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ENT 632
Entrepreneurial Financing

Lecture 02



Venture Capital and and Angel Investment

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Learning Objectives

- 1. Identify Venture capital (VC), a number of factors help determine whether VC is appropriate.**
- 2. Whoa are Angel Investors? Explain Angel Group Business Practices. Reflecting evidence of Angel Impact on Firm Performance.**
- 3. What are other financing methods for new ventures?**

Venture capital

- **Venture capital (VC)**, along with angel investing and other nonpublic financing sources, **is part of the private equity (PE) market.**
- **VC funds** are organized by VC firms, where the VC firm serves as the general partner (GP) of each VC fund it organizes.
- VC funds in the U.S. are limited partnerships in which the limited partners (LPs) provide almost all of the capital and **the GP is responsible for managing the fund**, including investment selection, working with entrepreneurs, and harvesting the investments.
- **VC funds have finite lives and are normally established to last for about 10 years.**
- While some VC firms establish seed-stage funds for funding start-ups, most focus on funding ventures that are about to embark on the start-up stage with the potential for high growth that will follow.
- **VC-backed ventures** generally require few tangible assets or other assets that could serve as collateral and provide a basis for secured lending; they also have the potential to achieve high growth with high profitability but with the commensurate high risk.

- From the entrepreneur's perspective, a number of factors help determine whether VC is appropriate :
- **First, timing is important.** The venture must be developed to a point where the VC firm can expect to add value, not just money, and the firm must expect to earn a return that will compensate for the VC's human capital investment and where the entrepreneur recognizes the potential value of VC involvement.
- **Second, the venture must be in an industry sector where the VC has expertise.** Their focus is on sectors with potential high-growth, high-return opportunities.
- **Third, VCs have tended to concentrate investments in particular geographic areas and to focus on opportunities that are "close to home."** While, historically, New England has been the focus of much VC activity, in more recent years the geographic focus has shifted.
- **Fourth, the investment horizon and investment objectives of VC funds make VC better suited for some projects than others.** In part, because of their agreements with LPs, VCs are likely to focus on projects with potential for very high returns but low probabilities of success and that can be harvested during the planned life of the VC fund. They are not likely to invest in projects that can generate positive cash flows quickly but have limited growth potential or in those that are likely to be harvested outside a 3-to-8-year window.

Corporate Venturing

- A number of prominent corporations have, at one time or another, implemented an in-house VC program to aid in developing new business opportunities.
- Some corporations view continuous innovation as essential to their sustainability and growth. Such firms have found creative ways to supply capital to support ideas that do not “fit” with their traditional product or service lines but may have market potential.
- **Corporate venture funds can help to retain creative employees and provide some assurance that great ideas will not “escape.”**
- A well-known example of an idea that escaped is the establishment of Hewlett-Packard by former employees of Bell Labs who became frustrated with the corporate research process at Bell Labs. Subsequently, two employees of HP left to form Intel.
- Former Google employees have founded a number of start-ups. Perhaps in response to concerns with losing talent and losing out on opportunities, in 2009 Google’s parent company (Alphabet) formed GV (formerly Google Ventures) as its VC investment arm.
- GV provides seed- and growth-stage funding to technology companies and operates independently from Google.
- In contrast, Apple is a technology company where talented employees have left and founded start-ups of their own; however, Apple does not have a VC arm.

- **The primary motivation for corporate venture capital (CVC) is strategic, but CVC can be driven by several motivations:**
- One is **defensive**—a way for firms to keep track of emerging competitors and innovative technologies.
- CVC can also be an **offensive** strategy by investing and potentially acquiring or partnering with ventures that provide complementary services or products.
- CVC activity can also be a way to keep and incentivize employees who are entrepreneurial and would otherwise leave to start their own firms and rely on private VC for funding.
- **CVC is more likely in firms that depend on innovation to sustain competitive advantage.**

FIGURE 3.7
Organizational
structure of VC funds

VC funds are usually organized as limited partnerships. The GP manages the fund, while LPs provide most of the investment capital. The fund invests in a portfolio of new ventures.

