

## HOW MONEY IS CREATED

REMARKS BY MR. ROBERT P. MAYO,  
PRESIDENT, FEDERAL RESERVE BANK OF CHICAGO  
TO THE MILWAUKEE CHAPTER,  
FINANCIAL EXECUTIVES INSTITUTE  
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I AM PLEASED TO HAVE AN OPPORTUNITY TO MEET THIS EVENING WITH THE MILWAUKEE FINANCIAL EXECUTIVES. I ALWAYS ENJOY MEETING WITH EXECUTIVES WHO SHARE MY INTEREST IN FINANCIAL AFFAIRS. IN ADDITION, I ALWAYS FIND THAT I LEARN A GREAT DEAL FROM MEETINGS SUCH AS THIS.

I AM PARTICULARLY PLEASED TO BE HERE TONIGHT BECAUSE OF THE TOPIC WHICH YOU HAVE SUGGESTED. TO MANY, THE TOPIC, HOW MONEY IS CREATED, SUGGESTS A VERY SIMPLE SUBJECT--TOO SIMPLE AND EVEN MUNDANE FOR A GROUP OF FINANCIAL EXECUTIVES. BUT IT IS NOT A MUNDANE SUBJECT. CONFUSION ON HOW MONEY IS CREATED IS AT THE HEART OF MUCH OF THE PUBLIC DEBATE AND MISUNDERSTANDING ON MONETARY ISSUES TODAY.

EVERYONE HERE IS AWARE OF HOW FREQUENTLY THE PRESS, IN PARTICULAR, CONSIDERS THE IMPORTANT MONETARY ISSUES TO BE "WHY DID THE FED CREATE SO MUCH MONEY CAUSING INFLATION" AND "WHY ISN'T THE FED CREATING ENOUGH MONEY NOW TO BRING ABOUT A MORE RAPID RECOVERY?" THE PHRASING OF THE ISSUES IN THIS WAY INDICATES CLEARLY THAT THE WRITERS DO NOT KNOW HOW MONEY IS CREATED. THE FED DOES NOT CREATE MONEY!

IT MAY APPEAR TO SOME OF YOU THAT I AM SIMPLY DABBLING IN SEMANTICS. LET ME ASSURE YOU THAT I AM NOT. A CLEAR CONCEPTION OF HOW MONEY IS CREATED IS NECESSARY IF ONE IS TO UNDERSTAND MONETARY POLICY AND EVALUATE CRITICALLY THE POLICY ACTIONS TAKEN AND THE POLICY OPTIONS AVAILABLE. I AM CONVINCED THAT MANY OF THE SO-CALLED ISSUES ASSOCIATED WITH MONETARY POLICY WOULD EVAPORATE IF UNDERSTANDING WERE MORE WIDESPREAD. IN FACT, IT IS BECOMING INCREASINGLY NECESSARY TO GO BACK TO AN EVEN MORE FUNDAMENTAL QUESTION THAN HOW IS MONEY CREATED. THAT QUESTION IS--WHAT IS MONEY? WITH THE ADVENT OF NEGOTIABLE ORDERS OF WITHDRAWALS--NOW ACCOUNTS--FOR SAVINGS AND LOANS AND MUTUAL SAVINGS BANKS, TELEPHONIC TRANSFERS AND CORPORATE SAVINGS ACCOUNTS, IT IS NOT EVEN CLEAR THAT OUR OLD DEFINITION OF MONEY IS AS USEFUL IN A POLICY SENSE.

TONIGHT, THEN, I WANT TO TALK ABOUT THE FED'S ROLE IN INFLUENCING THE QUANTITY OF MONEY AND CREDIT IN THE ECONOMY BY REFERRING TO SOME OF THE FUNDAMENTALS OF MONEY CREATION.

