chapter 1 Money

It's fairy dust, but because we believe in it, it works



INTRODUCTION

Money sometimes seems to be what economics is all about. It's what we work to get and what we pay out to survive. It's what makes the world go around, pretty much the way Joel Grey sings it in his cynical, yet joyful number in the musical Cabaret. But look at it again. You can't eat it, drive it, or wear it. Stripped of its mystique, money is just a convenient way of exchanging goods and services, big or small, banal or exotic. Today's paper money and electronic money exist only because we believe in them. To make another theatrical allusion, money is like *Peter Pan*'s Tinker Bell, who is kept alive only because the audience believes in her. We believe in money oh, yes we do. We believe that crumpled piece of paper with \$5 on it can actually be exchanged for something to eat. Even more remarkably, we accept the fact that after a hard week's work, we are going to be paid with nothing but a bunch of electrons sent to the bank. Money is based on faith, but because all of us, or almost all of us, keep the faith, money works. How did we get this way?





What happened before there was money?



In early societies where people lived by hunting and gathering, they probably shared goods and services without any immediate payback. The hunters who dragged home a water buffalo didn't demand a load of firewood right away. They knew the family or tribe would keep them warm. But barter certainly came into practice early on, especially as villages got larger and people had to deal with those who weren't family. Through most of history, barter has been a simple and

obvious way of trading goods, even with strangers, almost as natural as language. Five-year-old children without instructions from their parents know how to trade a toy truck for a toy train. As they get older, children can make sophisticated judgments about markets. "I know from what I've seen that around here, one Derek Jeter baseball card is worth two Albert Pujols," one eight-year-old can confidently tell another.







When did barter become popular?



The history of bartering as a widespread practice goes back to 6000 B.C. in the Middle East, among the tribes in what was then Mesopotamia. The practice spread to the Phoenicians, who lived along the Mediterranean coast in what is today Lebanon and Syria. Beginning about 1200 B.C., the Phoenicians became the Mediterranean's great traders, carrying wine, cedar

logs, perfumes, dyes, and spices among ports from Egypt to the Iberian peninsula. Barter worked just about anywhere, in local trade as well as international. European swineherds could successfully trade pigs for wheat; cattlemen could swap for horses. Salt was so valuable in the Roman Empire that soldiers would accept it as barter for their military service.



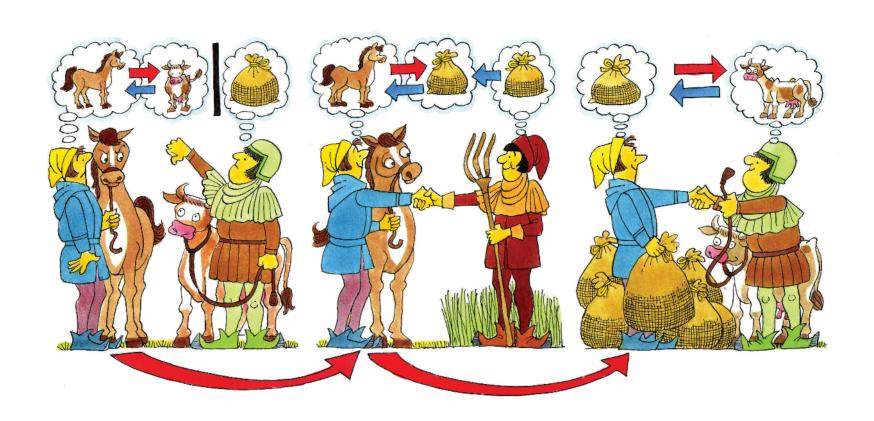




Isn't barter an awkward way to trade?



It certainly has its limitations. Perhaps you had a horse that you were eager to trade for a cow. But the owner of the cow didn't want a horse; he wanted wheat. So you had to hunt down a wheat farmer who needed a horse. You traded with him and took the wheat to the cow owner, who was then satisfied. That was time consuming. Also, you might be able to trade off one horse that way, but suppose that you had a team of horses that you wanted to get rid of and there were no immediate buyers.







How did traders get around that complication?



One way was to use storehouses. If a farmer had more livestock and grain on hand than he could pass along immediately, he could give it to the keeper of a storehouse. The keeper would hand him receipts, and he could later present the receipts and get his livestock and grain back. Or, he could give those receipts to someone else in exchange for, say, a house or a team of horses or whatever. And that was one of the beginnings of money. A piece of paper, in this case a warehouse receipt, could be used in exchange for something of real value, a house. That was one of the origins of money.









