The Components and Influences of Money Supply

by Christine Roy

October 3, 2022

What Is Money Supply?

Money supply is the total volume of currency held by the public at a particular point in time.

- There are several classifications of money (ie. **M1, M2, M3**), each characterized by their degree of liquidity defined per country.

- Liquidity refers to the efficiency or ease with which an asset or security can be converted into ready cash without affecting its market price. The most liquid asset of all is, of course, cash itself.

Measuring Liquidity: M1, and M2

Liquidity refers to how quickly a financial asset can be used to buy a good or service.

> For example, cash (M1) is very liquid. Your $20 bill can be easily used to buy a hamburger at lunchtime. However, $20 that you have in your long-term savings account (M2) can not be used to buy that hamburger. Thus, money in your long-term savings account is considered *less* liquid.

M1 money supply includes those monies that are very liquid such as cash, checks (checkable deposits or demand deposits), and traveler's checks. M1 money supply includes coins and currency in circulation—the coins and bills that circulate in an economy that are NOT held by the Treasury, at a Federal Reserve Bank, or in bank vaults.

These items together, currency and checking accounts in banks, make up the definition of money known as M1. Traveler's checks are also included in M1, but have decreased in use over the recent past. No-term savings deposits are also part of M1, if they can easily and quickly be converted and used as currency.

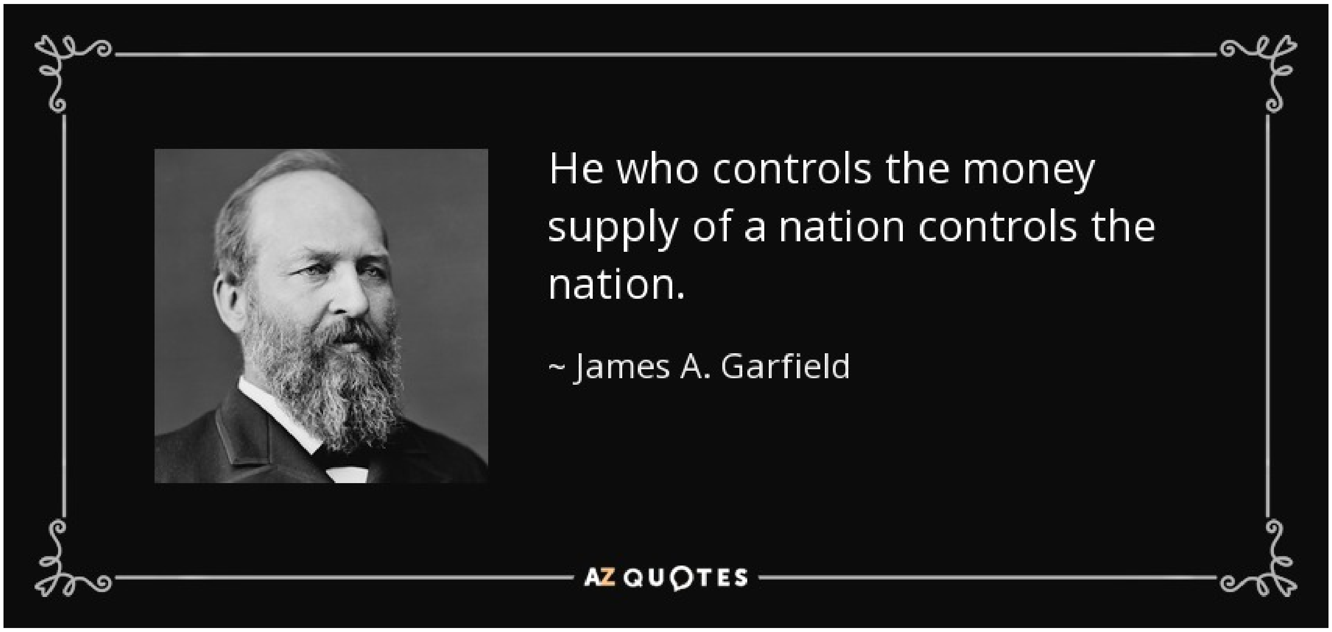
M2 includes everything in M1 but also adds other types of deposits. For example, M2 includes long-term *savings deposits* in banks, certificates of deposits, and money market funds.