MONEY CAN BE VIEWED VERY SIMPLY AS A TOOL USED TO FACILITATE TRANSACTIONS. IT IS A MEDIUM THAT IS READILY ACCEPTED IN EXCHANGE FOR GOODS AND SERVICES. MANY THINGS--FROM STONES TO CIGARETTES--HAVE SERVED THIS ROLE THROUGHOUT HISTORY. TODAY, IN THE UNITED STATES, THERE ARE ONLY TWO KINDS OF MONEY USED IN SIGNIFICANT AMOUNTS--CURRENCY AND COIN IN THE POCKETS AND PURSES OF THE PUBLIC, ABOUT 25 PER CENT OF THE TOTAL, AND DEMAND DEPOSITS OR CHECKING ACCOUNTS OF THE PUBLIC IN COMMERCIAL BANKS, ABOUT 75 PER CENT OF THE TOTAL. SINCE THEY ARE FREELY EXCHANGEABLE FOR EACH OTHER, THE DISTRIBUTION

OF THIS STOCK OF MONEY--NOW IDENTIFIED REGULARLY AS  $M_1$ --BETWEEN DEMAND DEPOSITS AND CURRENCY DEPENDS ON PUBLIC PREFERENCES.

ONLY DEMAND DEPOSITS AND CURRENCY IN THE HANDS OF THE PUBLIC ARE CONSIDERED MONEY. THIS MEANS THAT THE PRINTING PRESSES CAN ROLL--THE BUREAU OF PRINTING AND ENGRAVING CAN WORK OVERTIME--AND THE PAPER AND METAL CAN BE STORED AT THE FEDERAL RESERVE BANKS AND EVEN THE COMMERCIAL BANKS BUT THERE STILL MAY BE NO INCREASE IN THE MONEY SUPPLY; THERE WILL BE NO INCREASE IN THE MONEY SUPPLY UNTIL THE PUBLIC DESIRES TO HOLD MORE.

THUS, THE PUBLIC DETERMINES THE DISTRIBUTION OF THE MONEY STOCK BETWEEN DEMAND DEPOSITS AND CURRENCY AND, IN A SENSE, THE QUANTITY OF MONEY. THE EXTENT TO WHICH THIS LATTER POINT IS TRUE, WE'LL COME TO IN A MOMENT.

WHO THEN CREATES THE MONEY DESIRED BY THE PUBLIC? THE ACTUAL PROCESS OF MONEY CREATION TAKES PLACE IN COMMERCIAL BANKS-- NOT IN THE FED, NOT IN THE FEDERAL GOVERNMENT, NOT IN THE SAVINGS AND LOANS, NOT IN THE INSURANCE COMPANIES, NOT IN ANY OF THE OTHER FINANCIAL INTERMEDIARIES. IT TAKES PLACE ONLY IN THOSE INSTITUTIONS WITH DEMAND DEPOSIT LIABILITIES, WHICH UNTIL RECENTLY INCLUDED ONLY COMMERCIAL BANKS.

THE DEMAND DEPOSIT LIABILITIES OF COMMERCIAL BANKS ARE MONEY. THESE LIABILITIES ARE CUSTOMERS' ACCOUNTS. THEY INCREASE WHEN THE CUSTOMERS DEPOSIT CURRENCY AND CHECKS AND WHEN THE PROCEEDS OF LOANS MADE BY BANKS ARE CREDITED TO BORROWERS' ACCOUNTS.

BANKS CAN BUILD UP DEPOSITS BY LOANS AND INVESTMENTS AS LONG AS THEY KEEP ENOUGH CURRENCY ON HAND TO REDEEM WHATEVER AMOUNTS THE HOLDERS OF DEPOSITS WANT TO CONVERT TO CURRENCY AND, FOR AN INDIVIDUAL BANK, AS LONG AS IT IS PREPARED TO MAKE REMITTANCE ON CHECKS WRITTEN BY DEPOSITORS AND PRESENTED FOR PAYMENT BY OTHER BANKS. THIS UNIQUE ATTRIBUTE OF BANKING WAS DISCOVERED CENTURIES AGO. DEMAND DEPOSITS ARE A MODERN COUNTERPART OF BANK NOTES. IT WAS A SMALL STEP FROM PRINTING NOTES TO MAKING BOOK ENTRIES WHICH COULD BE "SPENT" BY WRITING CHECKS.