Money did not evolve over the centuries from a single source. Warehouse receipts were one line of development. Coins made from precious metals like gold and silver were another. Pieces of copper that may have been coins were found in a tomb in China dating from the 11th century B.C. Both warehouse receipts and precious metals are more convenient to carry around for trading than horses and pigs. But in other respects these two forms of money are quite different. As paper or parchment, warehouse receipts themselves have little value. Silver and gold, on the other hand, have at least some intrinsic value. Silver can be turned into bracelets

and goblets. Gold has always had bling, universally and almost mystically revered as a demonstration of beauty and power. (Many investors, so-called "gold bugs," still think it's the surest way to store one's wealth.) About the year 600 B.C., Athenians, who had a plentiful supply of silver, began to press coins of high quality and uniform silver content. Athenian traders and later Alexander the Great spread the coins throughout the Greek world. The Athenian "owl" (the coin had a portrait of Athena on one side and an owl on the other) became a standard currency of the ancient world, much as the dollar is today.







Who decides what money is?



Over the centuries, it has generally been markets, not governments, that ultimately have decided what money is. Things that a lot of people want, that are relatively scarce and are portable, have been used as currency. "Liquidity" is an important attribute. Your Lamborghini is valuable, but it would make a poor currency because you probably can't sell it in a hurry for a top price and you can't easily break off parts of it for sale. Investors measure the value of their holdings partly in terms of liquidity, asking how many of those stock certificates, bonds, real estate investments, condo time shares, antique chairs, and 1930s comic books can quickly be turned into cash, which generally means dollars or another international currency. Over the centuries unusual

forms of currency have come and gone. The Lenape Indians apparently accepted axes, hoes, cauldrons, awls, and wampum beads in exchange for Manhattan Island. (The historical record is a little shaky on this trade, but the value seems to have been about \$24 then, roughly \$1,000 now.) A serious shortage of coins throughout the British Empire in the late 1700s led to the development of an unusual currency, one that was literally liquid, in the colony of New South Wales, Australia. Highly sought after, storable, transportable, and easily divisible into portions, imported rum became the most accepted currency in the land. In the Moscow of the 1980s, cab drivers much preferred to be paid in Marlboro cigarettes than in rubles.







When did paper money begin?



We mentioned warehouse receipts for cattle and grain a little earlier. But in 17th century England a much broader and more significant form of paper money began to emerge. Merchants and traders had amassed huge hoards of gold and put it in the Royal Mint for storage. But in 1640, King Charles I seized the gold to fund his troops in the English Civil War. Understandably, the seizure made the merchants nervous, so they decided to save their future gold in the private vaults of London goldsmiths, whom they paid a fee for the privilege. The goldsmith gave the merchant a receipt certifying the quantity and purity of his gold, and when the merchant wanted his gold back he could present the merchant his receipt.





Or the merchant could use his stock of gold to create, in effect, his own paper money. Let's suppose a fabric manufacturer who has gold stored with the gold-smith needs sheep's wool. He can hand an order that says "pay the bearer of this certificate three ounces of gold" to the shepherd, who then turns the order over to a merchant in exchange for bags of wheat. The order keeps changing hands in a long train of purchases until some recipient, the swineherd perhaps, turns it over to the goldsmith for three ounces of gold. The goldsmiths of 17th century London were the forerunners of today's British bankers.





