

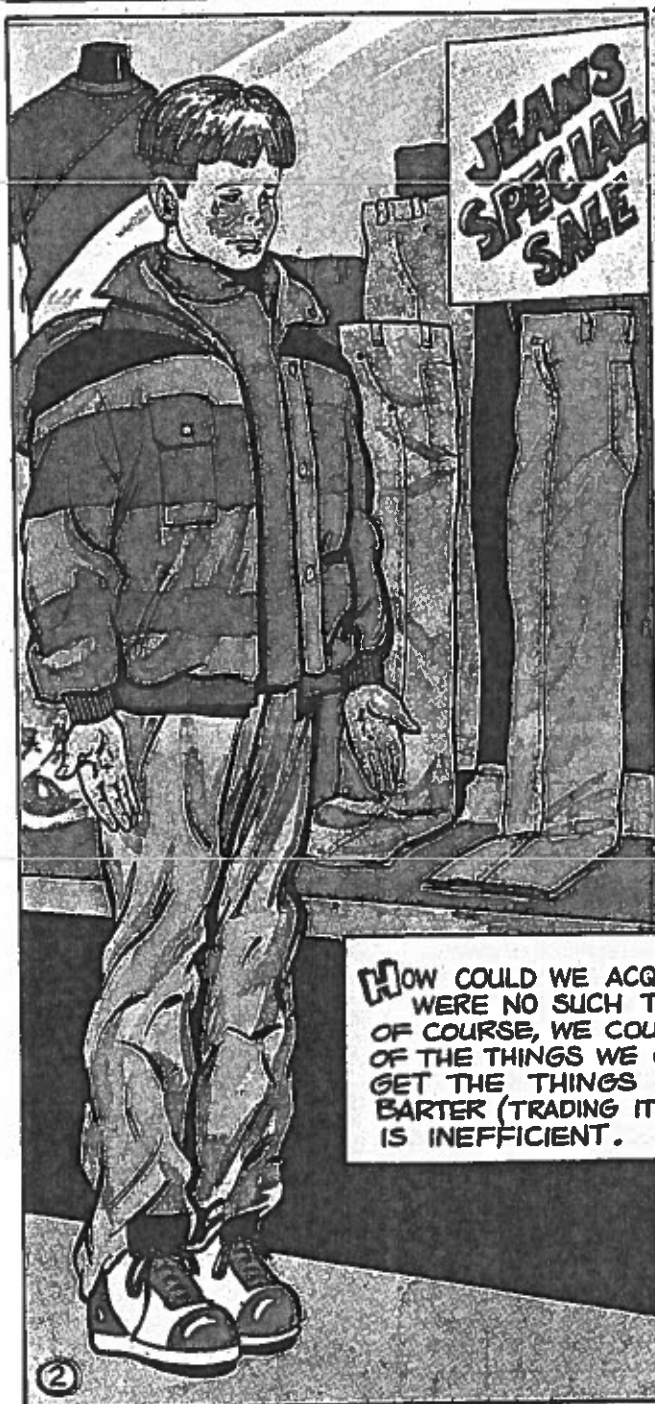
THE STORY OF MONEY



FEDERAL RESERVE BANK OF NEW YORK

THE STORY OF MONEY

WHAT IF THERE WERE NO MONEY?



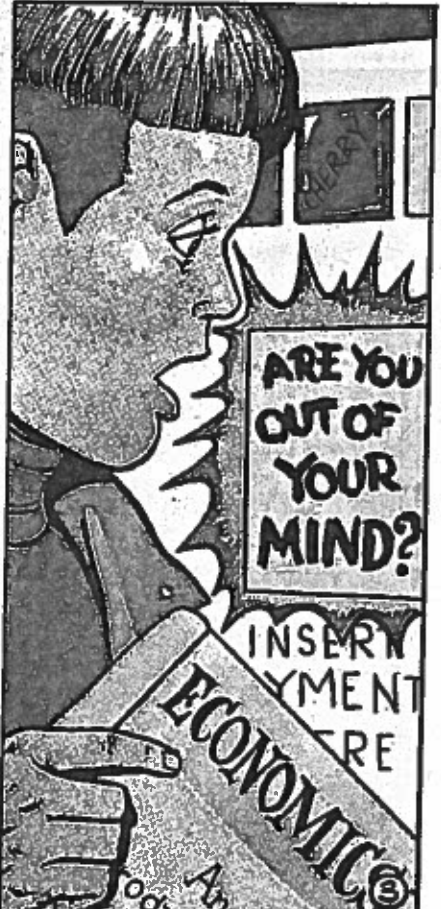
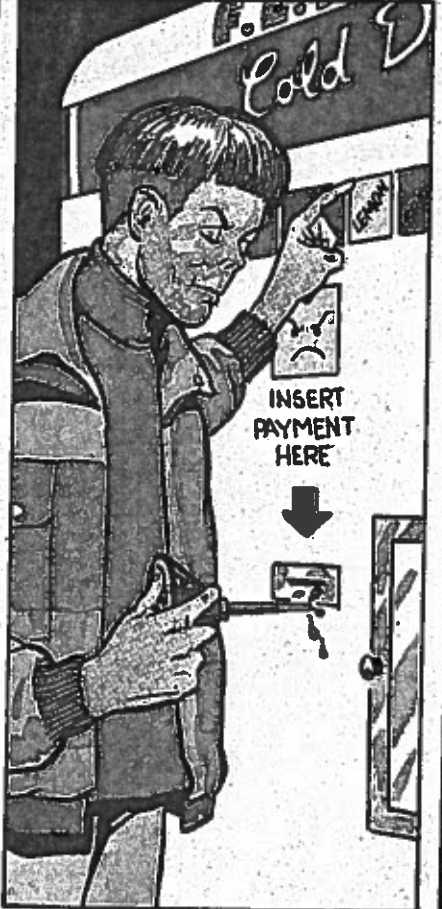
How could we acquire things if there were no such thing as money? Of course, we could trade away some of the things we own in order to get the things we want, but barter (trading items for other items) is inefficient.

STORY BY
ED STEINBERG
ART BY
NORMAN NODEL

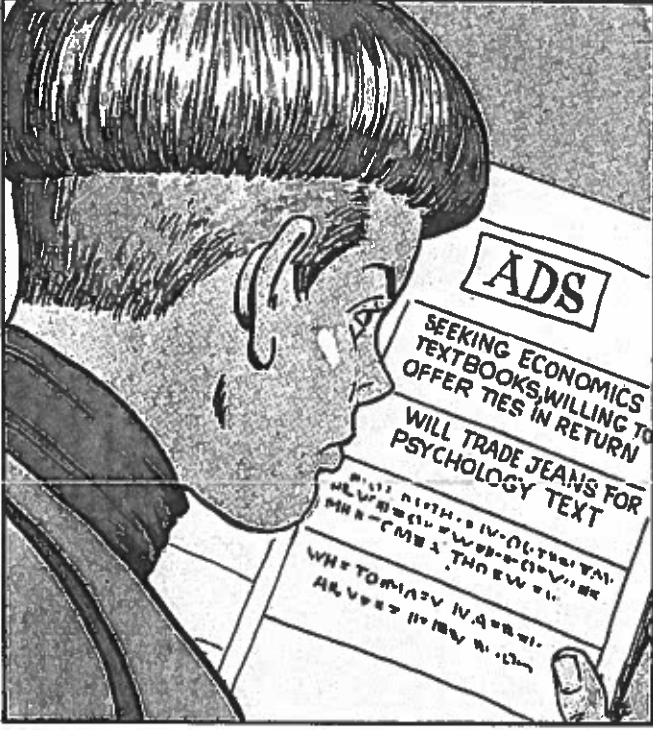
WHAT IF THE JEANS SELLER DIDN'T WANT ANY OF THE THINGS YOU HAD TO TRADE?



AND WHAT WOULD YOU OFFER THE VENDING MACHINE IN EXCHANGE FOR A SODA?



BARTER REQUIRES A "COINCIDENCE OF WANTS." THUS, FOR BARTER TO TAKE PLACE, A PERSON WANTING TO TRADE, LET'S SAY, A TEXTBOOK FOR A PAIR OF JEANS, MUST FIND SOMEONE WILLING TO PART WITH THE JEANS IN EXCHANGE FOR A TEXTBOOK.



FINDING A BARTER PARTNER MIGHT REQUIRE A LONG SEARCH.



THAT'S RIGHT; IT MIGHT TAKE YEARS TO FIND SOMEONE WHO WANTED THE ITEM YOU WANTED TO TRADE AWAY.



SO, BARTER IS TIME-CONSUMING; IN FACT, IT'S PROHIBITIVELY TIME-CONSUMING. SO IF THERE WERE NO MONEY, PEOPLE WOULD BE FORCED TO BE MUCH MORE SELF-SUFFICIENT THAN THEY ARE NOW-- THAT IS, THEY WOULD TRY TO PRODUCE MANY OF THE THINGS THEY WANT, INSTEAD OF ACQUIRING THEM FROM OTHER PEOPLE. PEOPLE IN COLD CLIMATES, FOR EXAMPLE, MIGHT TRY TO GROW THEIR OWN BANANAS.