Many banks and other financial institutions also offer a chance to invest in *money market funds*, where the deposits of many individual investors are pooled together and invested in a safe way, such as short-term government bonds.

And then, there's **M3,** a collection of the money supply that includes M2 money as well as large time deposits, institutional money market funds, short-term repurchase agreements, and larger liquid funds.

M3 is closely associated with larger financial institutions and corporations than with small businesses and individuals. M3 was traditionally used by economists to estimate the entire money supply within an economy and by governments to direct policy and control inflation over medium and long-term periods.

~ Money Components: [The Measures of Money Supply M1, M2 & M3](#) ~



A country’s money supply has a significant effect on a country’s macroeconomic profile, particularly in relation to interest rates, inflation, and business cycles. Business cycles are intervals of expansion followed by recession in economic activity. These changes have implications for the welfare of the broad population as well as for private institutions.

In the United States, **the Federal Reserve (Fed) controls the monetary supply.**

The process works this way:

- If the Fed decides to **increase the money supply**, its open-market manager buys back treasury securities from private dealers, paying for them by simply crediting their bank accounts. It does not transfer any actual cash.

- An increase in the supply of money works both through **lowering interest rates** which spur investments, and **through putting more money in the hands of consumers** making them feel wealthier and thus stimulating consumer spending.

- When the Federal Reserve increases the money supply, **inflation is a real danger**.

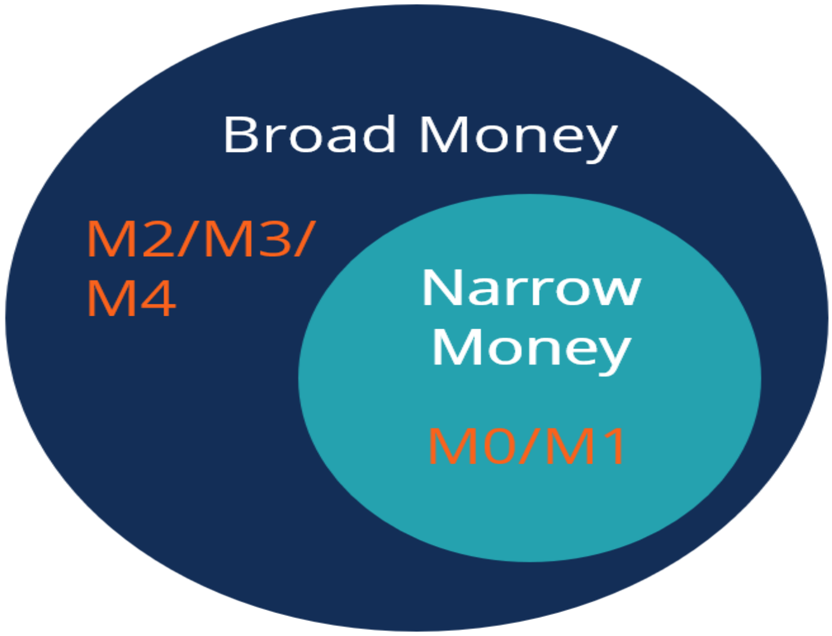
- When the Fed attempts to artificially stimulate the economy by increasing the money supply, the result is an increase in demand for the same supply, thus prompting price increases and instability.

- When the Fed **limits the money supply** via contractionary or hawkish monetary policy, **interest rates rise** and the cost of borrowing increases. This can dampen inflationary pressures and **slow down economic growth**.

- Increasing interest rates puts tremendous pressure on individuals, organizations and governments with outlandish debt. A government defaulting on their debt is a perilous economic tipping point equating to a financial domino catastrophe.

- The Fed sells bonds from its account, thus taking in cash and removing money from the economic system. Adjusting the federal funds rate is a heavily anticipated economic event.

The Fed controls the supply of money by increasing or decreasing the monetary base. The monetary base is related to the size of the Fed's balance sheet; specifically, it is currency in circulation plus the deposit balances that depository institutions hold with the Federal Reserve.



Broad Money and Base Money

Broad money is the most inclusive measure of a nation's money supply, M3 and M4, that includes narrow/base money and other assets that can be converted to cash easily. It is used by economists to spot potential inflation trends.

- Canada- Broad money (M2) in Canada includes all narrow money, market deposit accounts, savings deposits, time deposit accounts and retail money market mutual funds balances.

