

Forces Behind Interest Rates

By [Reem Heikal](#) on July 18, 2013 _ A A A

An [interest rate](#) is the cost of borrowing money. Or, on the other side of the coin, it is the compensation for the service and [risk of lending money](#). Without it, people would not be willing to lend or even save their cash, both of which require deferring the opportunity to spend in the present. But prevailing interest rates are always changing, and different types of loans offer various interest rates. If you are a lender, a borrower or both, it's important you understand the reasons for these changes and differences.

Lenders and Borrowers

The money lender takes a risk that the borrower may not pay back the loan. Thus, interest provides a certain compensation for bearing risk. Coupled with the risk of default is the risk of [inflation](#). When you lend money now, the prices of goods and services may go up by the time you are paid back, so your money's original purchasing power would decrease. Thus, interest protects against future rises in inflation. A lender such as a bank uses the interest to process account costs as well.

Borrowers pay interest because they must pay a price for gaining the ability to spend now, instead of having to wait years to save up enough money. For example, a person or family may [take out a mortgage for a house](#) for which they cannot presently pay in full, but the loan allows them to become homeowners now instead of far into the future. Businesses also borrow for future profit. They may borrow now to buy equipment so they can begin earning those revenues today. Banks borrow to increase their activities, whether lending or investing, and pay interest to clients for this service.

Interest can thus be considered a cost for one entity and income for another. Interest is the opportunity cost of keeping your money as cash under your mattress as opposed to lending. If you borrow money, the interest you have to pay is less than the cost of forgoing the opportunity to have the money in the present.

How Interest Rates are Determined

Supply and Demand

Interest rate levels are a factor of the supply and demand of credit: an increase in the demand for credit will raise interest rates, while a decrease in the demand for credit will decrease them. Conversely, an increase in the supply of credit will reduce interest rates while a decrease in the supply of credit will increase them. The supply of credit is increased by an increase in the amount of money made available to borrowers. For example, when you open a bank account, you are actually lending money to the bank. Depending on the kind of account you open (a [certificate of deposit](#) will render a higher interest rate than a checking account, with which you have the ability to access the funds at any time), the bank can use that money for its business and investment activities. In other words, the bank can lend out that money to other customers. The more banks can lend, the more credit is available to the economy. And as the supply of credit increases, the price of borrowing (interest) decreases.

Credit available to the economy is decreased as lenders decide to defer the re-payment of their loans. For instance, when you decide to postpone [paying this month's creditcard bill](#) until next month or even later, you are not only increasing the amount of interest you will have to pay, but also decreasing the amount of credit available in the market. This in turn will increase the interest rates in the economy.

Supply-Related			
Major Factor	Key Metric(s)	For example...	Translates into...
Monetary Policy	Federal Funds Rate	Higher short-term Fed Funds Rate... (Achieved by increasing the supply of short-term securities or a "tightening" of the money supply)...	...Increase in short-term rates and—to a lesser extent—an increase in long-term rates
Fiscal Policy	Budget Deficit	Larger deficit requires greater supply of bonds... (government borrowing)	...Upward pressure on all rates, especially long bonds
Demand-Related			
Major Factor	Key Metric(s)	For example...	Translates into...
Inflation	Consumer Price Index (CPI) or Producer Price Index (PPI)	Higher inflation directly translates into...	...Higher nominal interest rates
Fundamental Demand	Foreign and domestic uses of U.S. government debt	More attractive Euro bonds...	...Upward pressure on government bonds (i.e., to remain competitive)