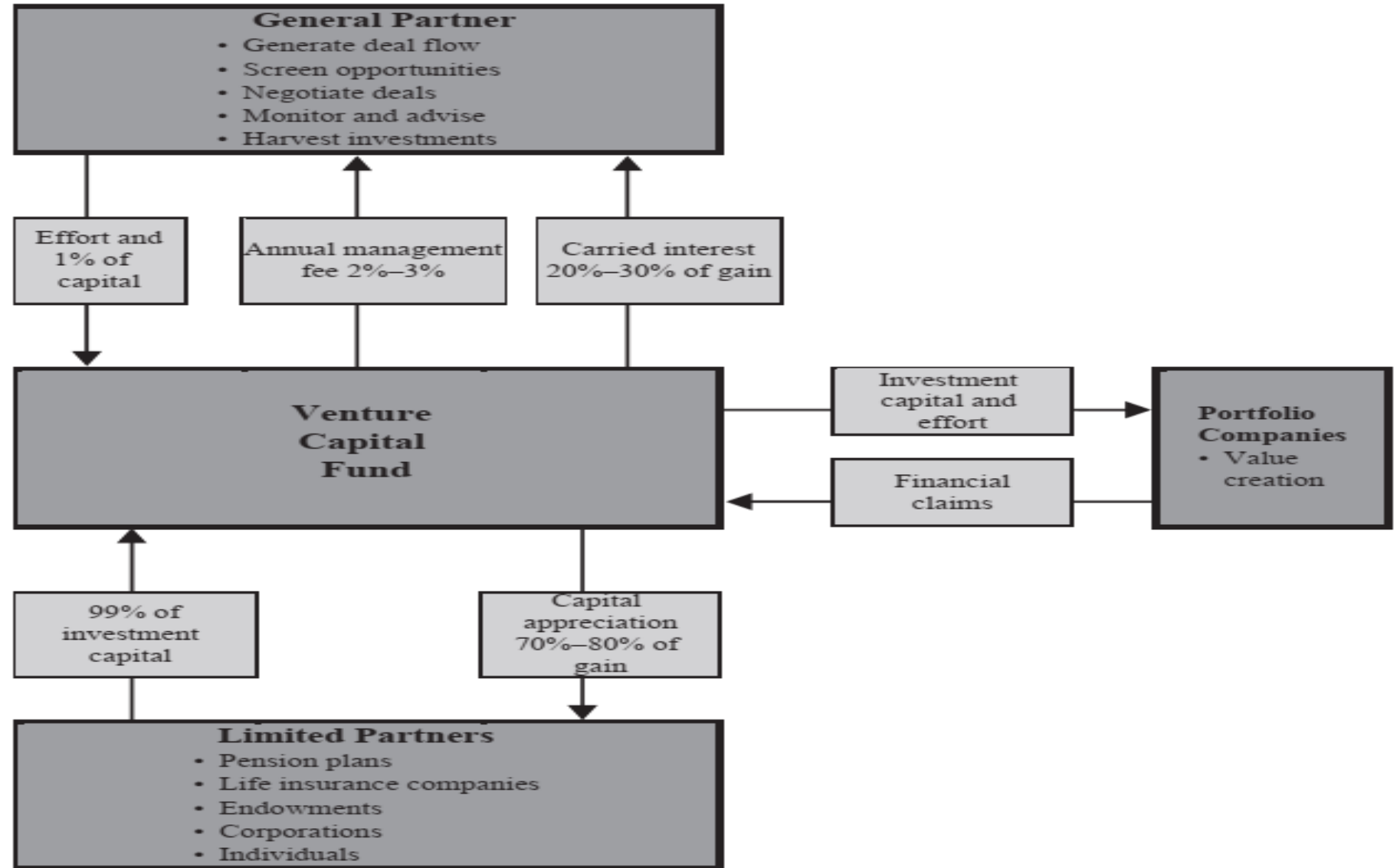