- Europe- The broadest money (M3) includes all M2 items, money market base shares, repurchase agreements, debt securities and money market paper.

- The United Kingdom- The broadest money (M3H) includes all narrow money and foreign currency deposits in building societies and banks.

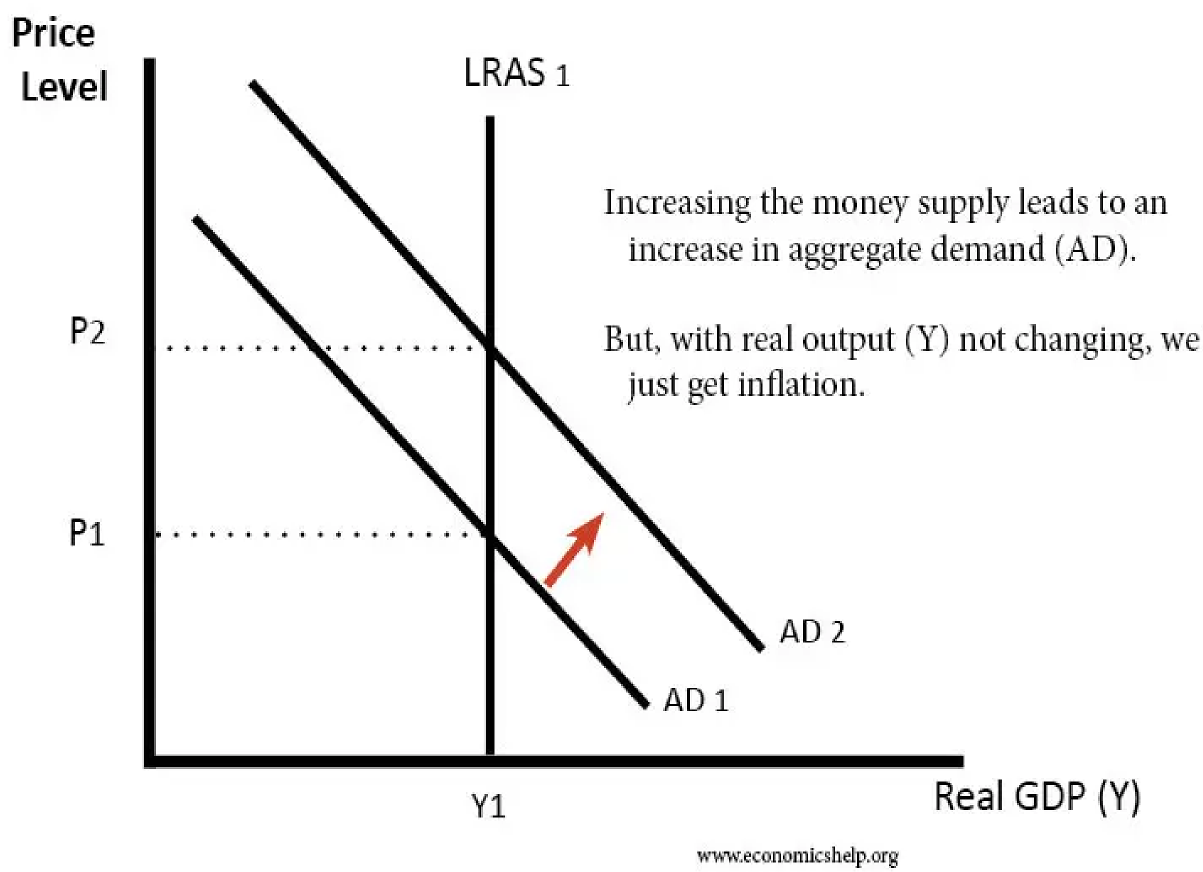
- Japan- Broad money (M3) includes all narrow money, deposits in post offices, financial institutions and savings.