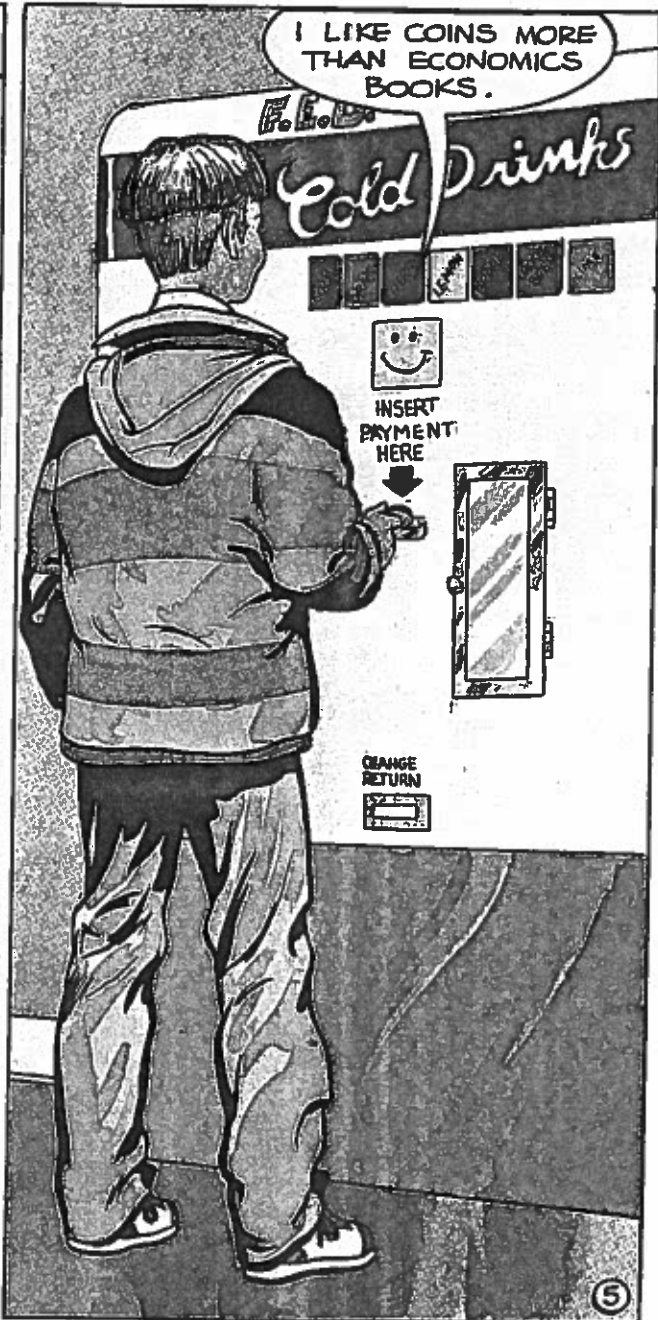
THEN, TOO, PEOPLE MIGHT TRY TO PRODUCE THEIR OWN DAIRY PRODUCTS. YOU'D HAVE PEOPLE TRYING TO MILK COWS WHO DON'T KNOW ONE END OF THE ANIMAL FROM THE UDDER.

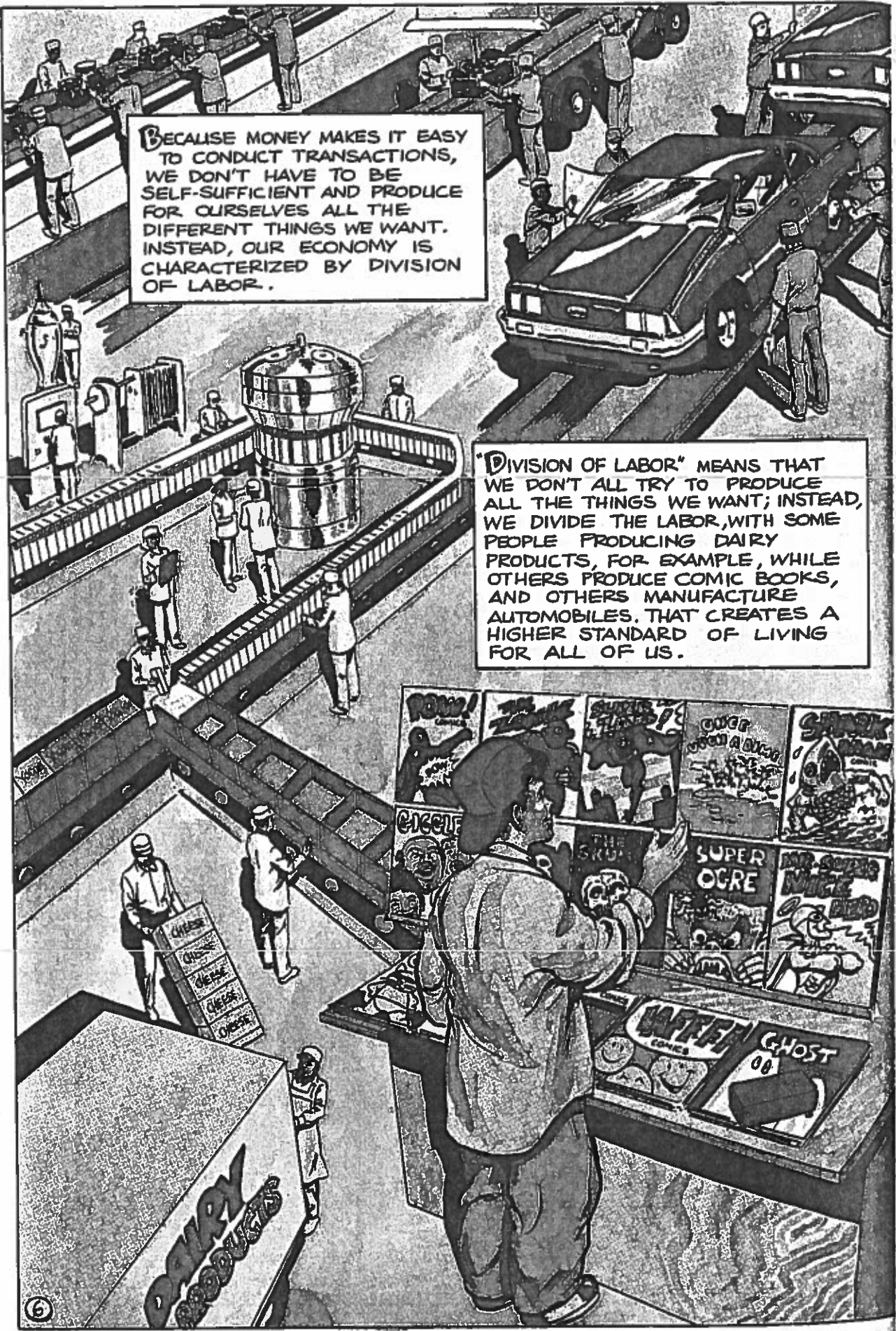


AND, CAN YOU IMAGINE HOW POOR THE QUALITY WOULD BE IF PEOPLE TRIED TO PRODUCE THEIR OWN COMIC BOOKS, INSTEAD OF LETTING THE EXPERTS WRITE THEM?



WITH MONEY, THOUGH, IT'S MUCH EASIER TO CONDUCT TRANSACTIONS.





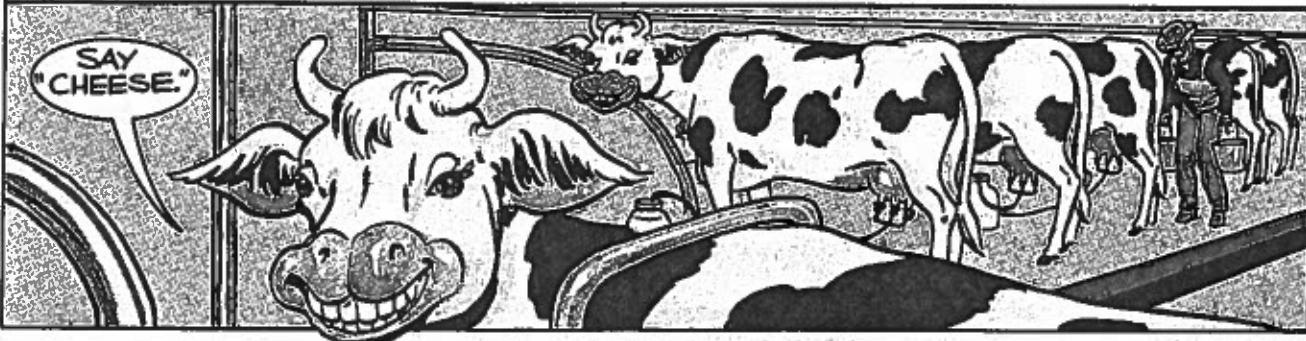
BECAUSE MONEY MAKES IT EASY TO CONDUCT TRANSACTIONS, WE DON'T HAVE TO BE SELF-SUFFICIENT AND PRODUCE FOR OURSELVES ALL THE DIFFERENT THINGS WE WANT. INSTEAD, OUR ECONOMY IS CHARACTERIZED BY DIVISION OF LABOR.

"DIVISION OF LABOR" MEANS THAT WE DON'T ALL TRY TO PRODUCE ALL THE THINGS WE WANT; INSTEAD, WE DIVIDE THE LABOR, WITH SOME PEOPLE PRODUCING DAIRY PRODUCTS, FOR EXAMPLE, WHILE OTHERS PRODUCE COMIC BOOKS, AND OTHERS MANUFACTURE AUTOMOBILES. THAT CREATES A HIGHER STANDARD OF LIVING FOR ALL OF US.

WHY DOES DIVISION OF LABOR LEAD TO A HIGHER STANDARD OF LIVING FOR OUR SOCIETY? THERE ARE AT LEAST TWO ANSWERS. FIRST, BY SPECIALIZING IN CERTAIN TASKS, RATHER THAN TRYING TO PRODUCE EVERYTHING, PEOPLE BECOME MORE ADEPT AT THOSE TASKS AND, THEREFORE, MORE PRODUCTIVE.



SECOND, ECONOMIES OF SCALE DEVELOP, AS THE USE OF SPECIALIZED MACHINERY MAKES PRODUCTION EVEN MORE EFFICIENT. WITH ECONOMIES OF SCALE, THE PER-UNIT COST OF PRODUCTION GOES DOWN AS YOU PRODUCE MORE.



WE NOW UNDERSTAND ONE OF THE MAJOR USES OF MONEY IN SOCIETY. MONEY SERVES AS A MEDIUM OF EXCHANGE-- THAT IS, IT'S WHAT WE USE TO BUY THINGS WITH, AND TO SELL THINGS FOR.



