INSIDE THE VAULT | SPRING 2000
https://www.stlouisfed.org/publications/inside-the-vault/spring-2000/money-does-it-still-make-the-world-go-round

Money ... Does It Still Make The World Go 'Round?

It's Only Money

It's something that most people think they don't have enough of, and yet it's only a piece of linen and cotton material just 6.14 inches by 2.61 inches or a disc of non-precious metal. It lasts from one year to 30 years, depending on whether it's currency or coin. What is it? It's money! But why do we need money? What function does it serve? Is the economy better because we have it?

The purpose of money is to facilitate the exchanges of goods and services. When we think of payment options, there are only three possible methods of effecting exchange: barter, credit and money. Individuals—who are sometimes referred to as economic agents—have an incentive to choose the least costly method of effecting exchange. The choice is illustrated by the parable of the trader.

A Producer Named Jake

There was a producer named Jake who once a week loaded some of his produce on a wagon and went to town where he and other producers would meet to trade their wares. One day Jake noticed that there was one particular item, grammies,1 that nearly everyone wanted and that they would exchange goods for grammies. Realizing that he can buy virtually any good he desired using grammies, he offers to take grammies for the goods he was trying to trade. Initially, Jake does this only when there was no opportunity for barter. He soon discovers, however, that trading in grammies is much faster and easier than searching out barter opportunities and his barter transactions become increasingly infrequent. By trading his wares for grammies, and grammies for the goods that he desires, Jake discovers that he can accomplish the desired trading in a fraction of the time that he had previously spent. Thus, Jake had more time to produce more goods or just have fun.

Jake realized that his trading time could be shortened further if the other producers also trade in grammies. If grammies generally were accepted by everyone in exchange, they would be money. The more widespread the use of money and the lower the exchange cost, the more likely it is that people will trade. The use of money causes markets to flourish. Increased trade promotes greater specialization, greater dependence on trade, and a greater need for and use of money. The phrase "Money makes the world go 'round" may be an apt description of how money facilitates economic exchange.

The parable of the trader may explain why money is an efficient method of effecting transactions, but it does not explain why money is held. Money is held for only one reason—by its very nature the process of exchange takes time so that anything that functions as a medium of exchange must be held. Although money is continuously changing hands, it always is being held by someone—it is never consumed. This is true of all assets, so what distinguishes money from other assets? The important criterion for separating money from other assets is that money is an asset that is generally acceptable as a means of trading goods—other assets

are not. Generally speaking, assets are held for the myriad of reasons that individuals accumulate wealth. In contrast, money is primarily held because of its low cost in effecting transactions.

Take It With a Grain of Salt

In earlier periods in history, commodity money such as salt or gold was used to transact exchange. In modern monetary economies, however, money is typically paper currency with no intrinsic value.2 Intrinsically useless money is called fiat money. Because fiat money requires fewer of society's scarce resources for its production and maintenance, its use results in a higher standard of living. Despite its advantages over resource-using money, fiat money evolved slowly over a considerable period of time.

Our money is called the dollar. Congress adopted the dollar (and the decimal system) as our unit of currency in 1785. Alexander Hamilton's coinage recommendation, which established the U.S. dollar as 270 grains (11/12 fine of gold) or 416 grains (0.89242 fine of silver), was not adopted until April 1792. Because of the inconvenience of carrying gold or silver, sight drafts were issued in convenient denominations. These claims on U.S. stocks of gold and silver circulated in lieu of the commodities themselves. Over the years the dollar has been redefined. Currently, U.S. currency is just a claim on the same quantity of U.S. currency. That is, we now have a pure paper currency (fiat money) standard. People are willing to hold intrinsically useless pieces of paper and claims that are denominated in intrinsically useless pieces of paper because they are certain that other individuals will accept the same.

Although the world is dominated by monetary economies, this does not mean that transactions are never carried out using barter or credit. In monetary economies, all three methods of effecting exchange are used. Because of its obvious limitations, relatively few transactions are carried out via bartering. In contrast, a large and increasing percentage of transactions initially are carried out with credit. The rise in the use of credit has caused some to speculate whether there could be a pure credit economy, with no money. This is unlikely for two reasons. First, to be efficient, credit needs to be denominated in a universally accepted unit of account. Second, credit instruments must be redeemable in some good that people desire. Both of these will tend to give rise to the development of money. While it is less obvious, it is important to note that money facilitates the use of credit just as it facilitates the trade of consumable commodities and tangible assets.

