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Money Market Tutorial

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Introduction

Whenever a [bear market](#) comes along, investors realize (yet again!) that the stock market is a risky place for their savings. It's a fact we tend to forget while enjoying the returns of a bull market! Unfortunately, this is part of the [risk-return tradeoff](#). To get higher returns, you have to take on a higher level of risk. For many investors, a volatile market is too much to stomach - the [money market](#) offers an alternative to these higher-risk investments.

The money market is better known as a place for large institutions and government to manage their short-term cash needs. However, individual investors have access to the market through a variety of different securities. In this tutorial, we'll cover various types of money market securities and how they can work in your portfolio.

What Is It?

The money market is a subsection of the [fixed income](#) market. We generally think of the term fixed income as being synonymous to [bonds](#). In reality, a bond is just one type of fixed income security. The difference between the money market and the bond market is that the money market specializes in very short-term debt securities (debt that [matures](#) in less than one year). Money market investments are also called cash investments because of their short maturities.

Money market securities are essentially IOUs issued by governments, financial institutions and large corporations. These instruments are very [liquid](#) and considered extraordinarily safe. Because they are extremely conservative, money market securities offer significantly lower returns than most other securities.

One of the main differences between the money market and the stock market is that most money market securities trade in very high denominations. This limits access for the individual investor. Furthermore, the money market is a [dealer market](#), which means that firms buy and sell securities in their own accounts, at their own risk. Compare this to the stock market where a broker receives commission to acts as an agent, while the investor takes the risk of holding the stock. Another characteristic of a dealer market is the lack of a central trading floor or [exchange](#). Deals are transacted over the phone or through electronic systems.

The easiest way for us to gain access to the money market is with a [money market mutual funds](#), or sometimes through a money market bank account. These accounts and funds pool together the assets of thousands of investors in order to buy the money market securities on their behalf. However, some money market instruments, like [Treasury bills](#), may be purchased directly. Failing that, they can be acquired through other large financial institutions with direct access to these markets.

There are several different instruments in the money market, offering different returns and different risks. In the following sections, we'll take a look at the major money market instruments.

Treasury Bills (T-Bills)

[Treasury Bills](#) (T-bills) are the most marketable money market security. Their popularity is mainly due to their simplicity. Essentially, T-bills are a way for the U.S. government to raise money from the public. In this tutorial, we are referring to T-bills issued by the U.S. government, but many other governments issue T-bills in a similar fashion.

T-bills are short-term securities that mature in one year or less from their issue date. They are issued with three-month, six-month and one-year maturities. T-bills are purchased for a price that is less than their [par](#) (face) value; when they mature, the government pays the holder the full par value. Effectively, your interest is the difference between the purchase price of the security and what you get at maturity. For example, if you bought a 90-day T-bill at \$9,800 and held it until maturity, you would earn \$200 on your investment. This differs from [coupon bonds](#), which pay interest semi-annually.

Treasury bills (as well as [notes](#) and [bonds](#)) are issued through a competitive bidding process at auctions. If you want to buy a T-bill, you submit a bid that is prepared either [non-competitively](#) or [competitively](#). In non-competitive bidding, you'll receive the full amount of the security you want at the return determined at the auction. With competitive bidding, you have to specify the return that you would like to receive. If the return you specify is too high, you might not receive any securities, or just a portion of what you bid for. (More information on auctions is available at the [TreasuryDirect](#) website.)

The biggest reasons that T-Bills are so popular is that they are one of the few money market instruments that are affordable to the individual investors. T-bills are usually issued in denominations of \$1,000, \$5,000, \$10,000, \$25,000, \$50,000, \$100,000 and \$1 million. Other positives are that T-bills (and all Treasuries) are considered to be the safest investments in the world because the U.S. government backs them. In fact, they are considered [risk-free](#). Furthermore, they are exempt from state and local taxes.

The only downside to T-bills is that you won't get a great return because Treasuries are exceptionally safe. [Corporate bonds](#), [certificates of deposit](#) and money market funds will often give higher rates of interest. What's more, you might not get back all of your investment if you cash out before the [maturity date](#).

Certificate Of Deposit (CD)

A [certificate of deposit](#) (CD) is a [time deposit](#) with a bank. CDs are generally issued by commercial banks but they can be bought through brokerages. They bear a specific maturity date (from three months to five years), a specified interest rate, and can be issued in any denomination, much like bonds. Like all time deposits, the funds may not be withdrawn on demand like those in a checking account.

CDs offer a slightly higher yield than T-Bills because of the slightly higher [default](#) risk for a bank but, overall, the likelihood that a large bank will go broke is pretty slim. Of course, the amount of interest you earn depends on a number of other

factors such as the current interest rate environment, how much money you invest, the length of time and the particular bank you choose. While nearly every bank offers CDs, the rates are rarely competitive, so it's important to shop around.

A fundamental concept to understand when buying a CD is the difference between [annual percentage yield](#) (APY) and [annual percentage rate](#) (APR). APY is the total amount of interest you earn in one year, taking [compound interest](#) into account. APR is simply the stated interest you earn in one year, without taking compounding into account.

The difference results from when interest is paid. The more frequently interest is calculated, the greater the yield will be. When an investment pays interest annually, its rate and yield are the same. But when interest is paid more frequently, the yield gets higher. For example, say you purchase a one-year, \$1,000 CD that pays 5% semi-annually. After six months, you'll receive an interest payment of \$25 ($\$1,000 \times 5\% \times .5$ years). Here's where the magic of compounding starts. The \$25 payment starts earning interest of its own, which over the next six months amounts to \$0.625 ($\$25 \times 5\% \times .5$ years). As a result, the rate on the CD is 5%, but its yield is 5.06. It may not sound like a lot, but compounding adds up over time.