I THINK I'LL USE SOME OF THIS MONEY TO GET MY FORTUNE TOLD.



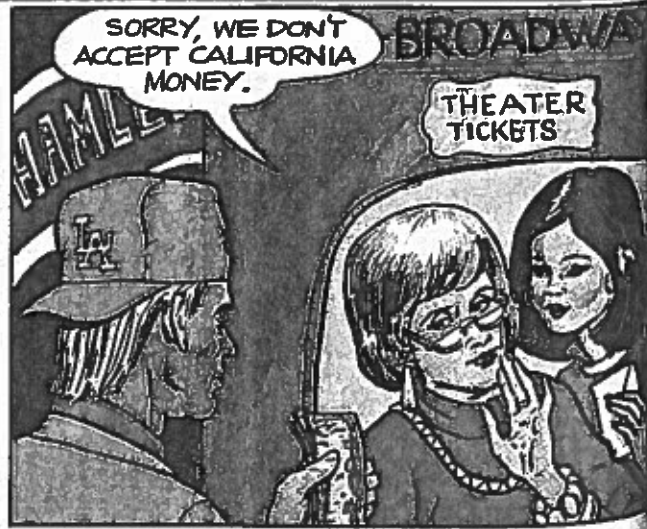
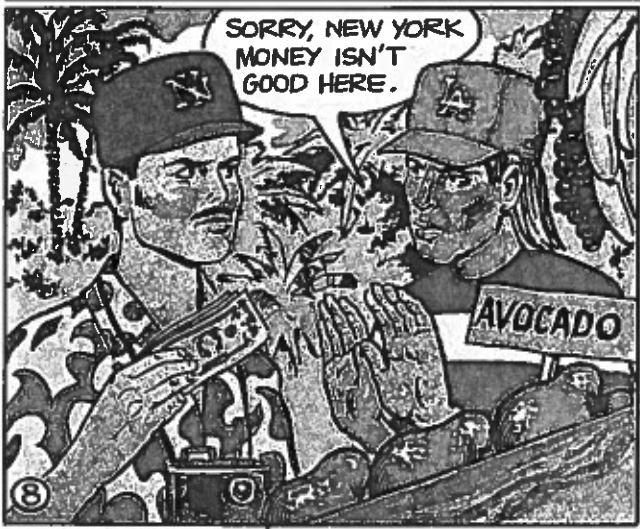
YOU'RE MY FAVORITE MEDIUM.



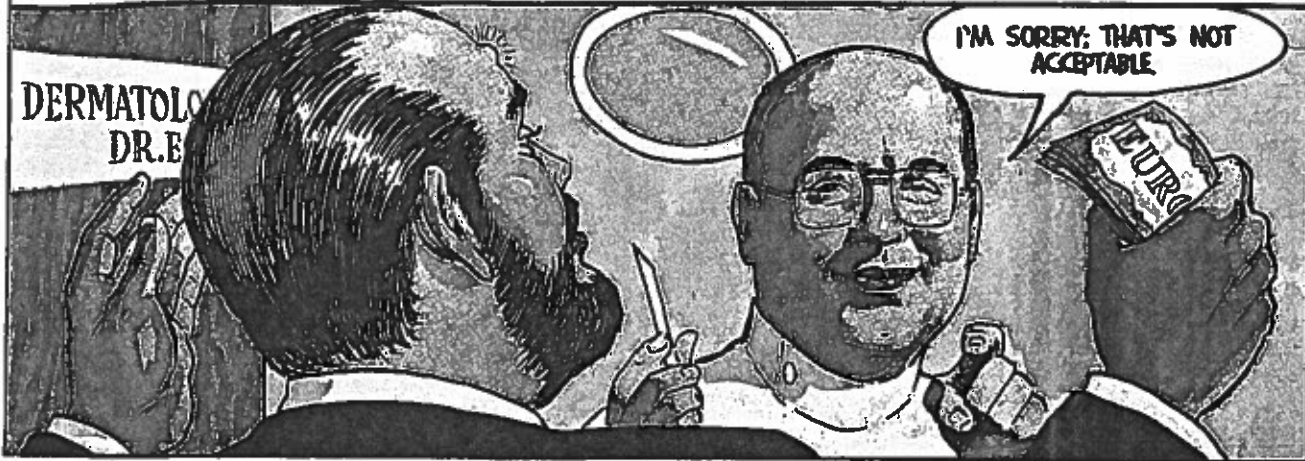
WHAT PROPERTIES MUST MONEY HAVE IN ORDER TO SERVE AS AN EFFECTIVE MEDIUM OF EXCHANGE? FIRST OF ALL, IT MUST BE ACCEPTABLE TO PEOPLE WHO WANT TO SELL THINGS. SELLERS MUST BE CONFIDENT THAT THE MONEY THEY ACCEPT FROM YOU WILL BE ACCEPTABLE TO THE PEOPLE FROM WHOM THEY, IN TURN, WANT TO BUY THINGS.



WHAT IF THE SAME MONEY WERE NOT ACCEPTABLE EVERYWHERE IN THE COUNTRY? SUPPOSE THAT THE MONEY THAT CIRCULATED IN NEW YORK WERE NOT ACCEPTABLE TO CALIFORNIANS, AND THE MONEY THAT CIRCULATED IN CALIFORNIA WERE NOT ACCEPTABLE TO NEW YORKERS. NEW YORKERS WOULD HAVE TROUBLE BUYING ITEMS FROM CALIFORNIA, CALIFORNIANS WOULD HAVE TROUBLE BUYING THINGS FROM NEW YORK, AND RESIDENTS OF BOTH STATES WOULD HAVE A LOWER STANDARD OF LIVING.



A NATION'S MONEY IS ACCEPTABLE THROUGHOUT ITS COUNTRY. BUT IF YOU WANT TO BUY THINGS IN ANOTHER COUNTRY, YOU HAVE TO USE THAT NATION'S MONEY. FOR EXAMPLE, IF AN ITALIAN OPERA SINGER GOES TO SEE A DOCTOR IN THE UNITED STATES, HE HAS TO PAY IN DOLLARS, NOT IN EURO.



SIMILARLY, AN AMERICAN WHO WANTS TO BUY THINGS IN ENGLAND MUST USE POUNDS.

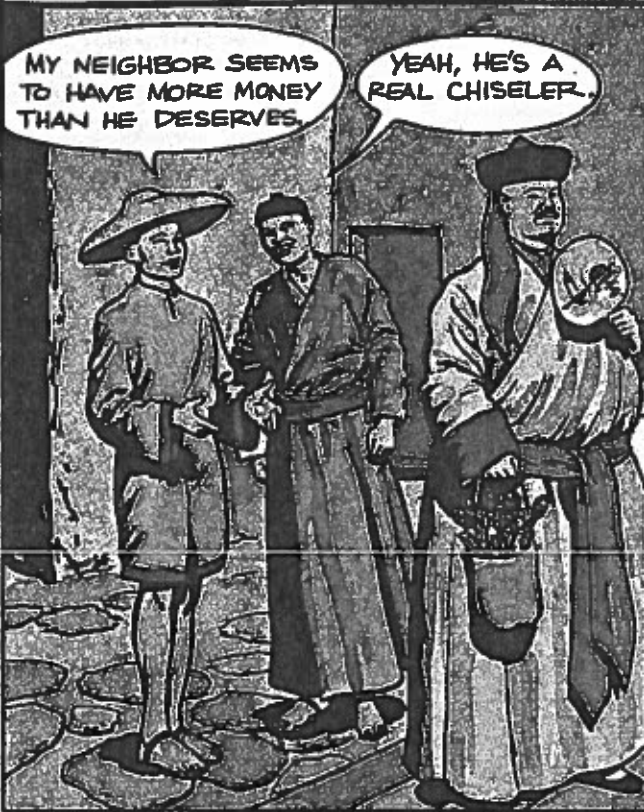
WHEN I GO SHOPPING IN ENGLAND, I FIRST CONVERT SOME DOLLARS INTO POUNDS.



ALTHOUGH MONEY MUST BE ACCEPTABLE AS PAYMENT FOR ITEMS THAT WE WANT TO BUY, MONEY DOES NOT HAVE INTRINSIC VALUE--THAT IS, IT DOES NOT HAVE TO CONSIST OF SOMETHING THAT HAS VALUE IN ITS OWN RIGHT, APART FROM ITS USE AS A MEDIUM OF EXCHANGE.



IN EARLIER TIMES, THOUGH, PEOPLE DID USE TYPES OF MONEY THAT HAD INTRINSIC VALUE. THE ANCIENT CHINESE USED CHISELS AS MONEY.



OTHER SOCIETIES HAVE USED FISH AS MONEY.

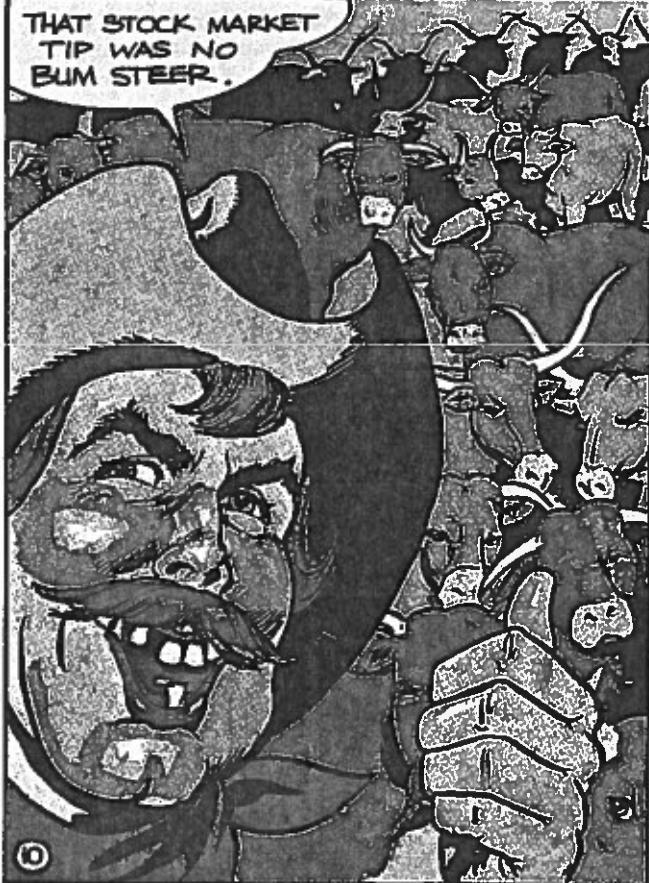
MY NEIGHBOR SEEMS TO HAVE MORE MONEY THAN SHE DESERVES.

