sustained strength, closer control over them could be obtained by lowering the nonborrowed reserve path (to attempt to offset the expansion in member bank borrowing) and/or by raising the discount rate. A rise in the discount rate would, for any given supply of nonborrowed reserves, initially tend to raise market interest rates, thereby working to speed up the adjustment process of the public and banks and encouraging a more prompt move back to the path for total reserves and the monetary base. Thus, whether adjustments are made in the nonborrowed path--the only path that can be controlled directly through open market operations--and/or in the discount rate depends in part on emerging behavior by banks and the public. Under present circumstances, however, both the timing of market response to a rise in money and reserve demand, and the ability to control total reserves in the short run within close tolerance

limits, are influenced by the two-week lag between bank deposits and required reserves behind these deposits.1/

(8) Other intermeeting adjustments can be made to the reserve paths as a family. These may be needed when it becomes clear that the multiplier relationship between reserves and money has varied from expectations. The relationship can vary when, for example, excess reserves and non-money reservable liabilities are clearly running higher or lower than anticipated. Since October 6 such adjustments during the intermeeting period have been made infrequently. Given the naturally large week-to-week fluctuations in factors affecting the reserve multiplier, deviation from expectations in one direction over a period of several weeks would be needed before it would be clear that a change in trend has taken place.

A variable relationship between expansion of reserves and of money is implicit in the description of procedures just given. This is illustrated by experience in the fourth quarter, as shown in the table on the next page. It can be seen from panel I that M-1 increased at only a 3.1 percent annual rate (seasonally adjusted) in that period and M-2 at a 6.8 percent rate. At the same time, as shown in panel II, nonborrowed reserves, total reserve and the monetary base rose at substantially more rapid rates--by annual rates of about 13, 13¾, and 8 percent, respectively.

There were a number of reasons for the much more rapid growth in reserves and the base than in the monetary aggregates. Only about 1 percentage point of the 13¾ percent annual rate of increase in total reserves

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1/ Under lagged accounting, banks are not required to hold reserves against deposits until two weeks later. With required reserves fixed at that time, the Federal Reserve in its operations is limited in its ability to control total reserves within a given week (since the total of reserves is determined by required reserves and banks' excess reserves), but can more readily determine whether the banking system satisfies its reserve requirement through the availability of nonborrowed reserves, or is forced to turn to the discount window (or to reduce excess reserves, though most banks are usually close to minimal levels in that respect).

Changes in Reserve and Monetary Aggregates
September to December 1979
(Seasonally adjusted)

	Percent Annual Rate[1/]	Change in Millions $
I. Changes in Monetary Aggregates:		
A. M-1	3.1	2845
1. Currency outside banks	5.3	1400
2. Member bank demand deposits	2.3	972
3. Nonmember bank demand deposits	2.1	473
B. M-2	6.8	15961
II. Changes in Reserves and Related Items:		1309
A. Nonborrowed reserves	12.9	
B. Borrowings	--	131
C. Total reserves (A + B)	13.8	1430
D. Currency 2/	5.9	1606
E. Monetary base (C + D)	8.1	3046

	Percentage Points Contributed Towards Growth of Total Reserves	Change in Millions $
III. Total Reserves Absorbed by:		
A. Private demand deposits	1.1	111
B. Interbank demand deposits	2.7	280
C. U.S. Government demand deposits	0.0	3
D. Large, negotiable CD's	3.6	378
E. M-2 time and savings deposits	4.5	466
F. Nondeposit items	0.0	-3
G. Excess reserves	2.0	205

Addendum:

Impact of lagged reserve accounting on:	
1. Total reserves	287[3/]
2. Reserves against private demand deposits	-64
3. Reserves against M-2 time and savings deposits	121
4. All other items subject to reserves	230

1/ Growth rates of reserves adjusted for discontinuities in series that result from changes in Regulations D and M.

2/ Includes vault cash of nonmember banks.

3/ Reflects change in total reserves during period attributable to fact that required reserves are based on deposits two weeks earlier, rather than on deposits contemporaneous with reserves. Thus, adjusted to a basis contemporaneous with deposit growth from September to December, total reserves would have expanded $287 million, or 2.8 percentage points, less than they actually did.

supported growth in the member bank demand deposit component of M-1 (as may be seen from line III.A of the table). An additional 4½ percentage points supported the member bank interest-bearing component of M-2 (line III.E). Thus less than half of the increase in reserves supported expansion in targeted monetary aggregates. More than half of the reserves supported expansion in interbank demand deposits, excess reserves, and large negotiable CD's. If these reserves had not been supplied, growth in M-1 and M-2 would have been much slower. In fact, actual growth in M-1 and M-2 was a bit slower than targeted, though not less than the Committee found acceptable.1/

As this example from recent experience helps demonstrate, the behavior of reserve measures in relation to money can be expected to vary with shifts in the currency and deposit mix, with changes in bank demands for excess reserves and borrowing, and with timing problems related to lagged reserve accounting. But even in evaluating money growth itself, which the Federal Open Market Committee sets as a target in the policy process, recognition has to be given to the likelihood that money growth can vary substantially on a month-to-month basis in view of inherently large and erratic money flows in so vast and complex an economy as ours.

1/ Moreover, the relatively rapid expansion in reserve measures was not associated with strength in bank credit, which in the fourth quarter grew at only about a 3 percent annual rate, well below its earlier pace. The slow expansion in bank credit during the fourth quarter reflected, on the liability side, a sharp reduction in the outstanding amount of borrowing by banks through Euro-dollars, federal funds, and repurchase agreements.