ESSENTIALLY, THEN, THE PROCESS OF MONEY CREATION INVOLVES THE ACCEPTANCE BY THE BANKS OF DEBT INSTRUMENTS. EVEN THE FEDERAL GOVERNMENT DOESN'T CREATE MONEY. THE BANKS DO IT WHEN THEY BUY GOVERNMENT SECURITIES--MAKE A LOAN TO THE GOVERNMENT. THE FEDERAL GOVERNMENT CAN ISSUE SECURITIES (DEBT) FROM NOW TO DOOMSDAY BUT AS LONG AS THE PUBLIC, INDIVIDUALS AND BUSINESSES, BUY THE DEBT WITH THEIR CURRENCY AND DEMAND DEPOSIT HOLDINGS, THERE IS NO INCREASE IN THE MONEY SUPPLY--NO NEW MONEY. IN FACT, SINCE GOVERNMENT DEPOSITS ARE NOT DEFINED AS PART OF THE MONEY STOCK, TO THE EXTENT THAT THE GOVERNMENT HOLDS AS A DEPOSIT THE PROCEEDS OF THE SECURITIES SALES, THE MONEY STOCK GOES DOWN. THE MONEY SUPPLY GOES UP ONLY WHEN THE BANKS BUY THE GOVERNMENT SECURITIES AND THE GOVERNMENT THEN SPENDS THE PROCEEDS IN THE ECONOMY.

SO PUTTING IT "IN A NUTSHELL", BANKS CREATE MONEY BY MAKING LOANS. LOANS ARE MADE BECAUSE THERE IS A DEMAND FOR MONEY BY THE PUBLIC OR THE GOVERNMENT. THE PUBLIC WANTS MONEY FOR TRANSACTIONS

NOW OR IN THE FUTURE. CERTAINLY, THERE ARE ALSO OTHER REASONS FOR DESIRING MONEY--FOR SAFETY, EMERGENCIES, OR TO ACCUMULATE FUNDS FOR FUTURE INVESTMENT--AND THESE NEEDS CHANGE OVER TIME. BUT IT IS THE PROCESS OF DEBT ACCEPTANCE BY BANKS THAT CREATES MONEY.

NOW, OF COURSE, THIS ISN'T THE WHOLE STORY. OBVIOUSLY, THE TOTAL MONEY STOCK IS NOT DETERMINED BY THE PUBLIC DEMAND FOR MONEY ALONE. IF IT WERE, IT WOULD PROBABLY GROW AT AN ASTRONOMICAL RATE SINCE WE WOULD ALL LIKE MORE. MONEY, LIKE ANYTHING ELSE, DERIVES ITS VALUE FROM ITS SCARCITY IN RELATION TO ITS USEFULNESS AND WITH ASTRONOMICAL GROWTH ITS USEFULNESS WOULD DISAPPEAR. THEREFORE, CONTROL OF THE QUANTITY OF MONEY IS ESSENTIAL IF ITS VALUE IS TO BE KEPT STABLE.

BUT IF DEPOSIT MONEY CAN BE CREATED SO EASILY, WHAT IS TO PREVENT BANKS FROM CREATING TOO MUCH--MORE THAN SUFFICIENT TO KEEP THE NATION'S PRODUCTIVE RESOURCES FULLY EMPLOYED WITHOUT PRICE INFLATION? AS NOTED BEFORE, THE MODERN BANK MUST (1) KEEP CURRENCY AVAILABLE TO MAKE PAYMENT ON DEMAND, (2) MAKE REMITTANCE ON CHECKS DRAWN ON IT, AND (3) IN THE CASE OF A MEMBER BANK OF THE FEDERAL RESERVE SYSTEM, MAINTAIN CASH AND/OR BALANCES AT ITS FEDERAL RESERVE BANK EQUAL TO A PRESCRIBED PERCENTAGE OF DEPOSITS. THE FIRST TWO NEEDS, PAYMENT OF CURRENCY AND CHECK CLEARING, ARE NOT A MAJOR RESTRAINT ON DEPOSIT EXPANSION FOR THE BANKING SYSTEM AS A WHOLE. CURRENCY NEEDS TEND TO FLUCTUATE SEASONALLY BUT ARE USUALLY QUITE PREDICTABLE. AND THERE IS NO NET DRAIN OF FUNDS FOR ALL BANKS TAKEN TOGETHER FROM THE CHECK CLEARING PROCESS. THE MAJOR RESTRAINT THEN