YEAH, THERE'S SOMETHING FISHY ABOUT HER.



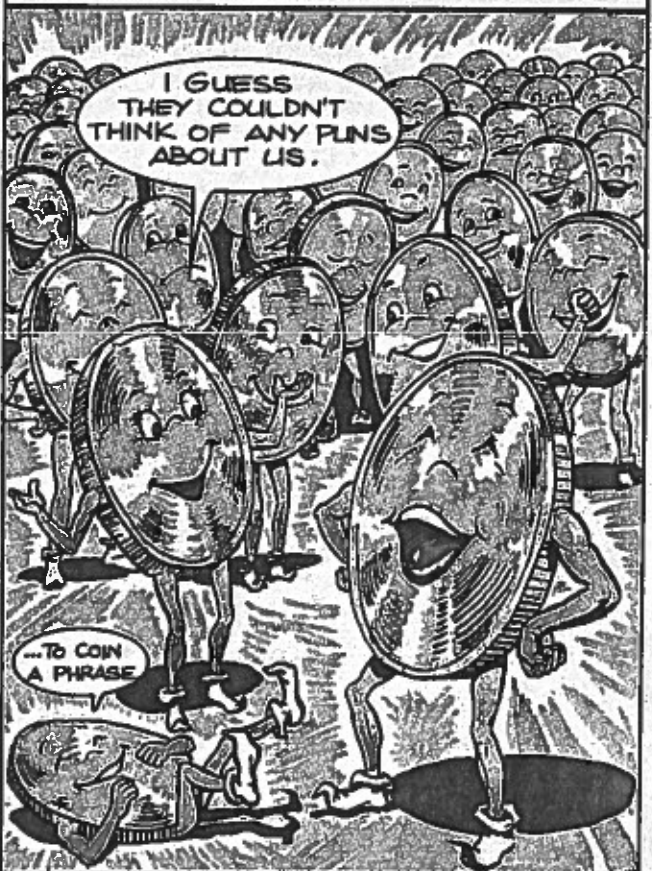
YET OTHERS HAVE USED CATTLE AS MONEY.

THAT STOCK MARKET TIP WAS NO BUM STEER.



AND, OF COURSE, MANY SOCIETIES HAVE USED GOLD COINS.

I GUESS THEY COULDN'T THINK OF ANY PUNS ABOUT US.



WHY DO WE NO LONGER USE SUCH ITEMS AS MONEY?

IT'S TOO BAD PEOPLE DON'T USE YOU GUYS AS MONEY ANYMORE.

YES, IF THEY DID, THEN THE MONEY THE ASTRONAUTS CARRY WOULD BE THE HERD SHOT 'ROUND THE WORLD.

ANSWERING THAT QUESTION WILL HELP US UNDERSTAND SOME OF THE OTHER PROPERTIES THAT MONEY SHOULD HAVE IN ORDER TO SERVE AS AN EFFECTIVE MEDIUM OF EXCHANGE.

WHAT'S WRONG WITH USING CHISELS AS MONEY?

HOW MANY DOES IT COST?

I DON'T KNOW, I'M THINKING.

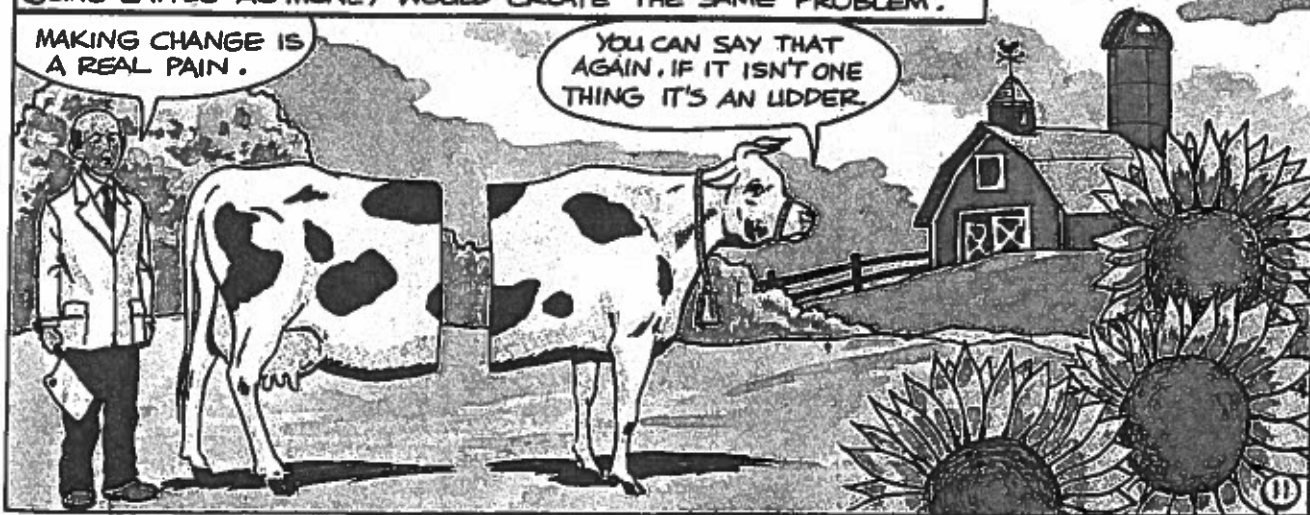
WELL, FIRST OF ALL, HOW WOULD YOU MAKE CHANGE IF SOMEONE BOUGHT LESS THAN A CHISEL'S WORTH OF WHATEVER YOU WERE SELLING?



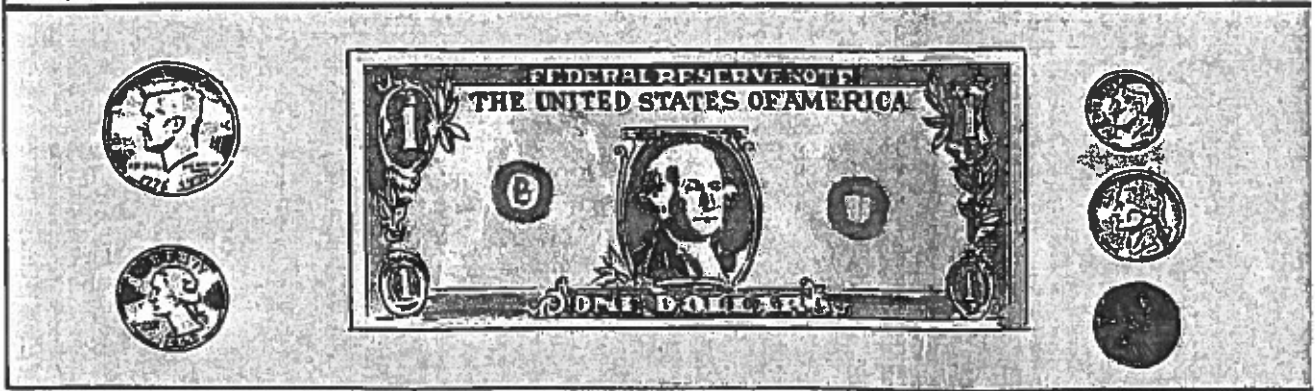
USING CATTLE AS MONEY WOULD CREATE THE SAME PROBLEM.

MAKING CHANGE IS A REAL PAIN.

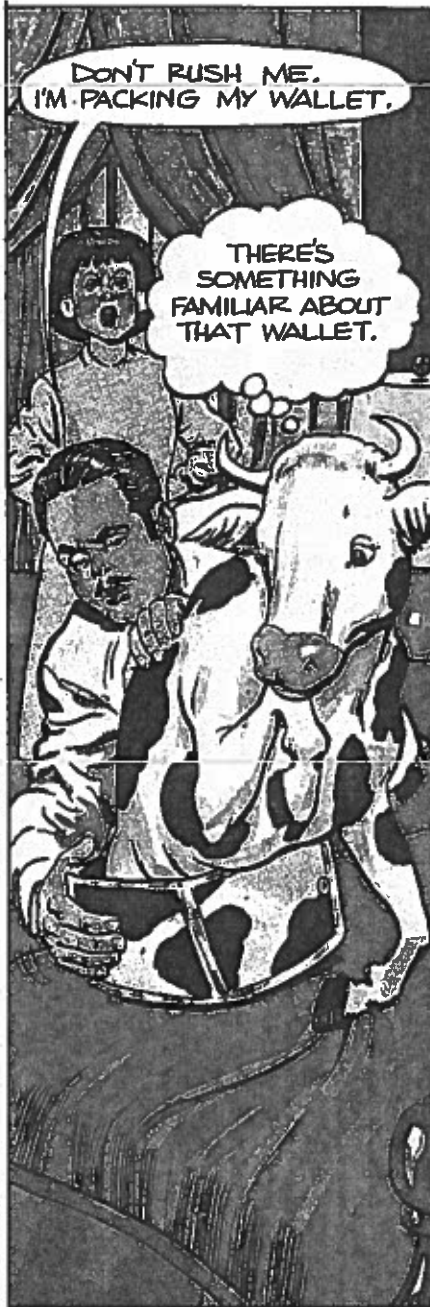
YOU CAN SAY THAT AGAIN, IF IT ISN'T ONE THING IT'S AN LIDDER.