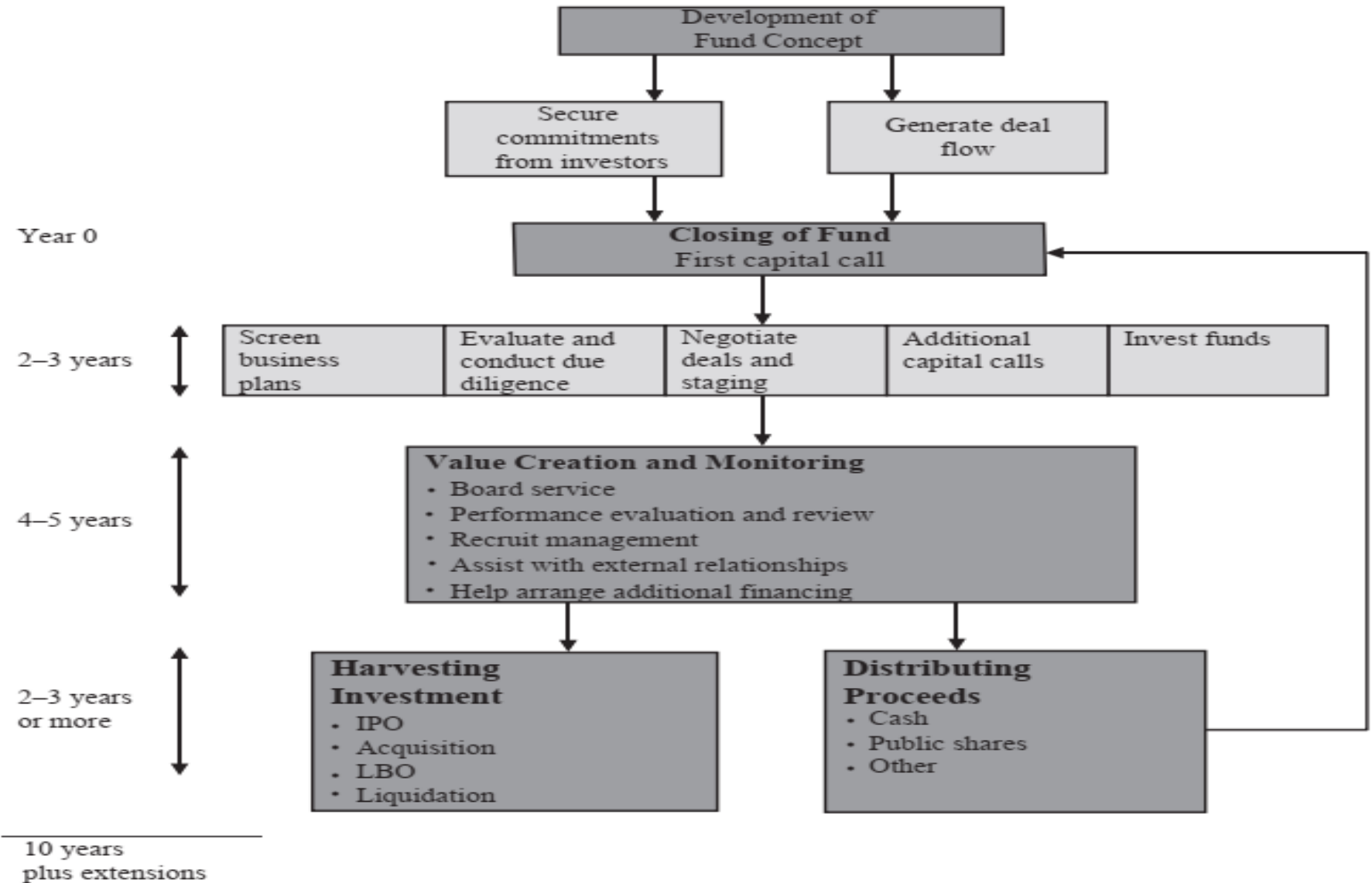