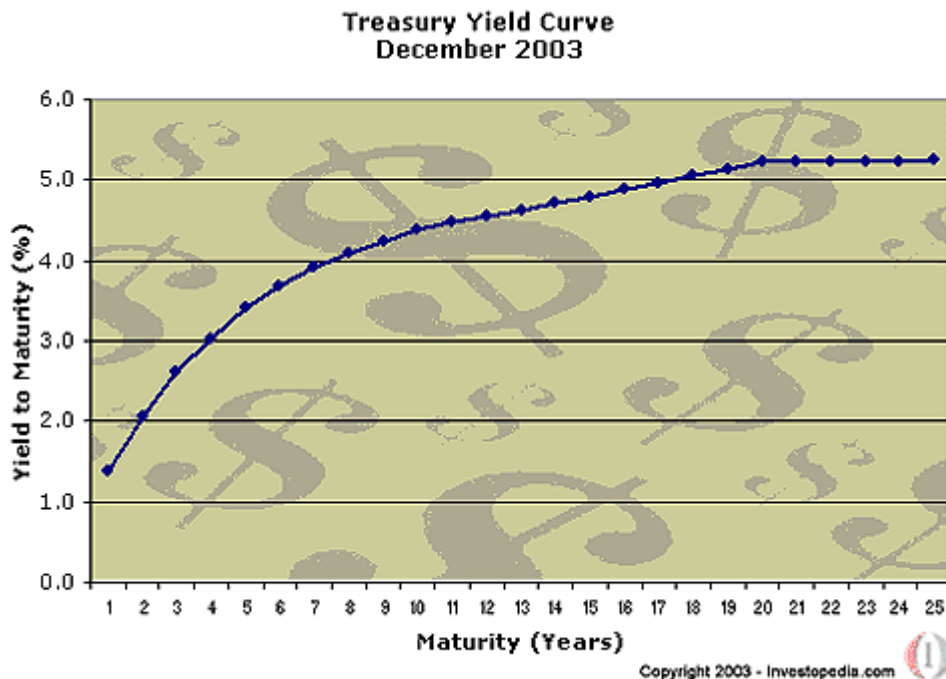
Inflation

Inflation will also affect interest rate levels. The higher the inflation rate, the more interest rates are likely to rise. This occurs because lenders will demand higher interest rates as compensation for the decrease in purchasing power of the money they will be repaid in the future.

overnment

The government has a say in how interest rates are affected. The U.S. [Federal Reserve](#) (the Fed) often makes announcements about how monetary policy will affect interest rates.

The [federal funds rate](#), or the rate that institutions charge each other for extremely short-term loans, affects the interest rate that banks set on the money they lend; the rate then eventually trickles down into other short-term lending rates. The Fed



influences these rates with "[open market transactions](#)", which is basically the buying or selling of previously issued U.S. securities. When the government buys more securities, banks are injected with more money than they can use for lending, and the interest rates decrease. When the government sells securities, money from the banks is drained for the transaction, rendering less funds at the banks' disposal for lending, forcing a rise in interest rates.

Types of Loans

Of the factors detailed above, [supply and demand](#) are, as we implied earlier, the primary forces behind interest rate levels. The interest rate on each different type of loan, however, depends on the credit risk, time, tax considerations (particularly in the U.S.) and convertibility of the particular loan.

Risk refers to the likelihood of the loan being repaid. A greater chance that the loan will not be repaid leads to higher interest rate levels. If, however, the loan is "secured", meaning there is some sort of collateral that the lender will acquire in case the loan is not paid back (i.e. such as a car or a house), the rate of interest will probably be lower. This is because the risk factor is accounted for by the [collateral](#).

For government-issued debt securities, there is of course very little risk because the borrower is the government. For this reason, and because the interest is tax-free, the rate on treasury securities tends to be relatively low.

Time is also a factor of risk. Long-term loans have a greater chance of not being repaid because there is more time for adversity that leads to default. Also, the [face value](#) of a long-term loan, compared to

that of a short-term loan, is more vulnerable to the effects of inflation. Therefore, the longer the borrower has to repay the loan, the more interest the lender should receive.

Finally, some loans that can be converted back into money quickly will have little if any loss on the [principal](#) loaned out. These loans usually carry relatively lower interest rates.

Conclusion

As interest rates are a major factor of the income you can earn by lending money, of bond pricing and of the amount you will have to pay to borrow money, it is important that you understand how prevailing interest rates change: primarily by the forces of supply and demand, which are also affected by inflation and monetary policy. Of course, when you are deciding whether to invest in a debt security, it is important to understand how its characteristics determine what kind of interest rate you can receive.