

Money Supply - Price Level / Inflation

by Sophia Tutorial

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WHAT'S COVERED

This lesson will cover the money supply, in relation to price level and inflation.

Our discussion breaks down as follows:

- 1. Money Supply
- 2. Interest Rates
- 3. Money Supply and Effect on Prices
- 4. Money Supply and Effect on Interest Rates

1. Money Supply

Let's begin with a definition. The **money supply** is the sum of cash and deposits in savings and checking accounts at a given time. It is also defined as the capital stock within an economy at any given time.



Essentially, the money supply is just what it sounds like--all of the money in the economy.

Keep in mind is that there are different ways that people hold money. There are liquid forms, the term "liquid" referring to how easily you can access it.

The most liquid form of money is cash--certainly a part of the money supply.

However, many people do not hold a ton of cash anymore. Instead, they keep a lot of their money in checking accounts. This is also extremely liquid because we can draw from that source any time with a debit card or by writing a check.

There are also less liquid forms of money that are included in the money supply. For instance, when you hold money in your savings account, you can certainly access that relatively easily today. However, you need to go through another step to get it.

Another less liquid form of money would be interest-bearing accounts, which are even less liquid than savings accounts.

All of these forms are included in our money supply.



Money Supply

The sum of cash and deposits in savings and checking accounts at a given time; the capital stock within an economy at a given time

2. Interest Rates

Now, the idea of interest-bearing accounts leads us to our next key term, interest rate. The interest rate is the price an individual pays to borrow money. It can also be viewed as the opportunity cost that an individual absorbs to hold a quantity of money.

Price is defined as the cost of a good or service. Remember, nominal prices reflect the current or prevailing price for an item, whereas real prices adjust for purchasing power variation over time--an important point to note since we will be discussing inflation in this tutorial.

Now that we have defined interest rates and price, you can see that the interest rate essentially is the price of money. It may sound odd to talk about the price of money itself, but that is what interest rates are.



For instance, if you choose to hold your money as cash or buy something with it, what is your opportunity cost? What did you give up the opportunity to do with that money? Well, you sacrifice the opportunity to earn interest on it. This is why the interest rates are the price of money.



The interest rate is the price of money.



Interest Rate

The price an individual pays to borrow money or the opportunity cost that an individual absorbs to hold a quantity of money

Price

The cost of a good or service; nominal prices reflect the current or prevailing price for an item; real prices adjust for purchasing power variation over time (inflation)

3. Money Supply and Effect on Prices

So, when do prices tend to rise? Well, we know that prices can go up whenever an item becomes more valuable, such as when people demand it more, for example.

⇔ EXAMPLE For instance, right around Valentine's Day, the price of roses typically skyrockets. This is because people are placing more value on this particular item, versus a result of inflation.

Prices can also rise when there is an increase in the amount of money circulating in an economy. Here is a simplified example to illustrate this concept.

IN CONTEXT

Suppose there are two people in an economy and each one has \$2. There is only one thing that they can purchase with their dollars, which is hamburgers, and there happen to be four hamburgers total in the economy.

So, \$4 in the economy and four hamburgers means that each hamburger will be priced at \$1.

Now, let's say that suddenly someone drops four more dollars out of the sky into this simplified economy. The money supply has now doubled, increasing to \$8.00. What is going to happen to the price of the four hamburgers?

Well, there are still only four hamburgers, yet now there is \$8.00 in the money supply. Therefore, the price increases to \$2 per hamburger.

As you can see, when the money supply increases, the price of goods and services in an economy will also increase. As we have more dollars circulating in our economy, things tend to get more expensive, which is what we call **inflation**.

We know that from year to year, and decade to decade, things are more expensive. People also tend to make more money. Therefore, when we look at our purchasing power, we consider how much better able--or less able--we are to afford goods and services today compared to the past.

Inflation, then, is the general level of an increase in prices from one period to another.



Inflation

The general level of increase in prices from one period to another

4. Money Supply and Effect on Interest Rates

Now, an increase in the money supply will also affect the price of money, or interest rates--because again, remember that interest rates are the price of money.

Do you recall what happens to the price of something whenever there is a greater supply of it? Whenever there is more and more of something, it tends to lose value.

Later in this course, then, we will be discussing how an increase in the money supply will impact interest rates in the economy. In addition, sometimes our Federal Reserve System will specifically try to increase the money supply in order to lower interest rates.

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SUMMARY

Today we learned about the **money supply**, including its definition and sources. We learned that the **interest rate** is actually the price of money. We also learned that **prices** would rise whenever there is an **increase in the money supply**, otherwise known as inflation. Lastly, we briefly touched upon how an increase in money supply can be used to lower interest rates in the economy.

Source: Adapted from Sophia instructor Kate Eskra.



TERMS TO KNOW

Inflation

The general level of increase in prices from one period to another.

Interest Rate

The price an individual pays to borrow money or the opportunity cost that an individual absorbs to hold a quantity of money.

Money Supply

The sum of cash and deposits in savings and checking accounts at a given time; the capital stock within an economy at a given time.

Price

The cost of a good or service; nominal prices reflect the current or prevailing price for an item; real prices adjust for purchasing power variation over time (inflation).