MONEY MUST BE DIVISIBLE-- AS THE DOLLAR IS DIVISIBLE INTO HALF DOLLARS, QUARTERS, DIMES, NICKELS, AND PENNIES -- AND MANY OF THE ITEMS USED AS MONEY IN EARLIER ERAS WERE NOT DIVISIBLE.



MONEY MUST ALSO BE PORTABLE-- THAT IS, IT HAS TO BE SOMETHING THAT CAN BE MOVED AROUND, IN ORDER TO BUY THINGS, AND THE ITEMS WE'VE BEEN LOOKING AT ARE NOT VERY PORTABLE.



MONEY MUST ALSO BE FUNGIBLE. NO, THAT DOESN'T MEAN IT HAS TO BE ABLE TO GROW MOLD; IT MEANS THAT ONE UNIT OF MONEY MUST BE INTERCHANGEABLE FOR ANOTHER... CHISELS, FISH, AND CATTLE DON'T MEET THIS REQUIREMENT.



MONEY MUST BE FUNGIBLE BECAUSE, BESIDES SERVING AS A MEDIUM OF EXCHANGE, IT ALSO SERVES AS STANDARD OF VALUE--THAT IS, AS A UNIT IN WHICH WE CAN MEASURE THE PRICES OR VALUES OF MANY DIFFERENT THINGS.



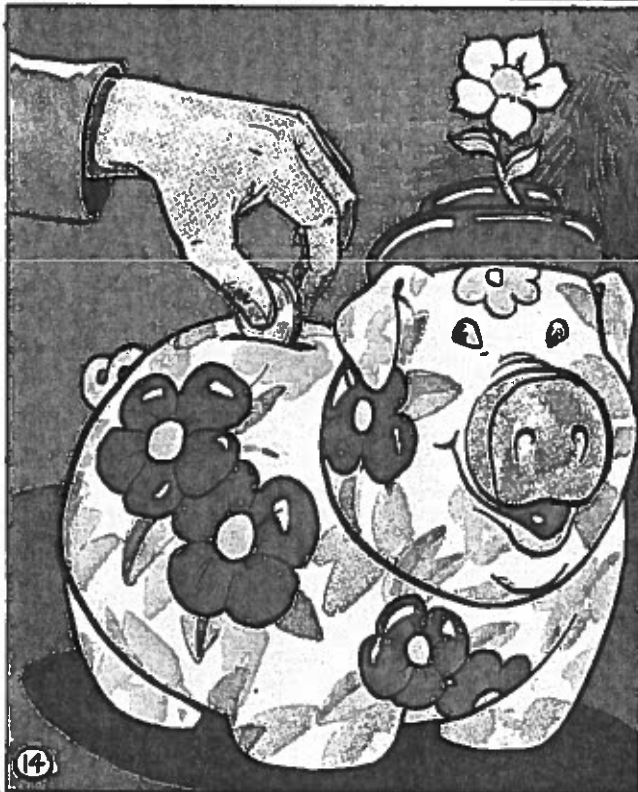
THE MONEY THAT WE USE IS FUNGIBLE. ANY DOLLAR IS WORTH THE SAME AS ANY OTHER DOLLAR. OLD AND WORN BILLS AND COINS ARE WORTH PRECISELY THE SAME AMOUNT AS CRISP AND SHINY NEW ONES.



MONEY MUST ALSO BE RELATIVELY STABLE IN VALUE, AND ITEMS SUCH AS CATTLE AND FISH DON'T MEET THAT REQUIREMENT.



WHY MUST MONEY BE RELATIVELY STABLE IN VALUE? ONE ANSWER IS THAT IN ADDITION TO SERVING AS A MEDIUM OF EXCHANGE AND AS A STANDARD OF VALUE, MONEY ALSO SERVES AS A STORE OF VALUE-- THAT IS, AS A WAY OF STORING UP PURCHASING POWER. STORING UP PURCHASING POWER IS WHAT YOU DO WHEN YOU SAVE.



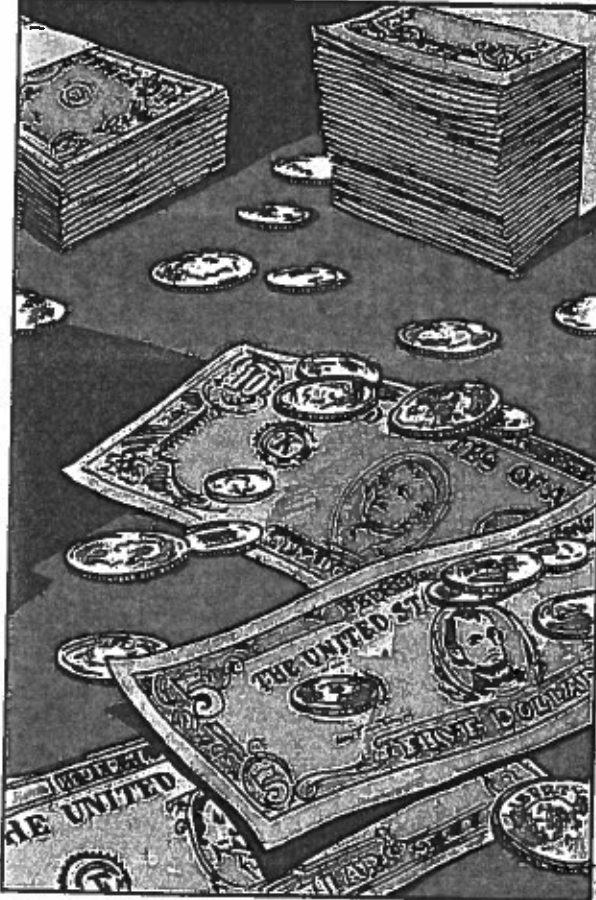
SOME TYPES OF MONEY THAT WERE USED IN THE PAST WERE NOT VERY EFFECTIVE IN PERFORMING MONEY'S ROLE AS A STORE OF VALUE.



IF PEOPLE SAVED SOME TYPES OF MONEY TOO LONG, THEY MIGHT FIND THAT THEIR SAVINGS HAD ACTUALLY DRIED UP.



WE'RE ALL FAMILIAR WITH THE COINS AND PAPER MONEY THAT WE USE AS MONEY TODAY.



BUT THAT'S JUST ONE KIND OF MONEY WE USE IN THE UNITED STATES, THE KIND WE KEEP IN OUR POCKETS AND CAN SPEND IN STORES AND RESTAURANTS, NEWSSTANDS, AND MOVIE THEATERS. MOST OF THE U.S. MONEY SUPPLY CONSISTS OF SOMETHING ELSE, HOWEVER. THE MAJORITY OF THE MONEY IN THE UNITED STATES CONSISTS OF THE AMOUNTS THAT PEOPLE AND BUSINESSES HAVE IN CHECKING ACCOUNTS.

MEMBER FDIC **HOMETOWN BANK**
 ACCOUNT NUMBER 379-6112-5
 MR. JOHN DOE
 410 MAIN STREET
 HOMETOWN

CHECKING

YOUR BEGINNING BALANCE 705.21
 YOUR ENDING BALANCE 1230.50

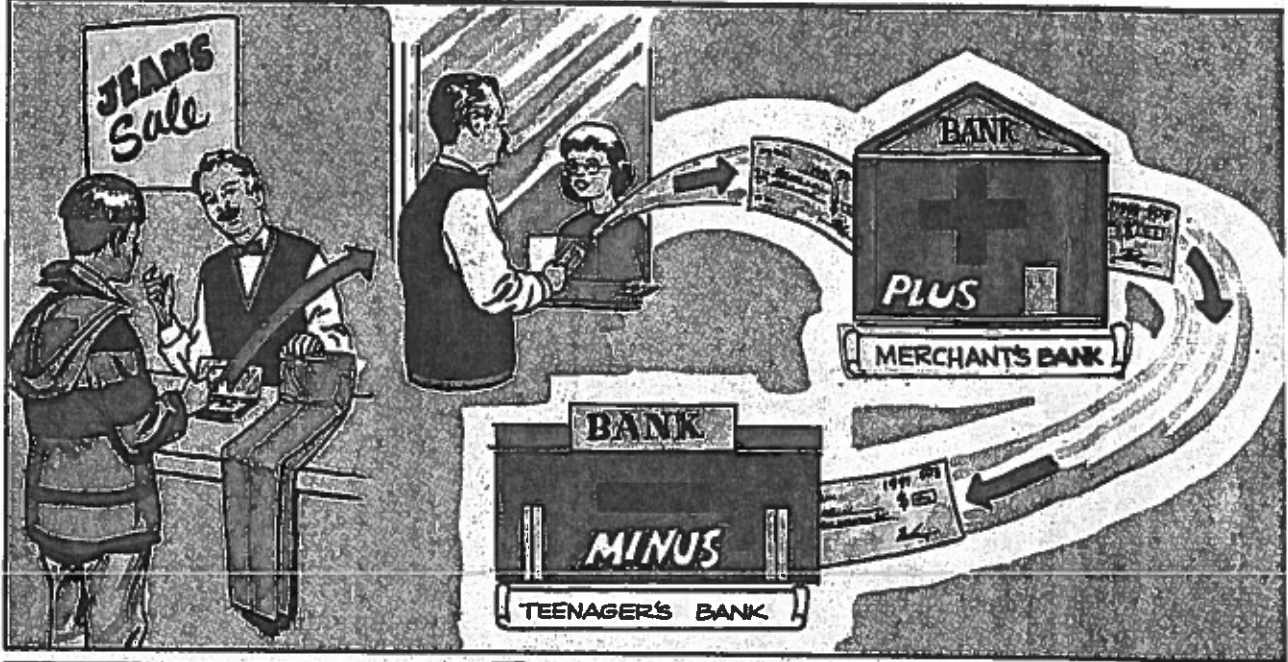
YOUR CHECKING ACTIVITY

TRANSACTION	DESCRIPTION	AMOUNT DEBITED	AMOUNT CREDITED	BALANCE
				705.21
		100.00		605.21
		50.00		555.21
		15.00		540.21
		10.00		530.21
		20.00		510.21
			1000.00	1510.21
		250.00		1260.21
		110.00		1150.21
			50.00	1200.21
			30.00	1230.21
			0.29	1230.50

HOMETOWN BANK

5

WHEN YOU USE A CHECK TO BUY SOMETHING, YOU'RE TELLING YOUR BANK TO TAKE MONEY FROM YOUR CHECKING ACCOUNT AND SEND IT TO THE OTHER PERSON'S CHECKING ACCOUNT.



