Money Market Tutorial

http://www.investopedia.com/university/moneymarket/
Thanks very much for downloading the printable version of this tutorial.

As always, we welcome any feedback or suggestions.
http://www.investopedia.com/investopedia/contact.asp

Table of Contents

Introduction

Whenever a bear market comes along, investors realize (yet again!) that the stock market is a risky place for their savings, a fact we tend to forget while enjoying the returns of a bull market! This, unfortunately, is part of the risk/return tradeoff. That is, to get higher returns, you have to take on a higher level of risk. But for many investors, a volatile market is too much to stomach - an alternative is the money market.

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. It is these money market instruments that we will learn about in this tutorial.

What is the Money Market?

The money market is a subsection of the fixed income market. Many people think of the term "fixed income" as synonymous with bonds, but technically, 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 very safe. Because they are so conservative, money market securities offer a lower return 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 and so individual investors have limited access to them. Also, 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 brokers usually act as agents, making money on commissions, while investors takes the risk of holding the stock. One other characteristic of a dealer market is there is no 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 a money market bank account. These accounts and funds pool together the assets of thousands of investors and buy the money market securities on their behalf. Although, some money market instruments like treasury bills may be purchased directly or 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. Let's take a look at the major ones.

Treasury Bills

Treasury Bills (T-bills) are the most marketable money market security. Their popularity is mainly due to their simplicity. T-bills are basically a way for the U.S. government uses 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. T-bills are issued with 3 month, 6 month, and 1 year maturities. You buy T-bills for a price less than their par (face) value, and when they mature, the government pays you their par value. This is different than coupon bonds, which pay interest semi-annually. Effectively, your interest is the difference between the purchase price of the security and what you get at maturity. If a bought a 90 day T-bill at $9,800 and held it until maturity, your interest would be $200.

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 done either noncompetitively or competitively. Noncompetitive bidding means you'll receive the full amount of the security you want at the return determined at the auction. Competitive bidding means 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: http://www.treasurydirect.gov/sec/secfaq.htm#secfaq4

One of the biggest reasons that T-Bills are so popular is because 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 they are backed by the

U.S. government. In fact, they are considered risk-free. Also, they are except from state and local taxes.

The only downside is that because Treasuries are safe, you won't get a great return. Corporate bonds, CDs, and money market funds will often give higher rates of interest. Also, 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. Time deposits may not be withdrawn on demand like a check account. CDs are generally issued by commercial banks but they can be bought through brokerages. They bear a specific maturity date (from 3 months to 5 years), a specified interest rate, and can be issued in any denomination, very similar to bonds.

CDs offer a slightly higher yield than T-Bills because of the slightly higher default risk for a bank, but overall the likeliness of a large bank going broke is pretty slim. Of course, the amount of interest you earn depends on a number of factors such as the current interest rate environment, how much money you invest, the length of time, and your specific bank. While nearly every bank offers CDs, rates often are not competitive, and so it's important to shop around.

An important 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 into account compound interest. APR is simply the stated interest you earn in one year, without taking into account compounding.

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 1 year, $1,000 CD that pays 5% semiannually. After 6 months, you'll receive interest payment of $25 ($1,000 x 5 % x .5 years). Here's where the magic of compounding starts. The $25 payment starts earning interest of its own, which over the next 6 months amounts to 62.5 cents ($25 x 5% x .5 years). As a result, the rate on the CD is 5 percent, 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 that they are safe and you know what return you'll receive. You'll earn more than in a savings account, and you won't be at the mercy of the stock market. Plus, in the U.S. your investment is guaranteed by the FDIC for up to $100,000.

There are two main disadvantages to CDs. The returns are paltry and your money is tied up for the length of the CD. You can't get your money out without paying a harsh penalty.

Commercial Paper

For many corporations, borrowing short-term money from banks is often a labored and annoying task. Their desire to avoid banks as much as possible has led to the wide scale 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 usually isn't any longer than 9 months, with maturities of 1-2 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 with 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, especially when the creditworthiness of a foreign trade partner is unknown.

Acceptances sell at a discount from the face value:

Face value of Bankers Acceptance	**$1,000,000**
Minus 2% per annum commission for one year	**-$20,000**
Amount received by exporter in one year	**$980,000**

One advantage of a bankers acceptance is that they do not need to be held on until maturity. Instead they 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 deposit at banks outside of the United States. This market evolved in Europe (specifically London), and thus the name, but Eurodollars can be held anywhere outside the United States.

The Eurodollar market is relatively free of regulation, and so banks can operate on narrower margins than their counterparts in the United States. Thus, 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 6 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, and they are typically less liquid and so 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? Isn't that what the collection agency does when you fail to pay your bills, or do they just come and break one of your knees? Fortunately, the type of repo we're talking about has nothing to do with collection agencies or gangsters.

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, but a number of significant losses over the years from fraudulent dealers suggests that lenders in this market have not always checked their collateralization closely enough.

There are also variations on standard repos:

- **Reverse Repo** - the complete opposite of a repo, where a dealer buys government securities from an investor and then sells them back on a later date at a higher price.
- **Term Repo** - exactly the same as a repo except the term of the loan is greater than 30 days.

Conclusion Resources

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 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, and so don't give a great return.
- A certificate of deposit (CD) is a time deposit with a bank.
- APY takes into account compound interest, 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.
- Bankers' acceptances (BA)are negotiable time draft for financing transactions in goods.
- BAs are used frequently in international trade and 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.

Also:
1. If you think we missed something and have a question, tell us about it.
2. If you enjoyed this tutorial, make sure to Tell a Friend!
3. If you still aren't on our newsletter, why not?

Quiz Yourself
Finally, if you think you know this stuff now we challenge you to take the quiz and **Test Your Money Market Knowledge**.

Related Links
Money Market Fund Basics - An excellent introduction to money market mutual funds.

Instruments of the Money Market - From the Federal Reserve Bank of Richmond, this is an extensive guide to money market securities.