**Chapter 1**

**Introduction**

1. There are two types of decisions made by agents. One is consumer choice, which describes the economic behavior of consumers who seek to maximize their utility function subject to a budget constraint. The other is production choice, which describes the economic behavior of managers who seek to maximize profits subject to production inputs and production technology.
2. In economics, the preferences of consumers are expressed by utility functions, which assign a ranking to members of a choice set.
3. a. Knightian uncertainty means a circumstance where probabilities cannot usefully be assigned to the potential outcomes of a decision.

b.Under uncertainty we will have difficulty assigning meaningful probabilities to states, and may even have difficulty defining the states themselves. In these circumstances it’s difficult to determine reasonable estimates of value.

c. Financial market failure occurs when markets do not exist at all or operate very badly. It’s not enough to say that the market is inefficient. Market failure may arise either from market power or from information asymmetry. Market power means that individual parties transacting in the market can influence the market price. Information asymmetry occurs different parties to a transaction may have different information about the environment in which they are transacting.

1. This statement described the financial market failure as a result of asymmetric information. The different parties involved in this transaction have different information because of Knightian uncertainty, leading to the collapse of internal bank lending.
2. In the classical perfect market, buyers and seller of products are assumed to be price takers and cannot influence the price of a product by their decisions, and they are also assumed to make rational decisions based on complete and accurate information that is costless to obtain.
3. Subjective probabilities are probabilities based on an individual’s judgment of a particular event occurring. They are used to calculate expected utility by using the probabilities to weight the utility of different outcomes.
4. Consumer choice theory deals with maximization of individual satisfaction which is represented by the individual’s utility function.
5. The household finance decision involves the assessment of tradeoffs between the satisfaction derived from current consumption and that deriving from consuming in the future. The latter is funded by investing.
6. Portfolio selection theory deals with the investor’s financial decision on how to allocate investable funds amongst the investment opportunities available in the capital markets. It usually aims to find a diversified portfolio that balances expected return against the risk of earning that return.
7. An appropriate goal for a firm’s management is to maximize the wealth of the firm’s owners.
8. a. IBM: percentage of debt = 1.23/2.23 = 55.157%

percentage of equity = 1 – 55.157% = 44.843%

b. Xerox: percentage of debt = 0.83/1.83 = 45.355%

percentage of equity = 1 – 45.355% = 54.645%

c. 3M Co.: percentage of debt = 0.37/1.37 = 27%

percentage of equity = 1 – 37% = 63%

1. In a perfect capital market, the capital structure of a firm is irrelevant to its value under the idealized conditions specified in the Modigliani-Miller theory. If we consider the impact of taxes on the cost of borrowing, however, there is an optimal capital structure in which the firm should be entirely financed by debt. Actually, managers would not behave like this in real world, because the cost of bankruptcy is not zero as well as other conditions that will be discussed later in the book.
2. This is because any earnings or profits not distributed to the owners as dividends are retained within the firm and thereby represent additional equity in the firm. So this retention decision will impact the firm’s capital structure.