Topic 4.1

Financial Assets

You Will Learn To:

- Identify different types of financial assets and their characteristics.
- Explain the relationship between the price of previously issued bonds and interest rates.

Financial Assets

Financial assets are things you can buy, sell, or hold with the hope of increasing your wealth or income in the future. Financial assets are nonphysical assets and are based on a contract between the issuer and the buyer.

The most common types of financial assets include:

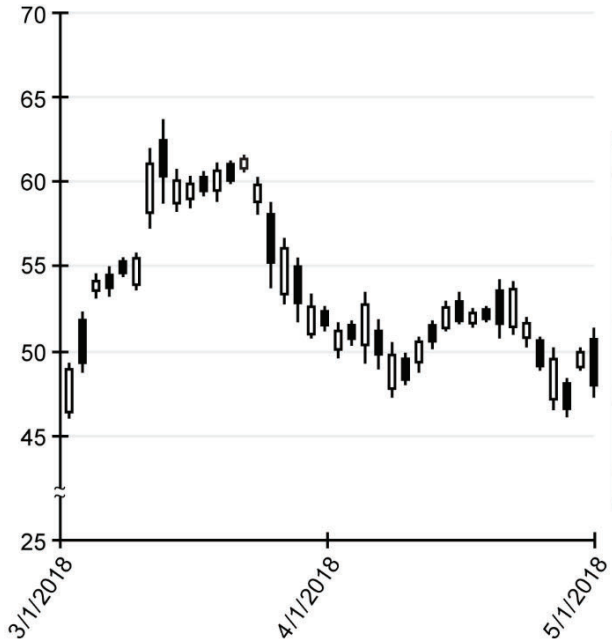
- stocks.
- bonds.
- money in the form of demand deposits in banks and currency.

Cash (currency) and demand deposits are the most liquid form of financial asset because they can be immediately used to purchase goods and services.

Stocks and Bonds

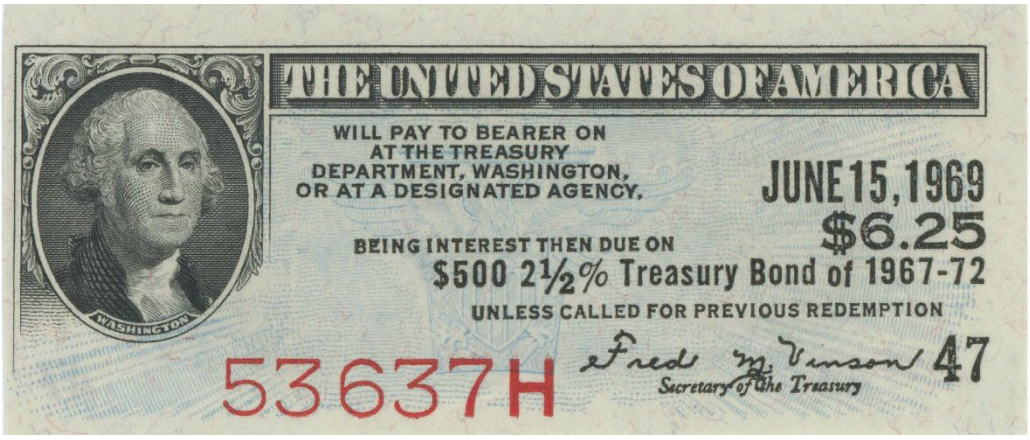
Stocks and bonds are other forms of financial assets that people hold instead of money, but they are less liquid because they take time to convert into currency. Households purchase stocks and bonds to build wealth over time.

Stocks



Stocks are a certificate of partial ownership in a corporation. Corporations sell stocks to raise financial capital that can be used to grow the company. Individuals buy stock in a company with the hope that they can make money if the value of the company increases over time. There is more risk associated with the purchase of stocks compared to other financial assets, like simply holding cash, because there is no guarantee the company's value will increase.

Bonds



Bonds are a loan from an investor to a firm or government in exchange for interest payments. Bonds are a way for a corporation or government to raise money to fund purchases without giving up any ownership of the company. However, by selling bonds, the company is taking on debt. The issuer (company) agrees to pay interest periodically and pay back the principal loan amount at the end of the agreement.