The main advantage of CDs is their relative safety and the ability to know your return ahead of time. You'll generally earn more than in a savings account, and you won't be at the mercy of the stock market. Plus, in the U.S. the [Federal Deposit Insurance Corporation](#) guarantees your investment up to \$100,000.

Despite the benefits, there are two main disadvantages to CDs. First of all, the returns are paltry compared to many other investments. Furthermore, your money is tied up for the length of the CD and you won't be able to get it out without paying a harsh penalty.

Commercial Paper

For many corporations, borrowing short-term money from banks is often a laborious and annoying task. The desire to avoid banks as much as possible has led to the widespread popularity of [commercial paper](#).

Commercial paper is an [unsecured](#), short-term loan issued by a corporation, typically for financing [accounts receivable](#) and inventories. It is usually issued at a [discount](#), reflecting current market interest rates. Maturities on commercial paper are usually no longer than nine months, with maturities of between one and two months being the average.

For the most part, commercial paper is a very safe investment because the financial situation of a company can easily be predicted over a few months. Furthermore, typically only companies with high [credit ratings](#) and credit worthiness issue commercial paper. Over the past 40 years, there have only been a handful of cases where corporations have [defaulted](#) on their commercial paper repayment.

Commercial paper is usually issued in denominations of \$100,000 or more. Therefore, smaller investors can only invest in commercial paper indirectly through money market funds.

Bankers' Acceptance

A [bankers' acceptance](#) (BA) is a short-term credit investment created by a non-financial firm and guaranteed by a bank to make payment. Acceptances are traded at discounts from [face value](#) in the [secondary market](#).

For corporations, a BA acts as a negotiable time draft for financing imports, exports or other transactions in goods. This is especially useful when the creditworthiness of a foreign trade partner is unknown.

Acceptances sell at a discount from the face value:

Face Value of Banker's Acceptance	\$1,000,000
Minus 2% Per Annum Commission for One Year	<u>-\$20,000</u>
Amount Received by Exporter in One Year	\$980,000

One advantage of a banker's acceptance is that it does not need to be held until maturity, and can be sold off in the secondary markets where investors and institutions constantly trade BAs.

Eurodollars

Contrary to the name, [eurodollars](#) have very little to do with the [euro](#) or European countries. Eurodollars are U.S. dollar-denominated deposits at banks outside of the United States. This market evolved in Europe (specifically London), hence the name, but eurodollars can be held anywhere outside the United States.

The eurodollar market is relatively free of regulation; therefore, banks can operate on narrower [margins](#) than their counterparts in the United States. As a

result, the eurodollar market has expanded largely as a way of circumventing regulatory costs.

The average eurodollar deposit is very large (in the millions) and has a maturity of less than six months. A variation on the eurodollar time deposit is the eurodollar certificate of deposit. A eurodollar CD is basically the same as a domestic CD, except that it's the liability of a non-U.S. bank. Because eurodollar CDs are typically less liquid, they tend to offer higher yields.

The eurodollar market is obviously out of reach for all but the largest institutions. The only way for individuals to invest in this market is indirectly through a money market fund.

Repos

[Repo](#) is short for repurchase agreement. Those who deal in [government securities](#) use repos as a form of overnight borrowing. A dealer or other holder of government securities (usually T-bills) sells the securities to a lender and agrees to repurchase them at an agreed future date at an agreed price. They are usually very short-term, from overnight to 30 days or more. This short-term maturity and government backing means repos provide lenders with extremely low risk.

Repos are popular because they can virtually eliminate credit problems. Unfortunately, a number of significant losses over the years from fraudulent dealers suggest that lenders in this market have not always checked their [collateralization](#) closely enough.

There are also variations on standard repos:

- **Reverse Repo** - The [reverse repo](#) is the complete opposite of a repo. In this case, a dealer buys government securities from an investor and then sells them back at a later date for a higher price
- **Term Repo** - exactly the same as a repo except the term of the loan is greater than 30 days.

Conclusion

We hope this tutorial has given you an idea of the securities in the money market. It's not exactly a sexy topic, but definitely worth knowing about, as there are times when even the most ambitious investor puts cash on the sidelines.

- The [money market](#) specializes in debt securities that mature in less than one year.
- Money market securities are very [liquid](#), and are considered very safe. As a result, they offer a lower return than other securities.
- The easiest way for individuals to gain access to the money market is through a [money market mutual fund](#).
- [T-bills](#) are short-term government securities that mature in one year or less from their issue date.
- T-bills are considered to be one of the safest investments - they don't provide a great return.
- A [certificate of deposit](#) (CD) is a time deposit with a bank.
- [Annual percentage yield](#) (APY) takes into account compound interest, [annual percentage rate](#) (APR) does not.
- CDs are safe, but the returns aren't great, and your money is tied up for the length of the CD.
- [Commercial paper](#) is an unsecured, short-term loan issued by a corporation. Returns are higher than T-bills because of the higher [default](#) risk.
- [Banker's acceptances](#) (BA) are negotiable time draft for financing transactions in goods.
- BAs are used frequently in international trade and are generally only available to individuals through money market funds.
- [Eurodollars](#) are U.S. dollar-denominated deposit at banks outside of the United States.
- The average eurodollar deposit is very large. The only way for individuals to invest in this market is indirectly through a money market fund.
- [Repurchase agreements](#) (repos) are a form of overnight borrowing backed by government securities.