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MFIN102201, Fundamentals of Finance
Boston College Summer Session 2018
Monday and Wednesday 6:00 PM-9:15 PM

Problem Set 1.

You must read Chapter 1 and 2 before attempting to solve the problem set. The content from the class presentation will not be sufficient to answer the problem set.

- 1) What are the two major decisions made by financial managers? **Explain each decision in one or two sentences.**
Uses of funds, or how to invest resources in the company
Sources of funds, or how to finance the company
- 2) Choose in each case the type of company that best fits the description. **Explain your choice briefly (1 sentence)**
 - a. The business is owned by a small group of investors. (**private corporation**)
 - b. The business does not pay income tax. (**partnership**)
 - c. The business has limited liability. (**public corporation**)
 - d. The business is owned by its shareholders. (**public corporation**)
- 3) What is limited liability, and who benefits from it?
Shareholders are only liable to the amount they contributed to the company. The beneficiaries are the shareholders, as their total loss is capped to the amount they contributed.
- 4) Is limited liability always an advantage for a corporation and its shareholders?
No, because other parties (for instance debt holders) know this, and how it can affect the decisions of the company. Because of this, debt holders might charge a higher interest rate.
- 5) We claim that the goal of the firm is to maximize current market value. Could the following actions be consistent with that goal? **Explain your choice briefly (1 sentence)**
 - a. The firm adds a cost-of-living adjustment to the pensions of its retired employees.
If the well-being of retired employees is valued by the market, this choice can improve the market valuation of the firm. Also, current employees could perceive this as an additional employment benefit and adjust their performance accordingly.
 - b. The firm reduces its dividend payment, choosing to reinvest more earnings in the business.
Yes, as long as the return of the project is higher than the return investors could get in an alternative investment of similar risk.

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c. The firm buys a corporate jet for its executives.

Yes, as long as the purchase of the jet can improve the performance of the company. For instance, easier travel could improve monitoring by the C-suite on distant plants/locations.

d. The firm drills for oil in a remote jungle. The chance of finding oil is only 1 in 5.

Yes, we don't care only about the probability but also the rewards of finding oil. What we want is for the rewards to compensate the level of risk the company is bearing.

6) What are agency costs? List some ways by which agency costs are mitigated.

Managers are agents for stockholders and are tempted to act in their own interests rather than maximizing value. Monitoring, contracting. Executive compensation, corporate governance.

7) Sometimes lawyers work on a contingency basis. They collect a percentage of their clients' settlements instead of receiving fixed fees. Why might clients prefer this arrangement? Would the arrangement mitigate an agency problem? Explain.

Because it aligns the incentives of the client and the lawyer. If the lawyer only receives a payment per hour, then it would get the same payment regardless of the outcome. Even more, with an hourly payment, his incentives are to extend the trial (or at least increase the billed hours) as much as possible, in order to maximize his income. By setting a percentage of the fees, the clients ensure that the lawyer is motivated to win the case, and win quickly. If the case is lost, he doesn't receive any income, so he is highly motivated to win.

8) What is a stock market? What is the difference of a primary market and a secondary market?

Market where securities are issued and traded.

Primary market: Market for the sale of newly issued securities.

Secondary market: Market in which previously issued securities are traded among investors.

9) What is a fixed-income market? What is the difference of a capital market and a money market?

Fixed-income market: Market for debt securities.

Capital market: Market for long-term financing.

Money market: Market for short-term financing (less than 1 year).

10) What is a mutual fund? What is a pension fund?

Mutual Fund: An investment company that pools the savings of many investors and invests in a portfolio of securities.

Pension fund: Fund set up by an employer to provide for employees' retirement.

11) Individual investors can buy bonds and stocks directly, or they can put their money in a mutual fund. What are the advantages of the second strategy?

Mutual funds offer investors low-cost diversification and professional management. For most investors, it's more efficient to buy a mutual fund than to assemble a diversified portfolio of stocks and bonds.

12) What are the functions of financial markets? What are the functions of financial institutions?

(Hint: 2.3)

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Transporting Cash across Time
Risk Transfer and Diversification
Provide liquidity
Allow efficient payment mechanisms
Generate information

Bonus question: If you answer this correctly, you get 10 additional points in your lowest score problem set. All problem sets are graded in a 0-100 point scale.

It is sometimes suggested that instead of seeking to maximize shareholder value and, in the process, pursuing profit, the firm should seek to maximize the welfare of all its stakeholders, such as its employees, its customers, and the community in which it operates. How far would this objective conflict with one of maximizing shareholder value? Do you think such an objective is feasible or desirable? **Explain in more than one sentence and less than half a page. Hint: we discussed this in class.**