COMES FROM THE RESERVES NECESSARY TO SATISFY LEGAL REQUIREMENTS UNDER OUR FRACTIONAL RESERVE SYSTEM. BUT BECAUSE IT IS A FRACTIONAL SYSTEM, YOU CAN GET A MULTIPLE EXPANSION OF DEMAND DEPOSITS FOR THE BANKS TAKEN AS A WHOLE. FOR EXAMPLE, IF RESERVES OF 20 PER CENT ARE REQUIRED, DEMAND DEPOSITS COULD EXPAND UNTIL THEY ARE FIVE TIMES AS LARGE AS RESERVES. AT THE PRESENT TIME, THE MULTIPLIER FOR DEMAND DEPOSITS IS ABOUT 8; THAT IS, DEMAND DEPOSITS ARE EIGHT TIMES AS LARGE AS RESERVES. THUS, THE LEGAL RESERVE RATIO, TOGETHER WITH THE AMOUNT OF RESERVES, SET THE UPPER LIMIT ON DEPOSIT CREATION.

LET ME MENTION ONE FURTHER STEP BEFORE WE CONCLUDE THE DISCUSSION OF HOW MONEY IS CREATED AND MOVE ON TO THE CLARIFICATION OF SOME OF THE CURRENT MONETARY POLICY ISSUES. THAT STEP IS TO LOOK BRIEFLY AT WHERE BANK RESERVES COME FROM. THERE ARE A NUMBER OF FACTORS CAUSING CHANGES IN BANK RESERVES; FOR EXAMPLE, CHANGES IN CURRENCY HOLDINGS AND U.S. TREASURY AND FOREIGN OPERATIONS AFFECT RESERVES. HOWEVER, FROM THE STANDPOINT OF MONEY CREATION, THE ESSENTIAL POINT IS THAT THE RESERVES OF COMMERCIAL BANKS ARE LARGELY DETERMINED BY ACTIONS OF THE FEDERAL RESERVE SYSTEM. THUS, THE FEDERAL RESERVE, THROUGH ITS ABILITY TO VARY BOTH THE TOTAL VOLUME OF RESERVES AND THE REQUIRED RATIOS OF RESERVES TO DEPOSIT LIABILITIES, CAN INFLUENCE BANKS' DECISIONS WITH RESPECT TO THEIR ASSETS AND DEPOSITS. ONE OF THE MAJOR RESPONSIBILITIES OF THE FED, THEN, IS TO PROVIDE THE AMOUNT OF RESERVES CONSISTENT WITH THE MONETARY NEEDS OF THE ECONOMY AT REASONABLY STABLE PRICES.

USING THIS SKETCH OF THE MONETARY PROCESS, WE CAN NOW BEGIN TO LOOK AT SOME OF THE ISSUES THAT HAVE BEEN HIGHLIGHTED IN THE

PUBLIC DISCUSSION OF MONETARY POLICY. THERE HAVEN'T BEEN MANY TIMES WHEN THE FEDERAL RESERVE HAS BEEN CONFRONTED WITH SUCH A WIDE DIVERSITY OF OPINION CONCERNING WHAT IT DID RIGHT OR WRONG IN THE PAST, HOW IT SHOULD BE ACTING NOW, AND WHAT ITS FUTURE POLICIES SHOULD BE. IT REFLECTS, I THINK, THE CONCERN FELT BY SO MANY OF THE DIFFICULTY OF CONTINUING TO MAKE PROGRESS IN REDUCING THE RATE OF INFLATION AND THE RATE OF UNEMPLOYMENT WITHOUT SETTING THE STAGE FOR ANOTHER UNSUSTAINABLE BOOM ACCOMPANIED BY RENEWED INFLATIONARY PRESSURES.

YOU MAY HAVE NOTICED THAT IN MY REFERENCES TO MONETARY POLICY SO FAR THIS EVENING, I'VE TALKED ABOUT THE FED INFLUENCING MONEY AND CREDIT. THIS REFLECTS MY VIEW THAT THE MONEY STOCK-- $M_1$ , FOR EXAMPLE--CAN NOT BY ANY MEANS BE THE SOLE GUIDE IN SETTING THE APPROPRIATE COURSE FOR MONETARY POLICY. CURRENT FIGURES ON THE MONEY STOCK--PARTICULARLY  $M_1$ --AS A MEASURE OF MONETARY POLICY MUST BE USED WITH GREAT CAUTION. THERE DEFINITELY IS A CONNECTION BETWEEN THE BEHAVIOR OF THE MONEY SUPPLY AND THE BEHAVIOR OF ECONOMIC ACTIVITY AND THERE IS A GOOD DEAL OF EVIDENCE TO SUPPORT IT. BUT I DO FEEL THAT THERE IS MORE CONFUSION THAN NECESSARY ABOUT THE EXTENT TO WHICH THIS CONCEPT ENTERS INTO MONETARY POLICY DELIBERATIONS, THE EXTENT TO WHICH THE FED CAN HIT SPECIFIC MONEY SUPPLY TARGETS OVER THE SHORT RUN, AND THE EXTENT TO WHICH THE FED SHOULD FOCUS ON THE MONEY SUPPLY RATHER THAN ON SUSTAINABLE ECONOMIC EXPANSION AS THE GOAL.