THE VALUE OF TRANSACTIONS FOR WHICH CHECKS ARE USED IS MUCH LARGER THAN THE VALUE FOR WHICH CURRENCY IS USED.



THAT'S BECAUSE CHECKS HAVE SOME MAJOR ADVANTAGES OVER CURRENCY. ONE ADVANTAGE IS SAFETY. IF YOU LOSE CASH, IT'S GONE. BUT IF YOU LOSE A CHECK, YOU HAVEN'T LOST YOUR MONEY, WHICH IS IN YOUR ACCOUNT IN THE BANK.



ANOTHER ADVANTAGE IS CONVENIENCE. THINK, FOR EXAMPLE, OF HOW MUCH EASIER IT IS TO MAIL SOMEONE A CHECK FOR \$19.99 THAN TO MAIL THE SAME AMOUNT IN CASH.



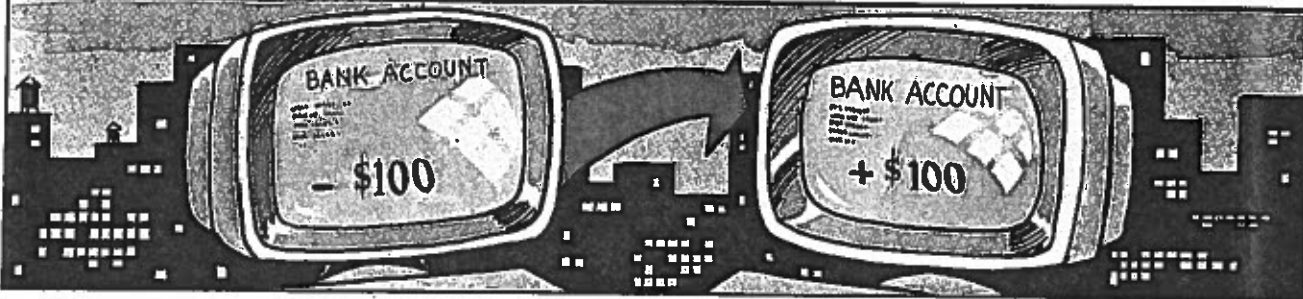
ALSO, A CHECK IS PROOF THAT YOU HAVE MADE A PAYMENT. BUT IF YOU MAIL CASH TO PAY A BILL, YOU HAVE NO PROOF THAT YOU SENT IT.

YES, I HAVE THE CANCELED CHECK RIGHT HERE.

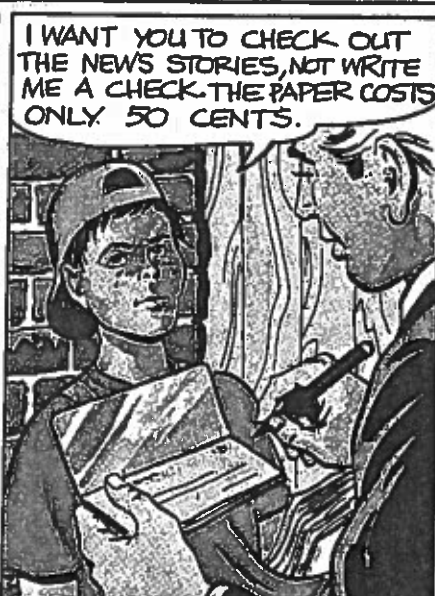
NO, I CAN'T TELL YOU THE SERIAL NUMBERS OF THE \$10 BILLS THAT I MAILED.



CHECKS OFFER ANOTHER ADVANTAGE: THEY MAKE MONEY EXTREMELY PORTABLE. BECAUSE THE MONEY EXISTS SIMPLY AS A BOOKKEEPING ENTRY AT A BANK, YOU DON'T HAVE TO CARRY IT ANYWHERE IN ORDER TO TRANSFER IT TO SOMEONE ELSE. THE CHECK SERVES AS THE INSTRUCTION TO YOUR BANK TO TRANSFER THE MONEY OUT OF YOUR ACCOUNT AND INTO THE OTHER PERSON'S ACCOUNT.



DESPITE THESE ADVANTAGES, THE COST OF PROCESSING CHECKS MAKES THEIR USE UNECONOMICAL FOR SMALL TRANSACTIONS.



LIKE CHECKS, CREDIT CARDS OFTEN ARE A CONVENIENT WAY TO BUY THINGS.



CHARGE IT, PLEASE.

A CREDIT CARD IS NOT MONEY, THOUGH. WHEN YOU CHARGE SOMETHING WITH A CREDIT CARD, YOU ARE SIMPLY PROMISING TO PAY FOR THE ITEM AT A LATER DATE, AFTER YOUR CREDIT CARD BILL ARRIVES.



I CAN USE THE PEN THAT I BOUGHT WITH A CREDIT CARD TO WRITE THE CHECK TO PAY THE BILL.

WE HAVE SEEN THAT CURRENCY AND WHAT IS HELD IN CHECKING ACCOUNTS, ARE BOTH KINDS OF MONEY, AND WE KNOW THAT WE WOULD ALL LIKE TO HAVE MORE MONEY.



DOES THAT MEAN THAT EVERYONE WOULD BE BETTER OFF IF WE ALL HAD MORE MONEY?



THE ANSWER MAY SURPRISE YOU. IT IS "NO."



TO UNDERSTAND WHY, WE MUST REMEMBER THAT OUR MONEY HAS NO INTRINSIC VALUE. WE CAN'T EAT IT, FOR EXAMPLE.



I PREFER REAL BREAD.

I PREFER REAL CABBAGE.



I EVEN PREFER REAL DOUGH.

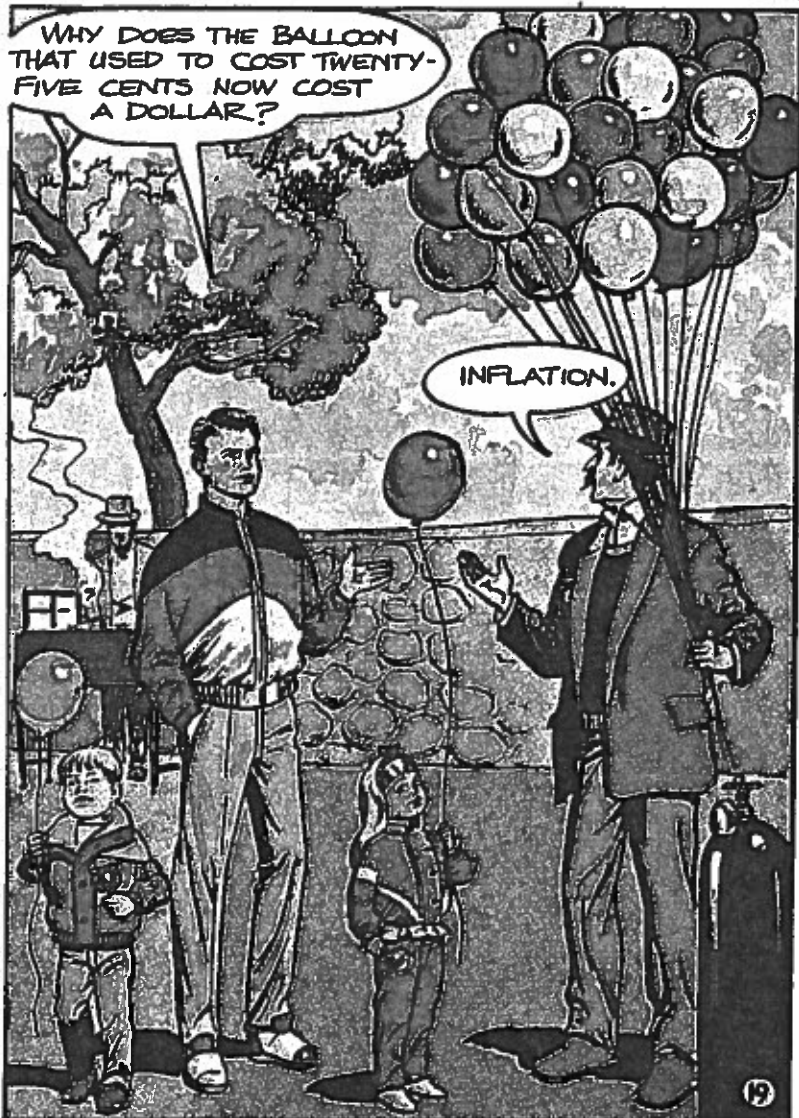


THE THINGS THAT DO HAVE INTRINSIC VALUE ARE THE GOODS AND SERVICES THAT OUR ECONOMY PRODUCES-- THINGS LIKE FOOD, HOUSING, AND EDUCATIONAL AND MEDICAL SERVICES.