FIGURE 3.8
The VC investment process



Angel Investors

- For ventures based on concepts that require lengthy development efforts, the earliest source of outside financing is often from high-net-worth individuals who invest their own capital either independently or through an organized angel investor group.
- These **angel investors** generally are freelancers who are interested in investing relatively small amounts of money (\$25,000 to \$500,000) in early-stage projects.
- Angel investors often **provide seed capital to develop an idea to the point where more formal outside financing becomes feasible**. Many are willing to invest over horizons of 5 to 10 years.
- In contrast, traditional VC funds usually prefer larger investments and somewhat shorter investment horizons.
- Most estimates put the amount of angel capital invested in the U.S. in recent years at around \$20 billion annually, excluding capital provided by friends and family. According the University of New Hampshire Center for Venture Research, 64,000 entrepreneurial ventures received angel financing in 2016, with an average round size of \$330,000.

Angel Investing

- Angel investors are **rich individuals** who provide capital for start-ups in exchange for either equity (convertible preferred stock) or convertible debt.
- **Convertible debt** is a type of loan that converts to equity at a trigger point, which typically is a subsequent financing event where there is a valuation (such as a VC investment).
- One of the **advantages** of convertible debt is that it is simple because it allows the investor to wait for a third-party valuation, presumably at a point when some major sources of uncertainty about the early-stage venture have been resolved.
- In addition to providing capital, **Angels may also add value** by providing expertise, introductions, monitoring, and so on.
- Angels may invest **individually** or **in groups**.
- Traditionally **angel groups** have been local organizations comprised of around 10 to 150 members (median size 45).
- **The groups enable the angels** to share research costs and due diligence efforts and to pool their investment capital.

3.9 Angel Investing (*Cont.*)

- **Most estimates put the number of angel groups worldwide at around 500.**
- In terms of market size, recent estimates suggest that U.S. angels pump around \$20–\$25 billion per year into start-ups.
- **While the focus of angel investments is usually early-stage, some angels invest in expansion and late-stage as well.**
- The angel organization allows members to pool their capital so that investments can be larger than they would be if made individually.
- The members can also make smaller investments in more opportunities, thereby diversifying.
- **Start-ups benefit from the experience and expertise of the various group members who invest in the firm.**

Angel Group Business Practices.

- **Each angel group has its own set of procedures, policies, and philosophy.**
- Common practices include regular meetings to review business proposals and listen to pitches.
- Angels work together to conduct due diligence.
- **Many angel groups co-invest with other groups, individual angels, and VCs who make early-stage investments.**
- **Like VCs, angel groups invest in a range of industries.**
- Among the most common are software, medical devices, telecom, and manufacturing.
- Most groups follow a procedure of screening business plan submissions to eliminate applications that are not appropriate.
- If selected, the founder is invited to an “investment meeting” to make a presentation/pitch, followed by Q&A.
- If a sufficient number of angels indicate they are interested in pursuing a venture, then a team of members will conduct due diligence, and if the new venture survives due diligence and a final screen, then the group or a subgroup will negotiate a term sheet and draft an investment agreement.

Evidence of Angel Impact on Firm Performance.

- Because **Angel investing is a private industry**, data on financial performance is not readily available, and when available, it is subject to a concern with selection bias.
- That is, investments that generate low or zero returns are unlikely to be reported.
- **Instead of relying on self-reported financial performance estimates**, researchers look at objective measures of success such as venture survival, growth, successful exit, and measures of innovation (patents) or impact of innovation (citations to patents).
- Several studies suggest that angels are beneficial to the growth, performance, and survival of start-ups.
- As with VCs, an important question is whether angels add value primarily through superior deal selection or go beyond it and add value through providing technical and managerial expertise and monitoring and facilitating subsequent funding.
- Kerr, Lerner, and Schoar (2014) attempt to distinguish between the two hypotheses by comparing ventures that receive angel group funding to ventures that sought funding but were narrowly rejected.
- The results show that while the selection metrics were similar, ventures that received the funding performed better than those that did not.
- Hence, it appears based on their sample that improved performance is attributable to the types of skills and expertise that angels can bring to the table.

Evidence of angel impact on firm performance.

- Frequently, for ventures that hold promise, an angel investment will be followed by VC.
- In other cases, ventures receive only angel funding and in others, only VC funding.
- **As noted, some VCs compete directly with angels in seed-stage financing.**
- Dutta and Folta (2016) try to exploit the variation to explore how VCs and angel groups may be associated with different outcomes for ventures:
 - -- VCs and angel groups contribute equally to the innovation rates of ventures they finance, but that VC-backed ventures produce more impactful innovation (measured by patent citations) than angel-backed ventures and also faster commercialization.
 - -- VCs are also associated with more successful exit.

Angel Syndicates.

- An **angel syndicate** is a fund created to make a single investment and is led by an individual who is an experienced technology investor or is another entity such as a VC firm.
- The lead identifies an investment opportunity and elects to lead the syndicate as a way to raise funds to pursue the opportunity.
- Once the syndicate is established, accredited investors may seek to join, but their participation must be approved by the lead.
- **As compensation for the lead's efforts to find the opportunity**, conduct due diligence, and monitor the venture after the investment is made, participants in the syndicate agree to pay the lead's carried interest.
- In recent years, angel syndicate platforms such as AngelList and OurCrowd have altered the structure of the industry, which historically has been fragmented by geography.
- **Through Angel Syndicates platforms**, accredited investors can invest beyond their local angel groups. This enables them to gain some geographic diversification and may give exposure to more opportunities.