The Bottom Line

Money is a social arrangement resulting from a complicated evolutionary process. It exists because it facilitates exchange by reducing the cost of trade. By reducing the cost of exchange, it encourages more trade and greater specialization. Because of their strategic complementary, it is not surprising that money, trade and specialization have tended to evolve simultaneously.

This article was adapted from "Money in a Theory of Exchange" which was written by Daniel L. Thornton and appeared in the January/February 2000 issue of Review*, a St. Louis Fed publication.*

Endnotes

1. For purpose of illustration, grammies are used as a fictitious item for exchange. [back to text]
2. Currency actually is printed on a material that is 75% cotton and 25% linen. [back to text]

INSIDE THE VAULT | SPRING 2000
https://www.stlouisfed.org/publications/inside-the-vault/spring-2000/q--a

Q & A

What's a yield curve?

Bonds with identical risk, liquidity and tax characteristics usually have different interest rates because of different times remaining to maturity. A yield curve is a picture contrasting yields with time to maturity for similar bonds. Yield curves usually slope upward because bonds with longer time to maturity usually pay higher interest rates.

Why are higher yields associated with bonds that have a longer maturity?

A longer-term bond involves more risk from interest rate fluctuations. Also, the longer-term bond encompasses expected inflation over the life of the bond. You may recall that nominal interest rates equal the real interest rate plus expected inflation. For example, if the real interest rate is 2.5% and expected inflation is 2%, the nominal interest rate would be 4.5%. Longer-term bonds require compensation for this inflation risk.

Why do long-term interest rates sometimes rise when the Fed cuts the federal funds target, causing short-term interest rates to fall?

Although the Fed can exert considerable influence over short-term rates, changes in inflation expectations can confound the effect of the federal funds target changes on longer-term rates. Easier monetary policy lowers short-term rates now, often at the expense of higher prices in the future.

What causes the yield curve to be inverted?

Although the yield curve is often upward sloping, sometimes it is downward sloping, in which case it is referred to as inverted. In this case, short-term interest rates are higher than long-term interest rates. If financial markets expect a weakening economy, long-term rates may fall relative to short-term rates. Although an inverted yield curve doesn't always signal a recession, it does indicate the markets' future expectations regarding the direction of the economy's performance.

The content for Q & A was adapted from "The Long and the Short of the Federal Funds Target Cuts," which was written by Michael T. Owyang, economist at the Federal Reserve Bank of St. Louis, and appeared in the September 2001 issue of Monetary Trends*, a St. Louis Fed publication.*

FEDERAL RESERVE BANK of ST. LOUIS
CENTRAL TO AMERICA'S ECONOMY®

INSIDE THE VAULT | SPRING 2000
https://www.stlouisfed.org/publications/inside-the-vault/spring-2000/economic-snapshot

Economic Snapshot

1st Quarter 2000

	Q2-99	Q3-99	Q4-99	Q1-00
Growth Rate—Real Gross Domestic Product	1.9%	5.7%	7.3%	5.4*
Inflation Rate—Consumer Price Index	3.3%	2.5%	2.9%	4.0%
Civilian Unemployment Rate	4.3%	4.2%	4.1%	4.1%

**Advance estimate*

Macroeconomic Performance by Decade*

	1960s	1970s	1980s	1990s
Real GDP Growth	4.4	3.3	3.1	3.1
Labor Productivity Growth	2.9	2.0	1.4	1.9
Employment Growth	1.9	2.4	1.7	1.3
Unemployment Rate	4.8	6.2	7.3	5.8
CPI Inflation Rate	2.3	7.1	5.6	3.0
S&P Real Total Returns	6.6	-0.5	12.9	15.9

* The figures, in percent, are quarterly averages. The growth rate calculations are based on year-over-year quarterly data.

Table from March National Economic Trends *Cover, March 2000*.

In what ways were the 1990s exceptional?

Low inflation is an area often thought to be exceptional in the 1990s, and relative to the experience of the 1970s and 19080s, it clearly is. Despite nearly identical average rates of economic growth in all three decades, the average inflation rate of the 1990s was about half that of the 1970s and 1980s. Certainly the performance of the stock market was exceptional in the 1990s. The inflation-adjusted total return to the S&P 500 exceeded the 1980s by 3 percentage points even though that performance is not due to the market

recovering from a poor performance in the previous decade. Also exceptional during the 1990s was the stability of inflation and output growth.