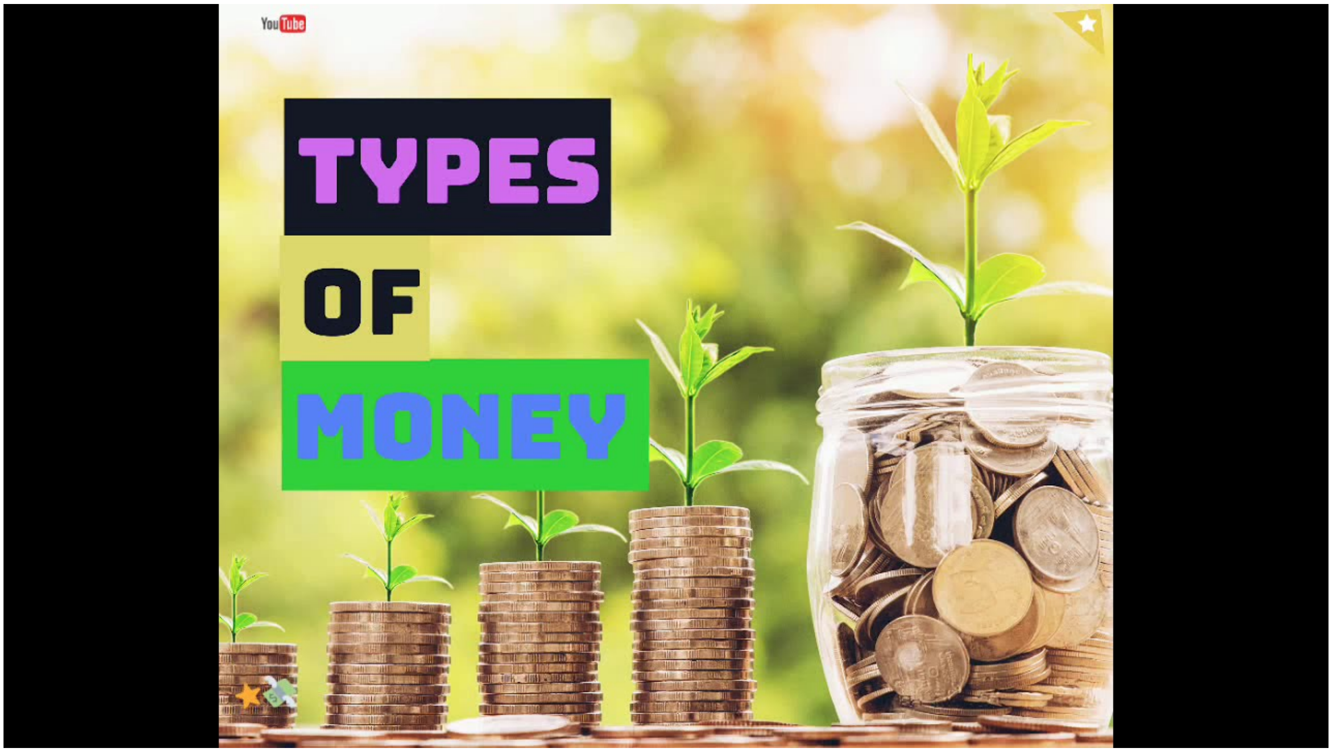
What is Base Money?

Also referred to as **monetary base, narrow money**, includes M0 and M1. M0 is equal to coin currency, physical paper, and central bank reserves.

Base money supply is created and circulated by monetary authorities or central banks. If the central bank wants to encourage inflation, it will increase the amount of base money in circulation.

And if they want to encourage deflation, they can reduce the base currency in circulation.





In economics, money is simply something generally accepted as a medium of exchange for goods and services. That means that anything can technically be considered money, but the most accepted kind today comes in the form of paper, coins and credit cards.

There are 5 different types of money in the world: **Fiat, commodity, representative, fiduciary, and commercial bank money**.

They also all have three functions in common; they serve as a medium of exchange, as a store of value, and as a unit of account.

1. Fiat Money: Banknotes (paper money) and coins

> Fiat money (fiat currency) is money whose value is not based on its inherent value but is based on an authoritative decision (fiat) by the governing body.

The government declares it as legal tender and it must then be accepted as a form of payment everywhere. Due to not having an intrinsic value, a partially destroyed bill can be replaced by the Federal Reserve Bank.

2. **Commodity Money:** Gold, silver, salt, cigarettes, diamonds, alcohol

Unlike fiat currency, the value of commodity money is intrinsic; its value comes from the commodity it is made from. It is also the earliest form of money using the barter system. These commodities are used as a medium of exchange and gain their value from the scarcity of the items.

3. **Representative Money:** Certificates, paper money, token coins

Representative money, like fiat money, has no value of its own. Unlike fiat money, it is backed by a commodity. As a commodity-back money, it could be exchanged for precious metals (like gold) held within a bank vault. It was easier to carry a certificate around rather than a chest full of gold.

