Chapter 14

Entrepreneurial Finance and Venture Capital

Answers to Concept Review Questions

1. What are the most important ways that entrepreneurial finance differs from “ordinary” finance? What special burdens confront financial managers of EGCs?

   Entrepreneurial growth companies often invest in very high-risk, high-return projects. The most valuable assets on many EGC balance sheets are intangible and cannot be pledged as collateral for a loan. Because they are trying to achieve rapid growth, most EGCs do not generate enough cash internally to finance all new investments. As a result, EGCs rely heavily on private equity finance, either from founders or venture capital investors.

2. Why do firms usually finance intangible assets with equity rather than with debt?

   Lenders are more reluctant to provide debt capital to a firm with intangible assets. Lenders can repossess and resell physical assets. They cannot repossess ideas or human capital. Intangible assets are also more difficult to value, making it harder for capital providers to fairly value financing instruments.

3. What is an angel capitalist, and how does this type of investor differ from a professional (institutional) venture capitalist?

   An angel capitalist is a wealthy investor who funds risky venture enterprises. While angel investors provide large amounts of capital to new firms, the angel industry is not as structured as the institutional venture capital industry is. Angels invest on a somewhat ad hoc basis and do not routinely involve themselves in the affairs of their “portfolio companies” to the extent that VCs do.

4. Why do you think that private limited partnerships have come to dominate the U.S. venture capital industry? Can you think of any weaknesses this organizational form might have as a vehicle for financing entrepreneurial growth companies?

   Private limited partnerships have the advantages of being easy to form, providing limited liability to investors, and providing investors with smaller amounts of capital to invest in diversified high risk but high reward ventures. They have the advantage of being free of outside influences, generally focusing on an industry in which the general partners have expertise. One weakness is limited access to capital – the regular capital markets are richer and can offer more total financing to firms.
5. Why do venture capitalists almost always use *staged financing* and convertible securities to finance entrepreneurial companies?

*Staged financing is less risky to the venture capitalists. They invest a small amount, see if the firm uses it well, and if the business appears to be successful, can invest more in the venture. Venture capitalists like convertible securities for a number of reasons. Convertible securities give them an ownership interest if the firm is successful. Convertible debt and preferred stock are also senior to common equity, giving venture investors a higher priority claim on the firm’s assets than the common stockholders’ claim. Convertibles give them the security of a fixed income security along with the potential to share in a possibly considerable upside gain.*

6. Entrepreneurs often refer to venture capitalists as “vulture capitalists” due to the amount of equity they demand before investing. Do you think the standard venture capital pricing formula is a justifiable compensation for risk, or is it exploitative?

*Venture capital deals can be very profitable, however, there is a high failure rate. In efficient capital markets investors are appropriately rewarded for risk – higher risk-taking means higher returns. It is true that many times founders are moved out of their firms by venture capitalists who end up owning large stakes in companies they did not found. Capital has a price, and those entrepreneurs who want to use the capital often must pay high prices.*

7. Why do you think European governments and stock exchanges are so keen to promote a vibrant entrepreneurial sector? Can you think of any competitive advantages that might accrue to Europe due to its relatively late start in developing IPO markets?

*European governments and stock exchanges would like to promote a vibrant entrepreneurial sector because of the potential high profits and job creation potential that could be associated with this sector. There is a potential competitive advantage in information – the European markets can look at the history of U.S. ventures, both successful and unsuccessful, and potentially learn from this.*

8. What are some of the competitive strengths and weaknesses of venture capital as practiced in Europe, Japan, and Canada compared to that in the United States?

*Banks provide more European venture capital financing than in the U.S. European VC funds are generally organized as investment companies, acting more like U.S. mutual funds than U.S. venture capital funds. European VC funds are less focused on early-stage investments than in the U.S. European venture investors are less likely to exit with an IPO than in the U.S. Canadian venture capital relies heavily on labor unions for funding, and Canadian venture funding has been particularly strong in the telecommunications industry. Japan has little true venture funding.*

9. How has the European venture capital industry changed over the past five years? Do you think these changes have made it more or less competitive and efficient?

*The venture capital industry has grown a great deal in recent years. In particularly, technology investments have grown, potentially making its markets more competitive.*
The downturn in world markets starting in 2000 has had an adverse impact on European venture capital funding, as has the lack of a strong technology sector.

10. What type of growth in venture capital funding and investment have developing countries experienced during recent years? What is their future outlook for venture capital growth?

Though venture capital markets in most developing countries are not large, there is evidence that they have been growing in recent years. With the growing importance of worldwide trade, the outlook for venture capital in developing countries is positive.

Answers to Self-Test Problems

ST14-1. You are seeking $1.5 million from a venture capitalist to finance the launch of your online financial search engine. You and the VC agree that your venture is currently worth $3 million, and when the company goes public in an IPO five years, it is expected to have a market capitalization of $20 million. Given the company’s stage of development, the VC requires a 50 percent return on investment. What fraction of the firm will the VC receive in exchange for its $1.5 million investment in your company?

\[
\text{Expected market value in 5 years} = 20 \text{ million} \\
\text{Required return on investment} = 50\% \\
\text{Value of VC investment in 5 years} = 1,500,000 \times 1.505 = 1,500,000 \times 7.594 = 11,390,625 \\
\text{Fraction equity received} = \frac{11,390,625}{20,000,000} = 56.95\%.
\]

ST14-2. An entrepreneur seeks $12 million from a VC fund. The entrepreneur and fund managers agree that the entrepreneur’s venture is currently worth $30 million and that the company is likely to be ready to go public in four years. At that time, the company is expected to have net income of $6 million, and comparable firms are expected to be selling at a price/earnings ratio of 25. Given the company’s stage of development, the venture capital fund managers require a 40 percent compound annual return on their investment. What fraction of the firm will the fund receive in exchange for its $12 million investment

\[
\text{Value of firm} = \text{Net income} \times \text{P/E multiple} = 6 \text{ million} \times 25 = 150 \text{ million} \\
\text{40\% return is required on the investment} \\
12,000,000 \times (1.40)^4 = 12,000,000 \times 3.842 = 46,099,200 \\
\frac{46,099,200}{150,000,000} = 30.73\% \text{ of the firm.}
\]

ST14-3. Suppose that 6 out of 10 investments made by a VC fund are a total loss, meaning that the return on each of them is −100 percent. Of the remaining investments, three break even, earning a 0 percent return, while one investment pays off spectacularly and earns a 650 percent return. What is the realized return on the VC fund’s overall portfolio?

This solution assumes that each of the 10 investments are for equal dollar amounts. Therefore, each investment gets a portfolio weight of 10\%

6 of 10 earn −100\%, so expressed as a fraction of total portfolio (p/f) return:

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(0.6 \times -1.00) = -0.60
\]

3 of 10 earn 0\% return, so expressed as a fraction of total p/f return:

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(0.2 \times 0) = 0
\]

One investment earns 650\% (0.1 \times 6.50)
Portfolio return ($R$) is thus calculated as:

$$R = (0.6 \times -1.00) + (0.3 \times 0) + (0.1 \times 6.50) = -0.60 + 0 + 0.65 = 0.05$$

The portfolio’s realized return will be 5.0 percent.