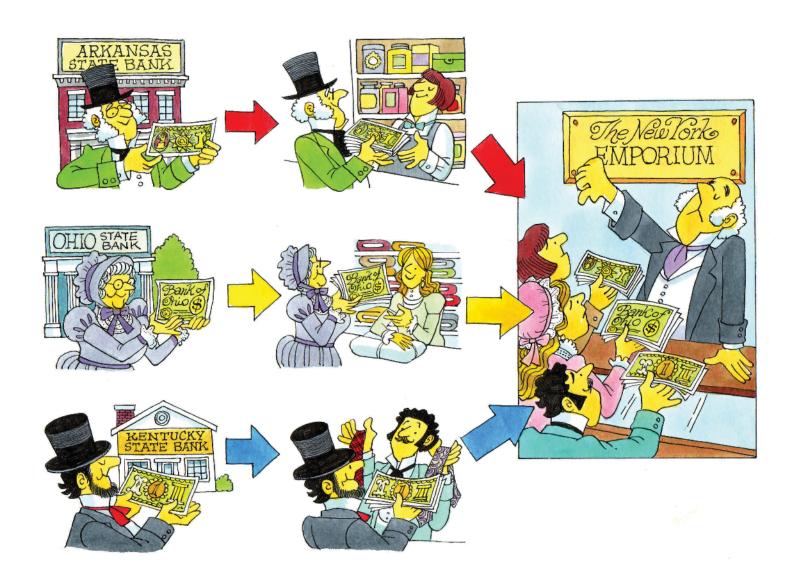


What did early Americans use for money?



Colonial Americans used all kinds of things, including furs, tobacco, Indian wampum, and Spanish and Portuguese coins. The Massachusetts Bay Colony created the first banknotes on American soil in 1690, when the colonial government in Boston, short of gold and coins, paid soldiers with paper that could be later exchanged for gold or silver coins. Maybe Boston could and maybe it couldn't make good on all that paper, but the promise won the citizens' confidence, and the notes stayed in circulation and were considered money. Other colonies, also short of coins, copied Massachusetts. During the Revolution, the Continental Congress paid war expenses in paper money called Continentals—so many of them to so many soldiers

and to so many suppliers, with little valuable metal to back them up, that by the end of the war Continentals were worthless. Twice in the early years of the U.S., the federal government tried to support national banks that would issue a stable currency accepted and recognized by all Americans. After the second bank failed in 1837, commercial banks around the country continued to issue their own notes, in such proliferation that at one time there were 5,000 different kinds of banknotes in circulation. That was bewildering. If you received a banknote with the name of a big, creditworthy bank on it, the note might be good countrywide. But many notes had no value farther than a few miles from home.







How did we get to the dollar bill?



During the opening year of the Civil War, 1861, the Union army ran gigantic expenses, far beyond the ability of the government to pay out of its meager tax receipts. So, Congress authorized President Lincoln's government to issue \$50 million worth of Treasury notes to pay soldiers and arms suppliers and the rest. Early on, those notes were supposedly exchangeable for silver or gold. But it soon became obvious there was no way Washington could turn all of those notes into precious metals. So in 1862, President Lincoln's aides created a new note, the "green-

back," in denominations of \$5, \$10, \$20, and up, with an appearance not remarkably different from today's dollar bills. Greenbacks were significantly different from the 1861 notes. These earlier notes promised they were convertible into coins. The greenback simply said "This note is a legal tender." It was "fiat" money — money because the government said it was money. It worked. People accepted greenbacks, even though the government would not exchange them for precious metals. The fact that the Union won the war almost certainly had a bearing on that.







If it isn't backed by gold, what makes the dollar mighty?



Up until 1971, the dollar was backed by gold, sort of. Neither American nor foreign citizens could exchange their dollars for gold. But foreign governments could convert some of the dollars they held at the set rate of \$35 an ounce, the gold standard. President Nixon ended that practice because foreign governments, nervous about the U.S. economy, began to convert their dollars into gold in large volumes, running down American gold reserves. Taken off the gold standard, the dollar lost its supreme value, as any American tourist traveling in Europe after 1971 can attest. (It was good news for U.S. manufacturers, however, because it made their products cheaper for foreigners to buy.) Today the dollar's international value depends

on the familiar tug between supply and demand. We discuss this in greater detail in Chapter 7, but basically it means that foreigners create a demand for dollars because they want to buy Johnson & Johnson heart devices or trips to the Grand Canyon or, more likely, U.S. stocks and bonds. Moreover, they want to hold their money in dollars because the U.S. economy and political system still guarantee that it is the most secure place on earth. The dollar, although it fluctuates daily and sometimes greatly in value relative to other currencies, still projects power. If you pull your tanker up to an oil spigot in the Persian Gulf, for example, the price is calculated in dollars, not euros, pesos, or yen.





