

## Macroeconomic Definitions -- Dr. Tom McGahagan -- Spring 2005

### IV. SAVING, INVESTMENT AND THE FINANCIAL SYSTEM

1. **Nominal savings** is savings evaluated in monetary terms.

2. **Real savings** is savings measured in terms of the real goods which could have been consumed but are not. Economists speak of real savings as "foregone consumption".

Because savings has a real aspect to it, it frees up resources which may be used for other purposes, most importantly for **INVESTMENT**

3. **Nominal** or **FINANCIAL INVESTMENT** is investment in monetary terms.

Financial investments always result in the simultaneous creation of an **ASSET** and **LIABILITY**.

When a bond is issued by a corporation, the corporation promises to repay the money lent by the purchaser of the bond. Accordingly the corporation incurs a **LIABILITY** at the same time that the purchaser of the bond acquires an **ASSET**.

4. **Real investment** is the creation of an addition to the **CAPITAL STOCK** of the country.

Not all financial investments result in real investment. Most purchases of shares of stock are purchases in the **SECONDARY MARKET**, and only transfer ownership of part of the firm from the seller to the buyer. The firm itself receives no money and cannot carry out any real investment with the proceeds.

5. **Shares of stock** are claims to a share of the ownership in the corporations that issue the stock. They involve only **LIMITED LIABILITY** for the debts of the corporations, unlike **PARTNERSHIPS**, where each partner has unlimited liability. Stocks pay **DIVIDENDS**, a distribution of the profits of the corporations. Corporations are not legally obliged to pay dividends at all. However, they may issue **PREFERRED** as well as **COMMON** stock -- dividends must be paid on preferred stock, often at a preset rate, before they are paid on common stock.

6. **Bonds** are promises of repayment at a future date. They are issued by private firms to raise capital, and by the government to finance the national debt. Purchasers of the bonds of corporations are legally entitled to be repaid, and if the corporation declares bankruptcy, will share in the proceeds from the sale of the assets of the corporation before stockholders receive any compensation at all.

Bonds have a **FACE VALUE** or **MATURITY VALUE**, which is what the buyer will receive on the date of repayment. The **BOND PRICE** is the price paid at purchase. Bonds may be **ZERO COUPON BONDS**, which involve no payment from the corporation between the time of purchase and maturity, or **COUPON BONDS**, which do make such a payment.

7. **Primary market** for stocks or bonds. The firm issues the stocks or bonds and households buy the stocks or bonds. The firm receives the proceeds from the sale, and accordingly can invest the proceeds.

In the stock market, the primary market is represented by the market for **INITIAL PUBLIC OFFERINGS** or **IPOs** and by the issue of new stock by a company (rare because current stockholders worry about the **dilution** of the value of their stock)

In the bond market, the primary market for corporate bonds is represented by new **FLOTATIONS** of loans, managed by investment banks and brokerage houses.

The primary market for government bonds in the United States is represented by the **TREASURY AUCTIONS** at which the Treasury Department sells bonds to the highest bidder to finance (or refinance) the national debt.

8. **Secondary market** for stocks or bonds. Stocks or bonds may be transferred between parties other than the firm or government issuing them. Most stock market transactions take place in the secondary market. A very active market exists in US Treasury bonds, with banks, households and the US Federal Reserve buying and selling the bonds. Though the Federal Reserve often engages in **OPEN MARKET OPERATIONS**, the US Treasury will ultimately repay the bonds.

9. **Nominal interest rates.** A nominal interest rate is the percentage by which the repayment of a loan exceeds the amount loaned. If you borrow \$100 today and repay \$103 a year from now, the nominal interest rate is 3 percent.

10. **Real interest rates.** The real interest rate is the percentage by which the real goods and services which can be purchased by the repayment of a loan exceeds the real goods and services which could be bought by the loan at the time it was made.

If you borrow \$100 today, when pizzas cost \$10 each, you have borrowed 10 pizzas. If you repay \$110 next year, when pizzas cost \$11, you will repay 10 pizzas. The real interest rate is zero, even though the nominal interest rate is 10 percent.

The real interest rate may be calculated by subtracting the rate of inflation from the nominal interest rate.

11. **Fisher relation.** Since lenders want to gain rather than lose purchasing power when making loans, they will try to set the nominal rate of interest to their **desired real rate** plus the **expected** rate of inflation.

12. **Bond prices and interest rates.** When bond prices rise, the interest rate falls; when bond prices fall, the interest rate rises.

Example: assume a zero coupon bond with a maturity value of \$10,000 one year from its issue. If it sells at auction for a price \$9,500, the interest rate is  $(\$10,000 - 9,500) / \$9,500$  or approximately 5 percent. If the price rises to \$9,600, the interest rate is  $(\$10,000 - 9,600) / 9,600$  or approximately four percent.

13. **Loanable funds.** "Loanable funds" are financial resources built up by saving and available for investment by others. The loanable funds model of saving and investment plots the quantity of loanable funds supplied and demanded against the interest rate.

14. **Supply of loanable funds.** When the interest rate increases, the supply of loanable funds will most likely increase. (It will increase if the substitution effect of higher interest rates outweighs their income effect).

The supply curve for loanable funds will shift if there are changes in income.

15. **Substitution effect** of higher interest rates. An increase in interest rates makes it more attractive to save than to spend now. Households will therefore tend to substitute saving for spending.

16. **Income effect** of higher interest rates. An increase in interest rates effectively raises the lifetime income of savers, making it possible to achieve a given savings goal by putting LESS money in the bank now. This effect may partially or entirely counter the substitution effect.

17. **Demand for loanable funds.** When the interest rate increases, the quantity of loanable funds demanded for investment will decrease. When profit expectations change, the demand curve for loanable funds will shift. If higher profits are expected in the future, more loanable funds would be demanded at any given interest rate.