Chapter 2. New Venture Financing: Considerations and Choices

Questions and Problems

1. Give three examples of bootstrap financing. Why do you think this type of funding is so widely used by entrepreneurs when starting new ventures?
2. Use the Internet to locate some Web sites of venture capital firms and business angel groups. Based on your search, what are the characteristics of investments sought by these two types of investors? What are the main differences in investment characteristics between the angels and the VCs? What differences in investment objectives, if any, do you see within each type?
3. Name three factors an entrepreneur should consider when contemplating pursuing venture capital funding.
4. Describe some of the ways Google fosters innovation within the company. Has it been successful, and if so, why?
5. Your company is going to purchase $10,000 of raw material from a new supplier. The supplier offers you terms of 1/15, net 45. That is, if you pay within 15 days, you get a 1% discount. If not, the total amount is due in 45 days.
    a. How much will you owe the supplier if you pay on day 10?
    b. What is the implicit interest rate if you forgo the discount and pay on day 45?
6. A firm has a $100,000 account receivable it is considering factoring. It expects to collect the full amount in 60 days, but is in need of immediate cash. A bank offers the firm a short-term loan secured by the receivable at 12% interest. The factor will advance 85% of the receivable immediately, with a $15,000 reserve. The full receivable is collected in 60 days, from which the factor will deduct a 2.5% fee. What should the company do?
7. Describe three benefits of "private placement" debt or equity.
8. In some activities, such as education and healthcare, for-profit and not-for-profit enterprises compete with each other. What do you think it means for an enterprise to be organized as not-for-profit? Why do you think not-for-profits sometimes compete aggressively for business? As a prospective entrepreneur of a venture that could be organized as either, what factors do you think should bear on the choice? Explain.
9. When would you organize as an S Corporation instead of a C Corporation?
10. What is the meaning of "limited liability" in terms of total risk and risk allocation? If equity investors in a venture have limited liability, and the venture fails, how might the failure affect the equity investors, creditors, employees, suppliers, and customers? Do you think it would matter to the other stakeholders whether equity investors have limited liability? Why or why not?
11. Describe the three exemptions to securities registration provided by Regulation D. What is the maximum amount a company could raise in a 12-month period if only some of their investors were "sophisticated"?

12. Explain how milestones and staging can mitigate the information problems facing entrepreneurs and investors. What problems might milestones create?
13. Define "term sheet" and "investment agreement." What are the main differences between the two?
14. An entrepreneur is currently the sole shareholder in her venture, with 100,000 shares. An investor offers her $60,000 for 20,000 new shares. What are the pre- and post-money values of the venture?
15. After its last round of financing, a venture had 400,000 shares outstanding and a post-money value of $2 million. If the entrepreneur is confident the company is currently worth 25% more and needs to raise $500,000, how many shares will he sell? What are the new pre- and post-money values of the venture?
16. A venture with 2 million total common shares – 1.4 million owned by the entrepreneur and 0.6 million by an angel investor – had a post-money value of $8 million after its last (and only) round of outside financing. The company has run into some development delays and needs to raise additional capital. A new investor offers $500,000 in exchange for 200,000 new common shares.
    a. If there is no ratchet agreement, what will be the post-money value after the $500,000 investment? How much is the entrepreneur's stake worth?
    b. Now assume the angel investor's agreement includes a ratchet provision. Under the terms of the ratchet, the angel investor will receive enough new shares for free so that his average cost per share is the same as that of any new investor. Given your answer to part (a), and including the impact of the ratchet, what price per share would the new investor seek, and how many new shares would the existing angel investor receive? Now how much is the entrepreneur's stake worth? Note: You can do this using Solver, by trial and error, or by finding the solution algebraically.
17. In a previous round of financing for a resort spa, an investor contributed $2 million in exchange for 1 million shares of common stock. The entrepreneur retained ownership of 2 million shares. Because of massive construction cost overruns and delays, things have not gone well for the spa since the investment. The venture needs another $1 million, with which the entrepreneur hopes to complete development. However, the existing investment agreement includes a ratchet provision for the prior investor. Under the terms of the ratchet, the investor will receive enough new shares for free so that the investor's average cost per share is the same as that of any new investor.
    a. Suppose that in the absence of the ratchet provision a new investor would be willing to accept 1.25 million shares in exchange for the $1 million investment. Compute the post-money valuation of the venture.
    b. Now, based on the valuation in part (a), giving effect to the ratchet provision, what price per share would the new investor seek, and how many new shares would the existing investor receive? Note: You can do this and part (c) using Solver, by trial and error, or by finding the solution algebraically.
    c. Suppose the ratchet agreement has a floor that limits the average cost of the existing investor to a minimum of $1 per share. How would that limitation affect the price per share for the new investor and the number of new shares going to the existing investor?
    d. What fraction of the equity would the entrepreneur end up retaining under each of the three scenarios?

18. An existing biotechnology venture is seeking an infusion of $5 million to carry it to the next milestone. The company has a prototype of a device for using ultrasound to shatter kidney stones. The $5 million is needed to complete the testing required for FDA approval. An investor is proposing to provide the capital in exchange for 2 million shares of common stock. Alternatively, the investor will accept 1.8 million shares of preferred stock, convertible to common on a 1 for 1 basis, or the investor will accept 1.5 million convertible preferred shares, along with warrants to acquire an additional 1.5 million shares for a nominal price. The warrants can only be exercised if the venture fails to achieve the revenue level projected by the entrepreneur two years after the investment. In any case, the entrepreneur would own 2.5 million shares of common stock. Compute the pre- and post-money valuations for each scenario. If you were the entrepreneur, what factors would you want to consider in deciding which of the offers to accept? If you were the investor, how would you interpret the entrepreneur's choice?

19. Hacker Inc., a software developer, is considering a financing deal with an investor. The investor and Hacker have agreed on a $2 million investment for 2 million shares of the company. The post-money valuation is $10 million. Hacker has developed promising gaming software to use with popular game consoles, but has been stymied by the closed architecture of the most popular consoles. If the architecture opens up and interest in the software takes off, Hacker will need considerably more money to continue its line of software.

    a. Design a ratchet provision, to include in the investment agreement, which will protect the investor against dilution in subsequent rounds of financing.

    b. Why would Hacker's entrepreneurs agree to the provision?

    c. What are the costs, direct and indirect of such an antidilution provision? Explain.