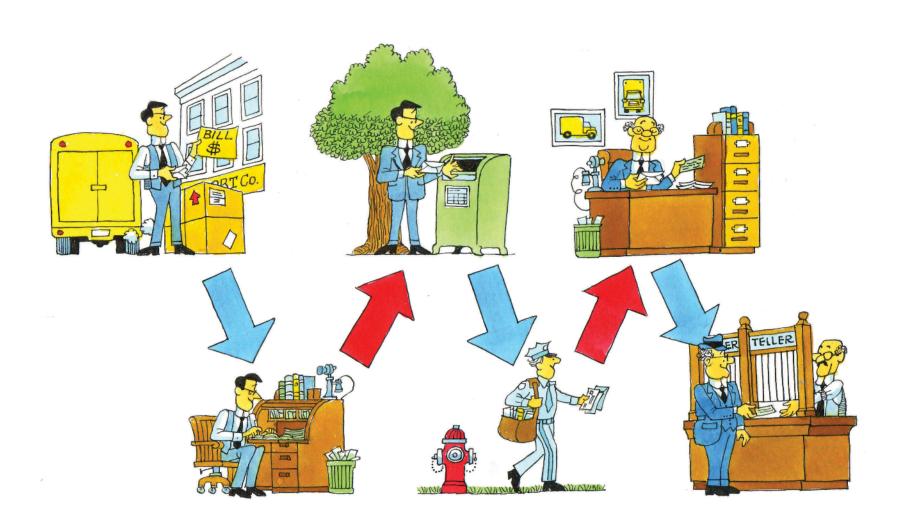


When did checking accounts start?



Accepting a check requires an even greater leap of faith than accepting paper currency not backed by gold or silver. A ten-year-old can understand why a \$10 bill can be translated into a movie ticket and candy. But how does his father get away with writing any amount of money he wants on a blank piece of paper and trading it to a car dealer for four wheels? The first widely used checks were probably those introduced in the 1500s in Holland. Amsterdam was then a major international shipping and trading center. People who had accumulated cash began depositing it with Dutch "cashiers," for a fee, as a safer alternative to keeping the money at home. Eventually

the cashiers agreed to pay their depositors' debts out of the money in each account, based on the depositor's written order to do so. Before World War II, U.S. workers were commonly paid in cash and settled their bills the same way, putting anything left over into savings accounts. In the 1950s, checking accounts got a foothold in the middle class, climbed rapidly in acceptance, and may have peaked in the mid-1990s when Americans wrote 50 billion checks a year. Most checks are good, but those Americans who unwittingly accept bad checks typically are defrauded out of \$1 billion or so annually. The puzzled 10-year-old skeptic has a point.



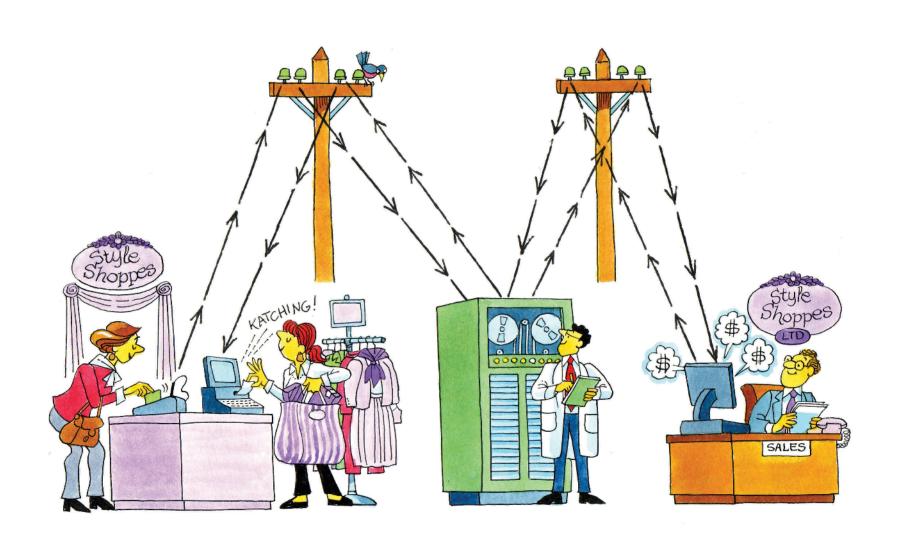




Why did electronic money catch on?



Even though there are currently about \$32 trillion worth of checks written every year in the U.S. alone, the use of checks to transfer funds is probably in decline, losing out to electronic transactions. Financial institutions, for example, no longer write millions of dollars of checks to one another to settle accounts. It is much faster and cheaper to send money back and forth by electronic signals. In a typical year, banks and other financial institutions move around a staggering \$40 trillion or more worth of electrons. Consumers, too, are converting from heavy reliance on checking accounts to more use of electrons through credit cards and online banking. Their reasoning is clear: It is simply easier.