4. **Fiduciary Money:** Checks, bank drafts

Deriving from the Latin word fiducia, to trust, fiduciary money works on the promise and trust that it will be exchanged for fiat or commodity money by the issuer (bank). People are not required to take it as a form of payment because it is not a government-ordered legal tender.

5. **Commercial Bank Money:** Funds in a checking account

Commercial money (also known as demand deposits) is a claim against a bank for the purchase of goods and services (through the means of withdrawing in person, check, ATMs, or online banking). It is a debt-created currency by the bank.

Fiat, commodity, representative, fiduciary, and commercial bank money all share the **7 properties of money**:

1. **Fungibility**: Interchangeable. Ex. Every dollar bill has the same worth as another dollar bill despite any tears or stains.
2. **Divisibility**: Able to be divided.
3. **Durability**: It must be able to withstand the wear and tear from going hand to hand.
4. **Portability**: It should be able to easily be carried and transported around.
5. **Cognizability**: Its value must be easily identified.
6. **Stability of value**: The value should remain constant over a long period.
7. **Limited Supply**: Money must be relatively scarce and not easy to come by, reproduced or created.

The Functions of Money

Money is defined by the **three functions** or services that it provides:

1. A Medium of Exchange

The main and most important function of money is that it can be used in the exchange of goods and services. As a widely accepted form of payment, it serves as a medium of exchange that allows those who use it to get what they need easily.

Without money, people would have to use the barter system. In this system, people exchange goods and services with one another. It's a good system if both parties hold what the other wants, which is called a double coincidence of wants. For example, if I wanted to exchange a luxury car for a used speed boat with someone, we would both walk away happy.

2. Unit of account

Serving as a unit of account, money acts as a common standard for measuring the value of goods and services. It's consistent and allows you to easily compare the worth of a $1 soda to a $50 chair. On the other hand, if I had to pay for the soda with pencils, and the chair with apples, it'd be harder to understand their values.With money as a common measure, it's easier to quote and bargain prices.

3. Store of value

Money must also serve as a store of value, meaning that it retains its worth over time. It should be able to be saved, stored, and retrieved while still being viable as a reliable medium of exchange. However, one could argue that money does not really "store value" either due to the fluctuating purchasing power with inflation.

Deflation vs. Disinflation

Deflation is a decrease in general price levels throughout an economy, mainly caused by shifts in supply and demand.

Disinflation is what happens when the inflation rate slows down temporarily over time.

Basis	**Deflation**	**Disinflation**
Definition	An economic condition where the purchasing power of consumers rise due to a decline in prices of commodities	An economic situation where the inflation rate falls gradually on a temporary basis
Overall Impact	Negative	Positive
Opposite to	Inflation	Reflation
Impact on National Economy	Weakens	Stable and prosperous
Demand and Supply Gap	Supply exceeds demand	The negligible gap between supply and demand
Consumer Behavior	Consumers decrease expenditure expecting a future price decline	Consumers spend money as per requirement, irrespective of price level
Example	Severe deflation during the great recession from 2007 to 2009. During the Great Depression 1930-1933, deflation was the result of a collapsing financial sector and bank failures.	Disinflation in Japan during the 1970s

Monetary Policy

- Monetary policy is a set of actions to control a nation's overall money supply to stimulate economic growth or to slow its growth.
- Monetary policy strategies include revising interest rates and changing bank reserve requirements.
- Monetary policy is commonly classified as either expansionary or contractionary.
- The Federal Reserve commonly uses three strategies for monetary policy including reserve requirements, the discount rate, and open market operations.

Economic statistics such as gross domestic product (GDP), the rate of inflation, and industry and sector-specific growth rates influence monetary policy strategy.

Types of Monetary Policy

Monetary policies are seen as either expansionary or contractionary depending on the level of growth or stagnation within the economy. The expansionary or contractionary policies mostly entail adjusting interest rates.

Contractionary: ie. Quantitative Tightening (QT) - Hawkish
A contractionary policy increases interest rates and limits the outstanding money supply to slow growth and decrease inflation.

Expansionary: ie. Quantitative Easing (QE) - Dovish

During times of slowdown or a recession, an expansionary policy is implemented by lowering interest rates to make saving less attractive, and increase consumer spending and borrowing.