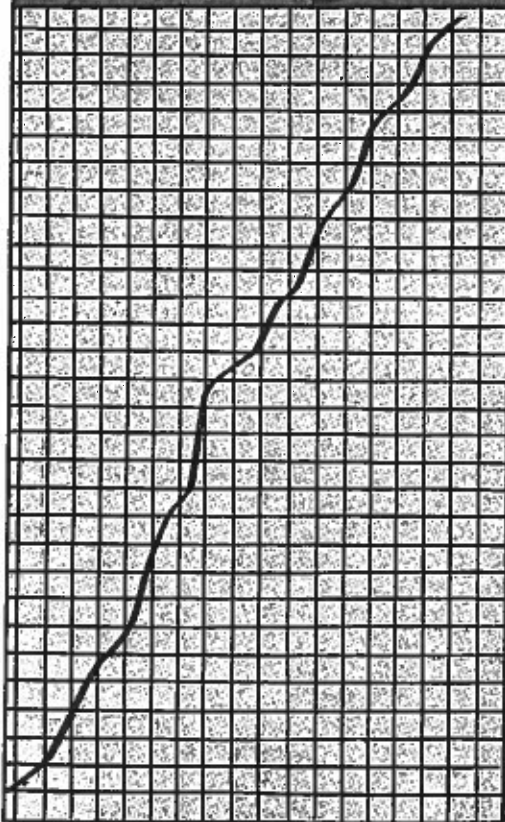


IF THERE'S TOO MUCH MONEY AROUND IN RELATION TO THE NATION'S OUTPUT OF GOODS AND SERVICES, THE RESULT CAN BE INFLATION-- THAT IS, A GENERAL RISE IN PRICES.

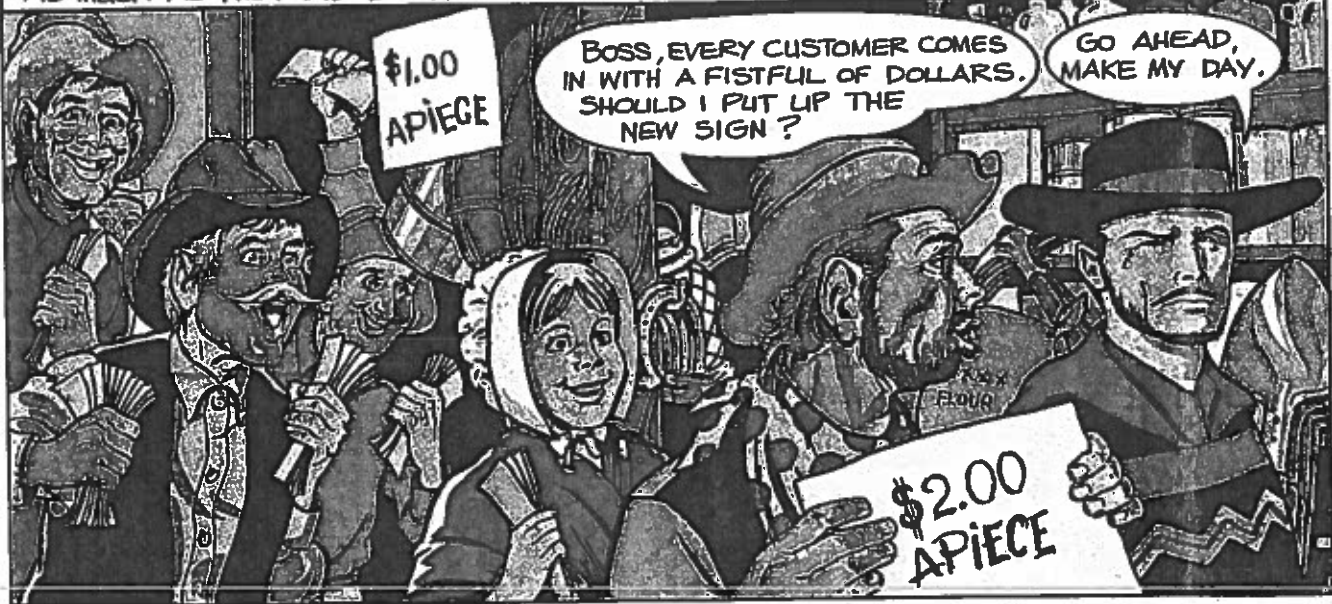
WHY DOES THE BALLOON THAT USED TO COST TWENTY-FIVE CENTS NOW COST A DOLLAR?



PRICES



WHEN PEOPLE HAVE MORE MONEY TO SPEND AND THE VOLUME OF GOODS AND SERVICES DOESN'T INCREASE AS FAST, SELLERS FIND THAT THEY CAN RAISE PRICES AND SELL AS MUCH AS THEY DID BEFORE.



INFLATION CAN BE BAD FOR SEVERAL REASONS. ONE IS THAT IT UNDERMINES THE VALUE OF PEOPLE'S SAVINGS.



ALSO, INFLATION IS UNFAIR IN THAT IT MAKES SOME PEOPLE WORSE OFF BECAUSE THEIR INCOMES DON'T RISE AS FAST AS PRICES.



INFLATION ALSO HURTS PEOPLE WHO LEND MONEY AT INTEREST RATES THAT DON'T AT LEAST EQUAL THE RATE OF INFLATION.



RAPIDLY RISING PRICES ALSO CAN CREATE A MOOD OF UNCERTAINTY THAT CAN DISCOURAGE SAVING AND INVESTMENT AND HURT THE GROWTH OF THE ECONOMY.



OVER TIME, THE UNCERTAINTY AND FEAR CAN LEAD TO A BUSINESS DOWNTURN.

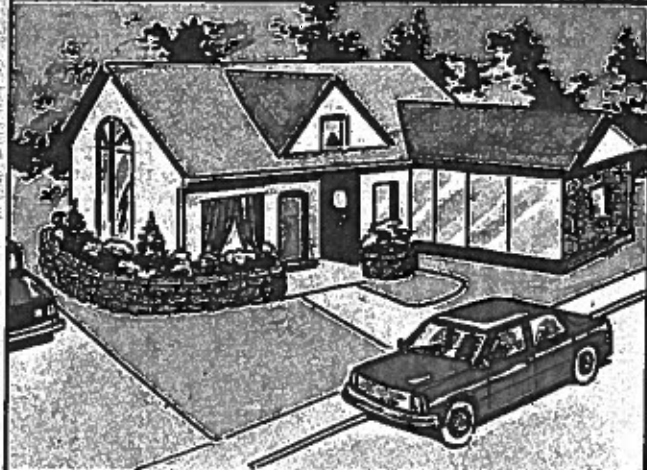
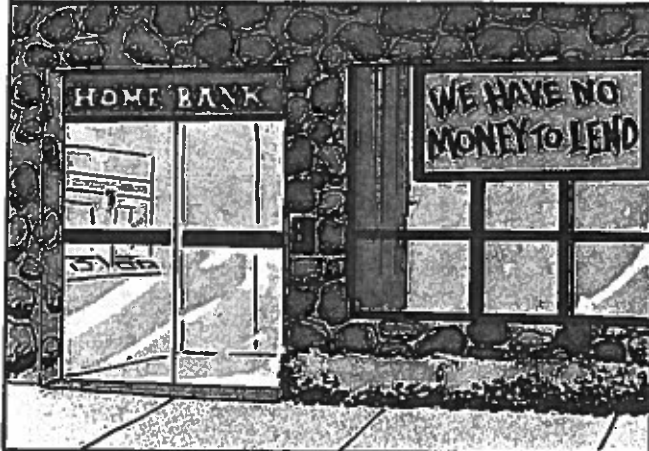
AND A BUSINESS DOWNTURN MEANS LOWER INCOMES AND MORE UNEMPLOYMENT.

BUSINESS OUTLO



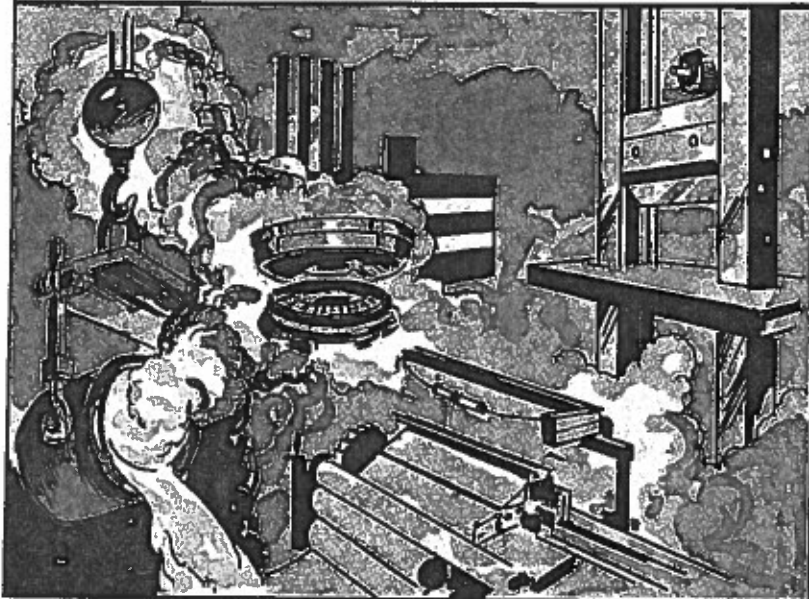
WHILE TOO RAPID GROWTH IN THE MONEY SUPPLY IS A DANGER TO THE HEALTH OF THE ECONOMY, TOO SLOW GROWTH IN THE MONEY SUPPLY ALSO POSES A THREAT.

IF THERE ISN'T ENOUGH MONEY IN THE ECONOMY, PEOPLE WON'T BE ABLE TO BORROW TO BUY THINGS LIKE HOUSES AND CARS.

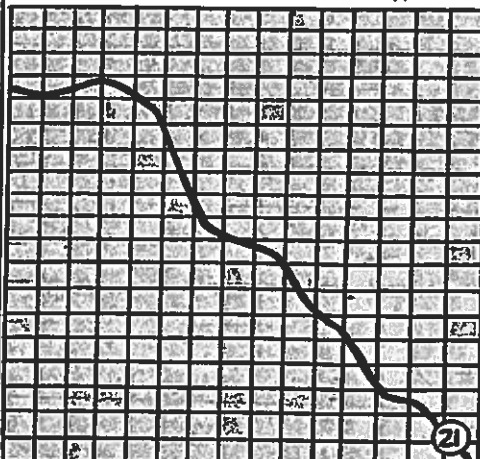


AND BUSINESSES WON'T BE ABLE TO BORROW TO INVEST IN NEW FACTORIES AND EQUIPMENT.

