

Money and the Pandemic: Magic Currency
Anne Emerson, October 2021

The purpose of this article is to provide some information about fiat money. We can think of money as that which is exchanged when buying and selling. It could be coins, banknotes, or checks. Currency is the type of money used, for example, U.S. dollars, or Japanese yen, or bitcoin. Bitcoin is a crypto-currency. Crypto-currencies are types of money that might be used to buy and sell on the internet.

In order to switch from dollars to another currency, it is necessary to sell dollars in exchange for the other currency. Demand for such exchanges generates an “exchange rate.” For example, on the website “XE Currency Converter,” on February 25, 2021, 1 USD = 0.707126 GBP (one US dollar could buy .71 British pounds) and 1 GBP = 1.41418 USD (one British pound could buy 1.41 US dollars. Any “spread” between the two rates is how buyers and sellers of currency collect enough money to make their trade worthwhile.

Fiat money is money, or currency, for example the U.S. dollar (or bitcoin), which is not backed by something tangible such as gold. In order to illustrate the difference between fiat money and money that is backed by gold, let us consider the stylized history of modern banking, as it may be told to college students.

Money, for example that used for the currency of Lydia in 600 BCE, was often minted from gold (or, sometimes, silver). Changes in the supply of gold, arising from discovery and exploitation of a new lode, would alter both the supply of money and its distribution. The owner of gold-bearing land might suddenly become rich, for little reason other than that the law gave him or her ownership of the gold found on or below that land. Historically, there was a close relationship between the amount of gold owned, and its value in commerce.

When gold and money were almost equivalent, a merchant would own gold in order to conduct business. Rich merchants might persuade goldsmiths to store gold in their vaults, for a fee. A goldsmith would give a merchant, in exchange for gold, a “gold certificate,” that is, a piece of paper promising to return a certain quantity of gold to the bearer, on demand. After a while, gold certificates became acceptable in commerce as a substitute for the actual gold. Dealing in trusted paper certificates was more convenient than dealing in gold ingots or coins for several reasons, including the bulky nature of gold and the need to check its purity.

As the story goes, one goldsmith noticed that some of the merchants' gold would remain in the vault for many years. Perhaps the gold certificates, circulating instead, meant that the actual gold was not needed in day-to-day business; or perhaps the gold's owner was saving for the long run. Whatever the reason, this goldsmith decided to lend out some of the gold that lay in the vault unclaimed.

In other words, there was already a gold certificate circulating which represented that gold. However, since the actual gold was not being requested, it could be taken out of the vault and lent to someone else, for that person to use and pay back with interest. (The lent gold was soon also lent in the form of a gold certificate rather than actual gold, because paper was more convenient than gold in commerce.)

As long as the owner of the original gold certificate which represented the gold, did not claim the lent-out gold before it had been returned with interest, the artisan would make money. He (or she) would receive both a fee for storing the gold, and interest for lending it out. This business model caught on quickly.

That is the story that represents the origin of modern banking, also known as "fractional reserve banking." The "reserve" was the original gold, that which the first gold certificate represented. As soon as there were more gold certificates circulating than actual gold in vaults, we had "fractional reserves." That is, the reserve (the quantity of gold) was only a fraction of the money circulating (in the form of gold certificates rather than actual gold).

In today's world, physical dollars (such as coins and paper banknotes) are little used in business. Many people use checks instead, or credit cards, or bank drafts, or crypto-currencies. All of these things can serve as money. Because of ongoing change, it can be challenging to calculate precisely both the stock of money and the amount of money that changes hands over a given period of time.

In the U.S. banking system, "reserves" are the funds held by banks against claims on the funds by depositors. They serve a role equivalent to that of gold in the story above, and are a percent of deposits required by law, that is considered prudent. Because banks make money from lending out depositors' money, they need to keep a certain amount on hand for depositors who want to withdraw their money.

Now we are in a position to discuss fiat money. Fiat money is money, or currency, that does not even pretend to be backed by gold. It is not in any sense a gold certificate. Fiat money's value, and its acceptance in use, derive from the fact that it is trusted by all parties to the transaction.

The supposed advantage of a currency that uses fiat money over a gold-backed currency, is that its supply can be controlled more readily than can the supply of gold. (Thus, one might avoid economic disruptions such as the inflationary consequences of the California gold rush in 1849.)

A potential downside of a currency based on fiat money, such as U.S. dollars or bitcoin, could arise if it were issued irresponsibly by the issuing authorities. For example, a government heavily in debt can “print money,” (the modern-day equivalent of running the printing presses round the clock) as described in the first article in this series – Magic Money. The process there described can sometimes be used by a currency’s issuer to create money in order to pay that issuer’s debts.

Until recently, economists would have predicted that doubling the money supply would double the price level. For example, if we double the money supply next year without changing the annual output of products, then all of next year’s money will be used to pay for, or “chase,” the same types and quantities of products next year as were produced this year. We would expect the price of each item to double, because there is twice as much money, but no more products.

Or we could say, \$100 will buy fewer products next year than this year, because prices will rise. (We will need our share – \$200 – of the doubled money supply to buy what \$100 can buy this year.) It follows that, if the money supply increases more rapidly than does output (products and services), we should expect inflation.

The more rapidly the money supply increases, relative to the economy’s total yearly output, the greater the rate of inflation we might expect. People may then adjust their behavior to allow for inflation, so that even more money might be “printed.” This is how high rates of inflation can develop.

There is much discussion in today’s financial media about why recent injections of large quantities of money into the U.S. economy have not, apparently, produced inflation. The details of this discussion, and of financial “bubbles,” are beyond the scope of the present article.

To conclude, “Magic Currency” is currency that uses fiat money. It is illusory (magic) because its value is related to people’s trust in it and belief in its value.

<https://www.thebalance.com/what-is-the-history-of-the-gold-standard-3306136>
<https://www.thebalance.com/what-causes-a-high-rate-of-inflation-357608>