*Start here*

WITH RESPECT TO THE USE OF THE MONEY STOCK IN POLICY DELIBERATIONS, I CAN ASSURE YOU THAT THE BEHAVIOR OF  $M_1$  (AND OTHER MONETARY AGGREGATES)

IS TAKEN INTO ACCOUNT VERY SERIOUSLY IN FED POLICY DELIBERATIONS. WE DO NOT, OF COURSE, ACCEPT THE SIMPLE VIEW THAT MONETARY GROWTH SHOULD OCCUR AT A CONSTANT RATE. THAT CONCEPT IMPLIES THAT MONETARY POLICY SHOULD NOT BE USED AS A COUNTERCYCLICAL ECONOMIC TOOL AT ALL. MANY WHO HAVE BECOME ENAMORED WITH A CONCEPT OF CONSTANT MONEY SUPPLY GROWTH HAVE FORGOTTEN THAT EVEN IF ATTAINABLE, SUCH AN APPROACH WOULD NOT PRODUCE ECONOMIC STABILITY. THUS, THE DISCRETIONARY USE OF MONETARY POLICY AND VARYING RATES OF MONEY GROWTH WEIGH HEAVILY IN THE POLICY-MAKING PROCESS.

THE EXTENT TO WHICH THE FED CAN HIT SPECIFIC MONEY TARGETS HAS ALSO BEEN A CONFUSING PART OF THE PUBLIC DEBATE. ~~OUR EARLIER DISCUSSION ON HOW MONEY IS CREATED MIGHT SEEM TO IMPLY RATHER SPECIFIC CONTROL BY THE FED OF THE MONEY STOCK.~~ AFTER ALL, IT MIGHT BE ARGUED,

*Since*  
1 *the Fed has*  
*it might appear that*  
ALL WE HAVE TO DO IS CHANGE THE AMOUNT OF RESERVES.

BUT THERE IS MUCH LESS CERTAINTY OF THE IMPACT OF A CHANGE IN RESERVES ON THE MONEY STOCK THAN MANY SUGGEST. A GIVEN INCREASE IN BANK RESERVES IS NOT NECESSARILY ACCOMPANIED BY AN EXPANSION IN MONEY EQUAL TO THE THEORETICAL POTENTIAL BASED ON THE REQUIRED RATIO OF RESERVES TO DEMAND DEPOSITS. WHAT HAPPENS TO THE QUANTITY OF MONEY WILL VARY, DEPENDING UPON THE REACTIONS OF THE COMMERCIAL BANKS AND THE PUBLIC. A NUMBER OF LEAKAGES MAY OCCUR. WHAT AMOUNT OF RESERVES WILL BE DRAINED INTO THE PUBLIC'S CURRENCY HOLDINGS, WHERE THE MULTIPLIER IS ONE, NOT EIGHT TIMES? TO WHAT EXTENT WILL THE INCREASE IN THE RESERVE BASE REMAIN UNUSED AS EXCESS RESERVES? WHICH BANKS WILL GAIN THE RESERVES? HOW MUCH WILL BE ABSORBED BY



TIME DEPOSITS OR OTHER LIABILITIES NOT USUALLY DEFINED AS MONEY BUT AGAINST WHICH BANKS MUST ALSO HOLD RESERVES--BUT WITH A MULTIPLIER MUCH GREATER THAN EIGHT TIMES? HOW SENSITIVE ARE THE BANKS TO CHANGES IN RESERVE PRESSURES EXERTED BY THE CENTRAL BANK? THE ANSWERS TO THESE QUESTIONS HOLD THE EXPLANATION OF WHY CHANGES IN THE MONEY SUPPLY MAY BE DIFFERENT THAN EXPECTED OR MAY RESPOND TO POLICY ACTION ONLY AFTER CONSIDERABLE TIME HAS ELAPSED.