Angel Syndicates. (Example)

- AngelList provides an example of how this works:
- Suppose a notable angel investor decides to lead a syndicate to invest in a promising new venture. The lead agrees to invest \$250K in the venture. To do so she makes a personal commitment to invest \$50,000, establishes a syndicate as an LLC, and offers the remaining opportunity to prospective investors for the remainder of the deal (\$200,000). The investors who join as members of the syndicate agree collectively to invest \$200,000 in the deal and to pay the lead 15% of any realized gain as a carry. If the investment has a successful exit, the syndicate investors first receive their \$200,000, after which every dollar of the syndicate's profit is split 80% to the syndicate, 15% to the lead, and 5% to AngelList advisors.
- There also will be out-of-pocket costs for each deal, such as fees paid to regulatory agencies and accountants, which syndicate investors typically agree to pay. Much like a VC fund, the syndicate investors do not invest directly in a venture.
- Rather, the syndicate's fund will invest by purchasing preferred shares, convertible debt, or other instruments issued by the company. The syndicate members invest in a special-purpose fund that is specifically created to invest in companies selected by the syndicate lead, and the fund is formed as an LLC. Both individuals and VC funds can form syndicates. By current regulation, each syndicate can only accept up to 99 investors.
- In contrast to the LPs of VC funds, syndicate investors can choose which start-ups they want to invest in and can stop investing at any time, and they also have much lower minimum investments.
- **Syndicates** generally do not charge management fees and use the term *deal carry* (not *fund carry*).
- Also, in general, the syndicate lead will put a larger portion of the total investment into the syndicate than the GP of a VC fund typically puts into a fund.

The SBA's small business investment companies.

- Most SBA (Small Business Administration)-guaranteed financing is provided through **Small Business Investment Companies (SBICs)**.
- **SBICs are privately owned and managed, for-profit organizations that are licensed by the SBA.**
- **With their own capital** (raised from private sources including banks, corporations, individuals, and others) **and with borrowed funds, SBICs provide capital to new and established small businesses.**
- **SBIC financing** usually takes the form of interest-bearing loans that are guaranteed by the SBA.
- Because of government support, the capital that SBICs invest is obtained at below-market rates.
- An SBIC that is faced with competition to supply funds to a venture may be compelled to pass along some of these savings.
- More recently, the program has broadened to enable financing that is more like equity, such as loans that include warrants where the total return is tied to venture success.
- While SBICs have invested in such companies as Apple, Costco, FedEx, and Whole Foods, the impact of SBA loan guarantee programs on entrepreneurial activity is small.

- The SBA also offers some grant programs, but the grants generally support **not-for-profit organizations, lending institutions, and state and local government entities** that provide small business management or assistance to small businesses.
- Although SBICs are involved in financing at about the same stages as VC, the normal interest-bearing structure of the financing makes it better suited for firms that are less risky than typical VC-backed firms.
- SBICs prefer firms with more limited growth potential that need financing for working capital and have the ability to achieve profitable operations quickly.

The small business innovation research program.

- If the venture involves technology, several government agencies sponsor grants under the auspices of the **Small Business Innovation Research (SBIR) program**.
- Participants include the Departments of Agriculture, Commerce, Defense, Education, Energy, and Health and Human Services, as well as the National Aeronautics and Space Administration (NASA) and the National Science Foundation.
- SBIR Plan I research grants provide funding defined by milestones; in Phase I, they provide seed capital and funding for up to \$150,000 to explore commercial feasibility, while Phase II grants are usually around \$1,000,000 for up to two years.
- The goal is to expand R&D and further assess viability.
- Phase III involves transitioning from the lab to the market, during which time the firm searches for follow-on private sector financing or other government programs; the SBIR does not fund this phase.

Trade credit

- **Trade credit, or vendor financing**, is the largest source of external short-term financing for firms in the U.S. and is even more important in emerging economies, where risk capital can be scarce.
- **Vendor financing** arises whenever a business makes a purchase from a supplier that offers trade credit.
- *For example*, a venture that buys supplies on terms of net 30 receives the supplies right away but does not need to pay until 30 days later. In effect, the supplier is providing the venture a zero-interest-rate loan for 30 days.
- Trade credit appears on the borrower's balance sheet as an account payable. The same loan appears on the supplier's balance sheet as an account receivable.
- The difference between a firm's accounts payable and its accounts receivable is **its net trade credit**.
- The net trade credit balance defines the firm in terms of whether trade credit functions as a net source or net use of funds.
- If accounts payable exceeds accounts receivable, trade credit is a **net source**—that is, borrowing.
- **Not all trade credit is free.**
- When it is not, heavy reliance on trade credit can be very expensive.
- For example, terms of 2/10 net 30 are common. The buyer is offered a 2% discount if the invoice is paid within 10 days; otherwise, the full payment is due in 30 days. If the buyer decides to forgo the discount, there is a sizable opportunity cost.

