About interest rate determination

First, it is important to recognize that an interest rate is a price. Specifically, the rate of interest* is the price of loanable funds.** Second, remember that in a market economy, prices are determined by the forces of supply and demand. Thus, in considering the determination of interest rates, one need only think back to sophomore economics and the chapters dealing with supply, demand and equilibrium price. The application is then very straightforward.

Demand – why does one demand loanable funds? If our current spending plans (or consumption) exceed our current means for carrying out those planned expenditures (or income), then we are candidates for entering the funds market. That is, we may need to borrow. Thus, in considering the demand for loanable funds, simply think in terms of forces or factors that give rise to the need to borrow. As a college student, one may have extraordinary expenses associated with attending school and, at the same time, limited income because of the associated absence from the job market. Thus, students often need loans in order to fund their education. During this time they are demanders of loanable funds. If the U.S. Treasury runs a huge budget deficit (imagine that!), then it becomes a demander of loanable funds and must enter the market in order to borrow the needed funds. A thriving business, either large or small, may need to borrow funds in order to expand. When they do, they are a demander of funds. On the other hand, if businesses perceive that the economy is turning down (about to enter a recession), they may decide that the market for their output will be receding, and that there is no reason to move ahead with planned expansion projects. This could then trigger a decrease in the demand for loanable funds.

Supply -- net savers are suppliers of funds. If one's current income exceeds his/her current spending, then he/she has surplus funds which can be used to make loans (either directly or indirectly through an intermediary) and earn interest. Here we have only to ask ourselves what are the factors or forces that tend to increase the supply of savings in the economy. A growing economy with rising employment and earnings tends to raise incomes and thus increase the supply of loanable funds. Similarly, people may at times become concerned about the prospects or threat of an upcoming "rainy day" and decide that they need to save more in preparation for the impending lean years. On the other hand, if people become concerned about the threat of accelerating inflation, they may decide that it is unwise to save and make loans in an environment in which they will be paid back with cheaper dollars, thus contributing to a decrease in the supply of loanable funds in the market.

And price – having thought now about the demand for loanable funds and the supply of loanable funds, we merely need to recall that an increase in demand (holding supply constant) tends to raise price, and an increase in supply (holding demand constant) tends to lower price. Not all that complicated!!!

Same thing—but viewed from a different vantage point:

At times we look at the transfer of funds from net savers to net borrowers from the viewpoint of the bond (or paper, or instrument) market as opposed to the "funds" market. That is, rather than focus on the funds that are being transferred we focus on the paper or instrument that is used to accomplish that transfer. We can focus on the money (funds) that I borrow in order to buy my new home, or we can focus on the piece of paper, the mortgage, (the instrument) that we use to effect that transfer. We can focus on the amount of money that the U.S. Treasury borrows each week, or we can focus on the volume (dollar's worth) of bills, notes and bonds (paper) that it sells each week. While the focus may be different, the phenomenon is the same. What is being accomplished is a transfer of funds from those who have more than they require during that time period to those who have less—from net savers to net borrowers.

Using this approach, or viewing the market from this vantage point, it is necessary to keep in mind that (a) buying a bond is synonymous with making a loan, and selling a bond is synonymous with borrowing, and (b) interest rates and bond prices are inversely related. Thus, if the government is running a large budget deficit, it finds it necessary to sell increasing volumes of paper (bills, notes and bonds), meaning that it places more paper on the market (i.e., increases the supply of debt instruments). Whenever it places more paper on the market, that increased supply of paper/debt leads to lower prices for that paper, and—keeping in mind the above mentioned inverse relationship—higher interest rates.

Notes

[*]Technically, there is no such thing as "the rate of interest." And while textbooks and teachers (including this one) regularly use the phrase, such use is based on convenience rather than on accuracy. At any particular point in time, there exist innumerable different rates of interest. For example, check the rate that any bank will pay for the use of your money versus the rate that they will charge you for the use of their money. Check the rate that the U.S. Treasury has to pay to borrow money versus what you have to pay. Further, check the rate that you pay on your credit card versus what you earn on your CD, or what the payday check cashing service, or pawn shop, charges for a loan. So again, rather than there being a single, <u>the</u> rate of interest prevailing at any point of time, there are literally thousands of different rates, reflecting different degrees of risk, liquidity, transactions costs, etc. Normally when we hear the term "the rate of interest" being used, the user is thinking in terms of some broad average or composite of rates prevailing at that particular time.

[**]We sometimes hear—erroneously—hear the rate of interest described as the price of money. It is not. One might say that the rate of interest is the price of borrowed money, but it is NOT the price of money. The price or value of money is best measured in terms of the CPI or some other price index.