There is less risk associated with purchasing bonds due to the interest payments, and if a company goes bankrupt, bondholders are paid before stockholders. In the US, the Department of the Treasury will also issue bonds to cover the government's spending obligations.

Bonds and the Interest Rate

Bonds are an important financial asset, allowing corporations and governments to raise money quickly. The equilibrium interest rate is the amount paid by the borrower and the initial rate of return of the lender.

For example, when the interest rate is 5%, a $100 bond will pay $5 in interest per year. The $5 interest payment will be paid every year until the principal is paid back. If the equilibrium interest rate in the economy increases to 10%, the cost of the previously issued $100 bond would be $50, rather than the original price of $100.

Note that the interest payment remains the same, not the price of the bond. The previously issued bond price fell because the $5 being paid in interest is 10% of $50, and in order to resell the bond, purchasers will expect 10% interest. The following example shows this change in bond price.

$$\text{Initial interest rate} = \frac{\text{Interest paid (\$5)}}{\text{Value (\$100)}}$$ Use the formula to determine the previously issued bond's initial value

$$\text{Market interest rate} = \frac{\text{Fixed interest payment}}{\text{Value of bond in secondary market}}$$ Adapt the formula to determine how the bond's value changes

$$10\% = \frac{\$5}{X}$$ Plug in values

$$10\% = \frac{\$5}{\$50}$$ Solve for adjusted value

If the equilibrium interest decreases to 2%, the cost of the previously issued $100 bond would be $250. The previously issued bond price increases because newly issued bonds now have a 2% interest rate and are less valuable than previously issued bonds. This drives up the price of previously issued bonds with higher interest rates.

$$\text{Initial interest rate} = \frac{\text{Interest paid (\$5)}}{\text{Value (\$100)}}$$ Use the formula to determine the previously issued bond's initial value

$$\text{Market interest rate} = \frac{\text{Fixed interest payment}}{\text{Value of bond in secondary market}}$$ Adapt the formula to determine how the bond's value changes

$$2\% = \frac{\$5}{X}$$ Plug in values

$$2\% = \frac{\$5}{\$250}$$ Solve for adjusted value

As the interest rate changes, the price of previously issued bonds moves in the opposite direction because interest rates and the price of previously issued bonds have an inverse relationship.

Opportunity Cost of Holding Money

Households have several options when it comes to holding money. They can choose to hold it as currency, or they can choose to invest in a financial asset. The opportunity cost of holding money as currency is the interest that is forgone by not using the money to buy other financial assets, such as bonds. The relationship between money and the interest rate will be discussed more in Topics 4.5 and 4.7.

Things to Remember

- The most common types of financial assets include stocks, bonds, and money in the form of demand deposits in banks and currency.
- There is an inverse relationship between the bond prices and the equilibrium interest rate.
- The opportunity cost of holding money is the interest that could have been earned by holding other assets.

4.1 Vocabulary

Financial asset	Nonphysical assets that have value based on a contract between the issuer and the buyer.
Assets	Anything of value owned by a household, firm, or government as a store of wealth.
Liquid	The relative ease of converting an asset into currency.
Stocks	Shares of ownership in a corporation.
Financial capital	Investment funds, including those used in exchange for international assets.
Bonds	A loan from an investor to a firm or government in exchange for interest payments.
Principal	The initial amount borrowed on a loan or bond.

4.1 Check for Understanding

1. **Which of the following is the most liquid form of money?**

   A. Stocks

   B. Bonds

   C. Cash

   D. Mutual funds

2. **Which of the following is a way for a government or corporation to raise money quickly?**

   A. Selling stocks on the secondary market

   B. Selling bonds

   C. Purchasing bonds

   D. Retaining earnings over time

3. **The opportunity cost of holding money is the interest that could have been earned from holding other assets, such as bonds.**

   A. True

   B. False

4. **What will happen to the price of previously issued bonds when the equilibrium interest rate decreases?**

   A. Bond prices will increase

   B. Bond prices will decrease

   C. Bond quantities will increase

   D. Bond quantities will decrease