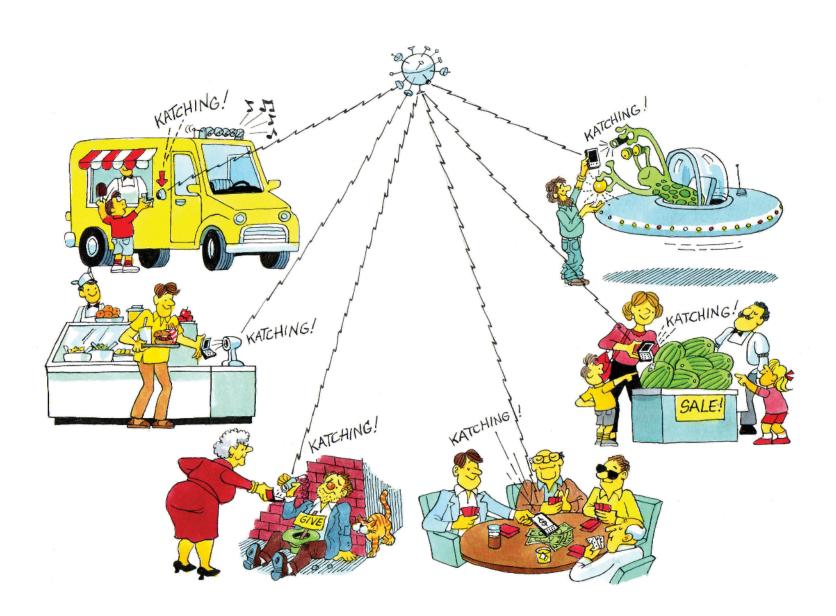


Will paper money disappear?



Paper money in day-to-day circulation now accounts for only 10% of the U.S.'s total money supply of roughly \$9 trillion. The other 90% is in deposits in many different kinds of accounts, from simple savings and checking accounts to complex money market funds and sophisticated certificates of deposit. Surprisingly, a huge but uncertain number of those dollar bills in various denominations circulate outside the U.S. Economists guess that dollars abroad amount to about \$600 billion of the total \$900 billion in circulation. What are they doing out there? Yes, some are engaged in the drug trade and other illegal pursuits. But in other places, such as Panama, El Salvador, and Ecuador, the dollar is the official

currency. And in many other places people want to have dollars in their drawers or safe deposit boxes because dollars are sound and accepted pretty much everywhere. If you have to leave the country in a hurry, dollars will ease your travel. Within the U.S., however, paper currency may be in decline, losing out to electrons in the same way checks are losing out. It will become increasingly simple to run your cell phone over the bar code on the packages at the supermarket and have your cereal boxes and paper towels charged directly to your credit card account. No need to wait in line for the cashier. How long will it be before you can scan everything into your cell phone?





Whatever happened to barter?

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Barter, as we all know, has never disappeared. Neighbors, friends, and others still trade goods and services without money changing hands. "If you pave my patio," the auto mechanic tells the mason, "You can take my old Chevy." No-money transactions can be challenging for the IRS, because they are officially taxable but not always reported as income, and they are hard to detect. Interestingly, the Internet, the very modern communications system, has invigorated barter, the most ancient of exchange systems. There is now a universe of online websites on which consumers trade everything from umbrella stands to second homes. Businesses, too, barter more than they used to because the Internet has made such shopping reasonably efficient. (Businesses presumably pay taxes.) The International Reciprocal Trade Association, a global trade association for the barter industry, estimates that 400,000 businesses

around the world barter and that their transactions amounted to about \$12 billion in 2010. That's peanuts, of course, a fraction of total world trade, which amounted to about \$12 trillion that year. Still, Internet barter has made possible some dizzying exchanges that would have been impossible otherwise. Consider the nation in Latin America that had excess aircraft. A sister Latin American nation wanted the aircraft but had only bananas to offer in exchange. The aircraft owner didn't care for bananas; it wanted earthmovers. So the banana producer began an around-the-world trek by Internet. It traded bananas for oil in the Middle East, then oil for warehouses of rugs in South Asia, which were transferred to Japan for earthmovers. The Latin American nation that had started out with bananas finally had the earthmovers the aircraft owner desired. Trade accomplished. Barter lives.