UNFORTUNATELY, MANY IN THE FINANCIAL MARKETS HAVE BECOME SO ATTUNED TO WATCHING THE MONEY SUPPLY FIGURES THAT EVERY WEEKLY WIGGLE, EVERY CHANGE, IS SEIZED UPON AS A CHANGE IN MONETARY POLICY, BUT YET POLICY MAY NOT HAVE CHANGED ONE IOTA.

THE BIGGEST PROBLEM, IT SEEMS TO ME, IS THAT TOO MANY OBSERVERS HAVE FOCUSED ON CHANGES IN THE MONEY STOCK AS THOUGH IT WERE THE GOAL ITSELF. YET THE ULTIMATE GOALS OF MONETARY POLICY INVOLVE THE BEHAVIOR OF EMPLOYMENT, PRICES, ECONOMIC GROWTH, AND INTERNATIONAL TRADE AND PAYMENTS. SINCE MONETARY POLICY DOES NOT AFFECT THESE GOALS DIRECTLY WITH SUFFICIENT SPEED TO HELP THE FED MAKE POLICY DECISIONS, THE FED HAS TO RELY ON SOME INTERMEDIATE OBJECTIVES THAT CAN BE ACHIEVED MORE DIRECTLY AND RELATIVELY QUICKLY AND THAT HAVE SOME RELATIVELY PREDICTABLE RELATIONSHIP WITH THE ULTIMATE GOALS.

ONE OF THE INTERMEDIATE TARGETS IS CERTAINLY  $M_1$ . BUT IT HAS MANY DRAWBACKS AS AN EXCLUSIVE TARGET. IN THE PAST 20 YEARS, OUR COUNTRY HAS EXPERIENCED RAPID ADVANCES IN FINANCIAL TECHNOLOGY, WITH THE ADVENT OF CERTIFICATES OF DEPOSIT, BANK CREDIT CARDS, INTEREST-BEARING DEPOSITS THAT CAN BE USED FOR TRANSACTION PURPOSES, MONEY-MARKET MUTUAL FUNDS, AND AN INCREASE IN THE LEVEL OF SOPHISTICATED

OF MANAGING CASH ASSETS ON THE PART OF THE GENERAL PUBLIC, THE DEMAND FOR CURRENCY AND CHECKING DEPOSITS HAS AND CONTINUES TO UNDERGO CHANGES. AS A RESULT, CHANGES IN THE RELATIONSHIP BETWEEN  $M_1$  AND OUR GROSS NATIONAL PRODUCT MAY ALSO BE OCCURRING. SOME OF THESE CHANGES CAN BE PREDICTED FAIRLY ACCURATELY, BUT OTHERS CANNOT.

BECAUSE NO SINGLE DEFINITION OF MONEY DESCRIBES COMPLETELY THE SPENDABLE FUNDS HELD BY THE PUBLIC, THE FEDERAL RESERVE TAKES INTO CONSIDERATION THE BEHAVIOR OF A NUMBER OF MONETARY AND CREDIT AGGREGATES, INCLUDING TIME DEPOSITS AND EVEN DEPOSITS AT ALL FINANCIAL INSTITUTIONS. IN ADDITION TO THE MONETARY AGGREGATES, WE MUST ALSO MONITOR THE CONDITION OF FINANCIAL MARKETS--THAT IS, MOVEMENTS IN INTEREST RATES AND THE LIQUIDITY NEEDS OF BUSINESSES AND FINANCIAL INSTITUTIONS. THEY IN TURN REFLECT BUSINESS AND CONSUMER ATTITUDES AND ANTICIPATIONS IN A UNIQUE WAY. ATTENTION IS ALSO PAID TO DEVELOPMENTS IN THE FOREIGN EXCHANGE MARKETS. THE BEHAVIOR OF ALL THESE VARIABLES ENTERS INTO THE DECISION-MAKING PROCESS--AND WITH DIFFERING WEIGHTS DEPENDING ON DIFFERING ECONOMIC CONDITIONS.