AGAIN, THE RESULT CAN BE A RECESSION--A PERIOD WHEN THE AMOUNT OF GOODS AND SERVICES THAT THE COUNTRY PRODUCES ACTUALLY DECLINES.



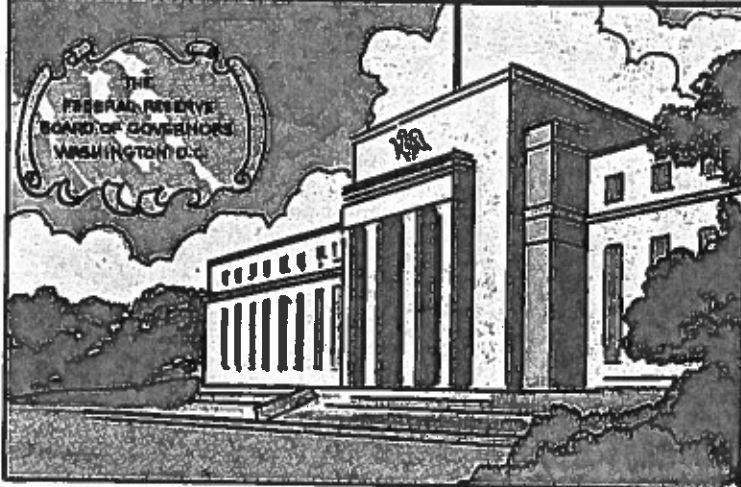
PRODUCTION OF GOODS AND SERVICES



SO, THE SUPPLY OF MONEY IN THE ECONOMY MUST GROW NEITHER TOO RAPIDLY NOR TOO SLOWLY, BUT AT A RATE THAT KEEPS THE VALUE OF OUR MONEY STABLE AND LEADS TO STEADY GROWTH IN THE ECONOMY.



HOW DO WE MAKE SURE THAT THE U.S. MONEY SUPPLY GROWS AT THE RIGHT RATE? THAT'S THE JOB OF THE FEDERAL RESERVE SYSTEM, OR "THE FED," FOR SHORT, WHICH CONGRESS CREATED IN 1913.

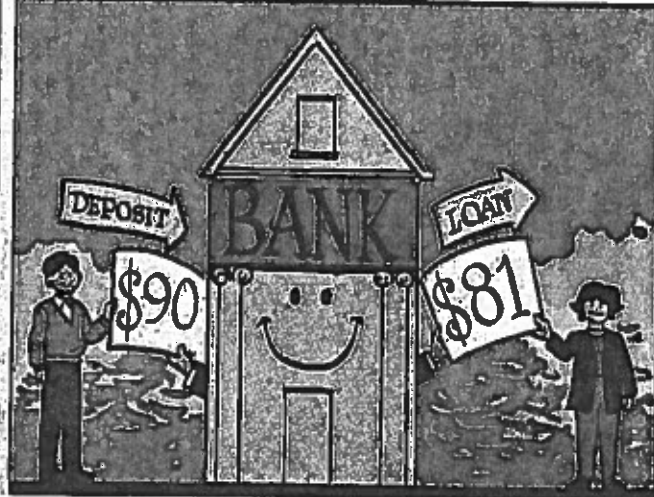
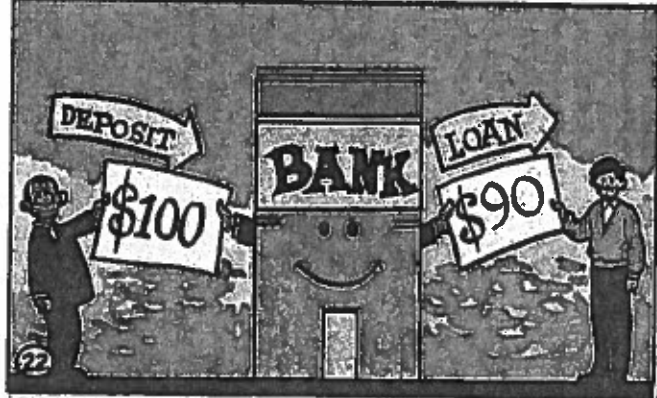


THE FED HAS A NUMBER OF TOOLS TO INFLUENCE THE GROWTH OF THE MONEY SUPPLY. ONE IS CALLED "RESERVE REQUIREMENTS."

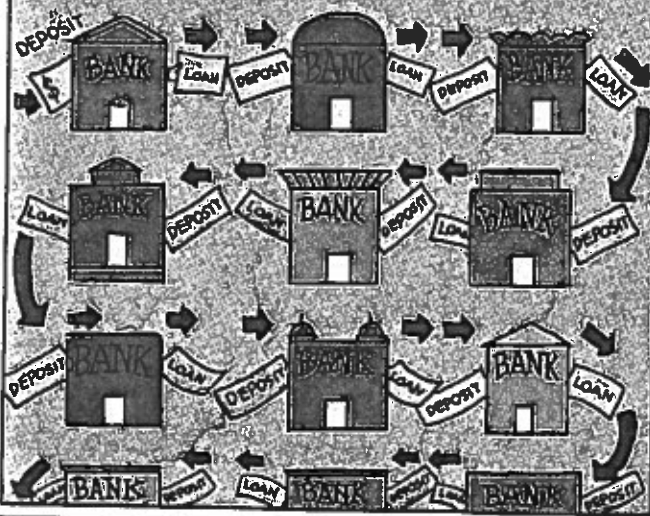


RESERVE REQUIREMENTS ARE THE PROPORTIONS OF THE DEPOSITS THAT BANKS MUST KEEP ON HAND AND ARE NOT ALLOWED TO LEND OUT. FOR EXAMPLE, IF THE RESERVE REQUIREMENT IS 10% AND YOU DEPOSIT \$100 IN A BANK, THE BANK CAN LEND \$90 OF THAT \$100 TO SOMEONE ELSE, BUT IT IS NOT ALLOWED TO LEND THE REMAINING \$10.

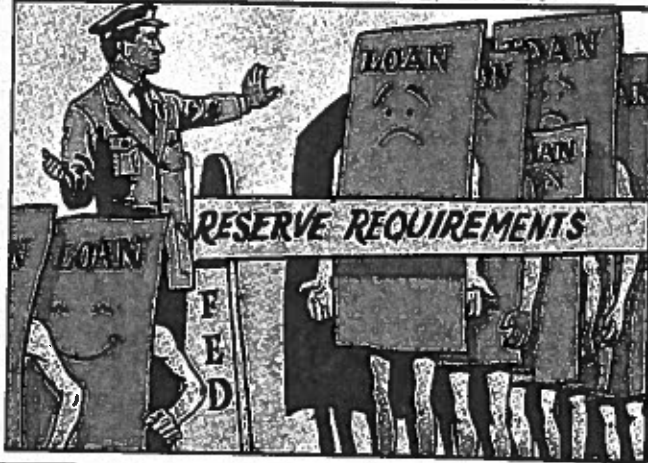
WHOEVER BORROWS THE \$90 FROM THE BANK IS LIKELY TO DEPOSIT IT IN A CHECKING ACCOUNT, TOO. THAT PERSON'S BANK CAN THEN LEND OUT 90% OF THE \$90, OR \$81.



THROUGH THIS PROCESS, THE BANKING SYSTEM ACTUALLY CREATES MONEY.



BY ITS POWER TO SET THE LEVEL OF RESERVE REQUIREMENTS, THE FED INFLUENCES THE AMOUNT THAT BANKS CAN LEND OUT AND THE AMOUNT OF MONEY THAT THE BANKING SYSTEM CAN CREATE.



IN PRACTICE, THE PROCESS OF INFLUENCING THE MONEY SUPPLY IS A COMPLICATED ONE, BUT IT'S ONE THAT CONGRESS HAS DESIGNATED THE FED TO PERFORM. WHEN IT WORKS WELL, THE U.S. ECONOMY CAN BENEFIT FROM ITS POTENTIAL TO GROW STRONGLY AND PROVIDE AMERICANS WITH ADEQUATE JOBS AND A HIGH STANDARD OF LIVING.



Glossary

Coincidence of wants – A situation in which two people each want what the other wants to trade, a condition necessary for barter to occur.

Division of labor – An approach to production in which different workers specialize in different tasks to achieve savings.

Economies of scale – The benefit of lower per-unit costs that result from large-scale production.

Federal Reserve System – The central bank of the United States. The System consists of the seven-person Board of Governors and 12 regional Federal Reserve Banks.

Fungibility – Interchangeability; money is fungible in that any dollar is interchangeable with any other dollar.

Inflation – An increase in the general price level.

Medium of exchange – An item that is generally accepted as payment for other items; money serves as the medium of exchange in our economy.

Money supply – The amount of money in the economy; the U.S. money supply available for immediate spending includes currency and checking accounts at depository institutions.

Recession – A time period in which economic activity declines.

Reserve requirements – The percentage of deposits that banks are required to keep either as cash or as deposits at a Federal Reserve Bank.

Self-sufficiency – The production by oneself of all the goods and services that one needs.

Standard of value – An item used to define the price or value of other items; money serves as the standard of value in our economy (see “Unit of account,” below).

Store of value – An item used to save, or to store, purchasing power for future use; the main store of value in our economy is money.

Unit of account – A unit in terms of which the prices or values of goods and services are expressed; the dollar serves as the unit of account in our economy.

For more information about
New York Fed education
programs, visit:
www.newyorkfed.org/education

To schedule a tour, go to:
[www.newyorkfed.org/aboutthefed/
ny_tours.html](http://www.newyorkfed.org/aboutthefed/ny_tours.html)

Federal Reserve Bank of New York
Public Affairs Department
33 Liberty Street
New York, NY 10045
(212) 720-6134

NOT FOR RESALE

For free copies, visit:
www.newyorkfed.org/publications