

# M0, M1, M2

by Sophia Tutorial



## WHAT'S COVERED

This tutorial will cover the classification of money according to its liquidity, using the categories of M0, M1, and M2.

Our discussion breaks down as follows:

1. Functions of Money
2. Liquidity of Money
3. Classification of Money
  - a. M0
  - b. M1
  - c. M2
4. Tools of the FOMC

## 1. Functions of Money

As a reminder, there are three functions of money:

Function of Money	Purpose
Medium of Exchange	Used as an intermediary to facilitate non-barter based trade; in other words, it allows us to get what we want (e.g., debit card, cash, check)
Store of Value	Has a recognized value that can be stored and retrieved
Unit of Account	Allows comparison of the value of different items; used in financial transactions and record keeping

## 2. Liquidity of Money

Now, most people likely tend to think of bills and coins when they hear the word "money." However, if money is anything that fits those three functions and allows us to get what we want, wouldn't checks and debit cards also be considered money? What else could it be?

Well, depending on how easy or difficult it is to spend a certain type of money, we classify it accordingly.

Some forms of money, like cash, are very easy to go out and spend right now. Other forms, like the money in a savings account, involve a few more steps to be able to spend, like transferring the money into a checking account and then taking the money out at an ATM.

This concept is known as liquidity, which is the focus of this tutorial.



#### BIG IDEA

Forms of money like cash that are easy to go out and spend right now are very liquid. Forms of money that involve a couple more steps, like money in a savings account, are not as liquid.

## 3. Classification of Money

As mentioned, money can be classified by its liquidity. We will discuss each category in detail.

### 3a. M0

Now, **M0** is the narrowest definition of money, including only the stock of physical currency. This is the most liquid form of money. As the narrowest way of defining what money is, this is simply all physical or actual cash held by people right now.



#### THINK ABOUT IT

Almost everyone accepts cash as a form of payment, but if you think about it, how often do you actually have cash on hand? Cash is the most liquid form of payment--even more so than a check--but are you the type of person who always has cash on you, or rarely has cash readily available?



#### TERM TO KNOW

### M0

The narrowest definition of money; includes only the stock of physical currency

### 3b. M1

Next, **M1** is an inclusive category. It includes M0, the stock of physical currency, and in addition, includes checking account balances, also known as demand deposits, because we can demand the money and write a check on them at any time.

So, if we include money that we can easily spend, M1 will include our checking accounts. It is not actual physical cash, but you can swipe your debit card almost everywhere now and immediately purchase something.



**EXAMPLE** You probably could not use a debit card to buy Girl Scout cookies from your neighbor, but in all likelihood, you could have written her a check. That check would have come out of your checking account.

Thus, because of all of those abilities to use on checking accounts, M1 is still considered to be fairly liquid.



## TERM TO KNOW

### M1

Includes demand deposits (checking account balances) + M0 (stock of physical currency)

### 3c. M2

The last category, **M2** goes a bit further; it is the least liquid of the forms we will discuss today. M2 is M1--our demand deposits and stock of physical currency (M0) plus the least liquid thing, which is time deposits. This is the broadest way of defining what money is. This includes all the ways that you are holding money that you cannot immediately pay for something, such as:

- Savings accounts
- Money market mutual funds



## HINT

This is what we mean by a time account. Think of it in the sense that it will take some time to be able to use it or convert it to cash.

Typically, you have to hold this form of money in an account for a certain amount of time.

↪ **EXAMPLE** Suppose after Christmas, you needed to transfer some money from your savings account into your checking account to pay your credit card bills. In this case, you were taking money from your M2 and putting it into your M1 so that you could actually spend it. Because it involved additional steps, this money is not quite as liquid.



## TERM TO KNOW

### M2

Time deposits + M1 (demand deposits + stock of physical currency)

## 4. Tools of the FOMC

The FOMC, or Federal Open Market Committee, is part of our Federal Reserve System. They meet eight times a year to manage our nation's money supply.



## HINT

In future tutorials, when we discuss managing our nation's money supply, think about the three components of the money supply--the very liquid money of M0, the still considerably liquid money of M1, and the less liquid money of M2--and how the actions of the FOMC impact each of those parts of the money supply.

The tools that the FOMC uses to control each of these components of our money supply are:

- The reserve requirement
- Open market operations
- Fed funds market
- Discount rate

Each of these will be a subject of a future tutorial, but as a brief overview, the reserve requirement is the amount of money that banks have to hold on reserve. The FOMC can change that, making it either easier or more difficult for banks to lend out money.

Open market operations are the buying and selling of Treasury securities, like bonds. When they engage in buying bonds, they are putting money in circulation. When they engage in selling bonds, they are taking money out of circulation.

The fed funds market and the discount rate are rates that banks have to pay to borrow. In the case of the fed funds market, they are borrowing from each other, whereas the discount rate applies when they are borrowing from the Fed. If the FOMC is targeting these rates and raising or lowering them, again, it makes it either easier or more difficult for the banks to access money and loan it out.

So, as we discuss them in other tutorials, think about how all of these tools will impact these components--M0, M1, and M2--of our money supply.



## SUMMARY

Today we reviewed the three **functions of money** as a medium of exchange, a store of value, and a unit of account. We learned how we can **classify money** according to its **liquidity**, with **M0** being the most liquid, **M1** being still fairly liquid, and **M2** being the least liquid. Finally, we learned about the **tools of the Federal Open Market Committee (FOMC)**, which is the organization in our country who uses these tools to manage and make decisions about the supply of money.

Source: Adapted from Sophia instructor Kate Eskra.



## TERMS TO KNOW

### **M0**

The narrowest definition of money; includes only the stock of physical currency.

### **M1**

Includes demand deposits (checking account balances) + M0 (stock of physical currency).

### **M2**

Time deposits + M1 (demand deposits + stock of physical currency).