BUT I WOULD LIKE TO MAKE IT CLEAR THAT WHILE ONGOING MONETARY POLICY DECISIONS MAKE USE OF MANY INPUTS, THE LONGER-TERM PATH OF MONETARY AGGREGATE GROWTH DOES HAVE SIGNIFICANCE. EXTENDED PERIODS OF TOO RAPID OR TOO SLOW A GROWTH OF THE MONETARY AGGREGATES WILL TAKE A TOLL IN MORE RAPID INFLATION OR IN MORE SLUGGISH RECOVERY. BECAUSE OF THIS, THE FEDERAL RESERVE CONCENTRATES ON SETTING MONETARY AGGREGATE TARGETS OVER LONGER PERIODS OF TIME.

*Back to hand written*

One final word about my  
full days. Carter was wrong,  
too, in suggesting a nominal,  
even a prefunctory role of the  
Reserve Bank Presidents in the  
monetary policy decision pro-  
cess. Each of us feel and I am sure  
certain can demonstrate that we  
are full participants.

I would be pleased to respond  
to any questions you might have.

IN THE SPRING OF 1975, FOR EXAMPLE, THE FEDERAL RESERVE STARTED MAKING PUBLIC ITS YEARLY GROWTH RATE TARGETS FOR THE MONETARY AND CREDIT AGGREGATES. THESE HAVE BEEN UPDATED EACH QUARTER. FOR THE 12-MONTH PERIOD RUNNING FROM THE THIRD QUARTER OF 1975 TO THE THIRD QUARTER OF 1976, THE TARGETED GROWTH RATE RANGE FOR  $M_1$  WAS SET AT 5 TO 7 1/2 PER CENT, WITH  $M_2$  INCREASING IN THE 7 1/2 TO 10 1/2 PER CENT RANGE. THESE TARGETS ARE NOT ETCHED IN STONE, HOWEVER, GOOD MONETARY POLICY-MAKING REQUIRES THAT THEY BE REVIEWED PERIODICALLY AND CHANGED IF ECONOMIC CIRCUMSTANCES WARRANT.

ON THE BASIS OF THE INFORMATION AVAILABLE ON CURRENT AND PROSPECTIVE ECONOMIC DEVELOPMENTS, I AM CONVINCED THAT MONETARY POLICY CONDUCTED WITHIN THIS RANGE OF PERFORMANCE FOR THE AGGREGATES WILL PROMOTE SUSTAINABLE ECONOMIC GROWTH AND AT THE SAME TIME WILL CONTINUE TO BANK THE FIRES OF INFLATION. BECAUSE OF THE LEAKAGES WE HAVE TALKED ABOUT, WE ARE CURRENTLY AT THE LOWER ENDS OF OUR LONGER-RUN PERFORMANCE DESIRES. BUT THIS WILL CHANGE GRADUALLY AS OUR RECOVERY CONTINUES AND THE PRIVATE DEMANDS FOR CREDIT BEGIN ONCE AGAIN TO GROW.

I REALIZE THAT THIS KIND OF POLICY PRESCRIPTION PROBABLY WILL NOT REDUCE THE UNEMPLOYMENT RATE AS FAST AS WE ALL WOULD LIKE. BUT A MORE AGGRESSIVE EASING OF MONETARY POLICY NOW RUNS SOME SEVERE RISKS FOR FUTURE INFLATION. AS I MENTIONED EARLIER, MONETARY POLICY ACTIONS AFFECT THE REAL ECONOMY WITH A LAG OF MANY MONTHS--AND A VARIABLE LAG AT THAT. TO IGNORE THIS LAG WOULD BE UNFORTUNATE, TO SAY THE LEAST. THE EFFECTS WOULD BE HITTING US WHEN THE ECONOMY

CAN BE EXPECTED TO HAVE ALREADY REACHED MORE ADEQUATE LEVELS OF PERFORMANCE. AND IN THAT LONGER RUN, SUCH POLICIES WOULD BE LEADING TO INFLATIONARY PRESSURES, RESULTING IN THE DESTRUCTION OF JOBS, NOT IN THEIR CREATION.

I MIGHT CONCLUDE, THEREFORE, BY ANSWERING THE QUESTION OF HOW MONETARY POLICY IS EXERCISED IN THE SAME WAY AS I WOULD ANSWER THE QUESTION HOW DO TWO PORCUPINES MAKE LOVE--VERY CAREFULLY.