Factoring

- When a business offers trade credit, it generates accounts receivable.
- In stead of borrowing to finance the receivables, the venture may be able to sell the receivables to a factor.
- A **factor** is a specialist who buys receivables and manages the collection activities.
- **Factoring comes in two basic types:** with and without recourse.
- If factoring is without recourse and a customer does not pay its bill, the factor absorbs the loss.
- Factoring with recourse means that if the customer does not pay, the factor can collect from the venture directly.
- **The three basic parts of a factoring transaction are:**
 - (1) **the advance** (the factor advances a percentage of the face value of the receivables to the seller),
 - (2) **the reserve** (the remainder of the total invoice amount that the factor holds until it receives payment),
 - (3) **the fees associated with the transaction**, which are deducted from the reserve.
- The advance generally ranges from 70% to 90%.
- The fee is calculated as a percentage of the face value of the receivables. It includes compensation for handling the collection and (for a nonrecourse transaction) compensation for assuming the risk of nonpayment.
- Normal fees can be 2–6% and can include implicit interest for the period over which the funds are advanced or an additional component for explicit interest over the period.

Fintech

- Bank loans, factoring, and trade credit are long-lived traditional institutions that have been challenged on many fronts by **financial technology (fintech) ventures** that are looking to disrupt old ways to providing credit to start-ups and small and medium-size enterprises (SMEs).
- **These include:**
 - peer-to-peer (P2P) lending firms,
 - firms that have adopted business models that streamline SBA loans,
 - online lenders (e.g., Kabbage),
 - innovations in creating markets and auctions for trade credit balances (e.g., C2FO.com), and
 - electronic markets for corporate receivables (e.g., NYSE Euronext).
- All these innovations are forms of disintermediation and are aimed at more efficient, speedier financing for firms.
- While most of these innovations in financing have focused on the larger markets in the U.S. and Europe, there is a global movement toward nonbank lending as well.

Franchising and independent contracting

- **Franchising is another way to finance growth.**
- In business format franchising, such as a fast-food restaurant,
- the **franchisor** establishes a business format and offers franchising opportunities to prospective **franchisees**.
- The **franchisee** invests in a facility in a particular locality.
- The facility carries the franchisor's brand and must conform to the general standards of the franchise network.
- Franchisors provide a range of services that can include site selection, training, product supply, marketing, and assistance in arranging financing.
- The franchisee normally pays a franchise fee and makes periodic payments that are partly based on revenues.
- Similarly, companies like Uber and FedEx use **independent contractors** in at least some components of their enterprises.
- Uber drivers and FedEx Ground operators acquire their own vehicle and, in some cases, may employ drivers.

- Uber and FedEx coordinate the activities of the independent contractors and establish service standards.
- **Reasons for franchising and use of independent contractors** are not limited to financing advantages, but the arrangement does allow the franchisor to expand the size and geographic reach of the business rapidly, without having to raise all the capital by itself.
- Among other things, the franchisee may be responsible for identifying the local market opportunity and acquiring the land and facilities, which, if the outlet were company owned, would have been costs borne by the franchisor.
- Franchising is common in a number of industries such as quick-service restaurants, lodging, car rental, automobile dealerships, and full-service restaurants. About one third of all retail sales in the U.S. are made through franchised outlets (including car dealers and gas stations).
- The practice has also increased the international reach of well-known consumer brand names. McDonald's, for example, is so pervasive that the "Big Mac Index" is sometimes used as an indicator of purchasing power parity across countries.
- There are also companies that do not "franchise" in a formal legal sense, but instead enter into licensing agreements for operation (e.g., Shake Shack). Still, the licensing revenue stream provides the parent firm with financing. The legal distinctions between licensing and franchising are nuanced and important to consider before choosing to adopt one approach versus the other.

Mezzanine capital

- Mezzanine financing is a hybrid of debt and equity financing that gives the lender the right to convert the debt to an equity interest in the company in case of default.
- Some VC firms and other private equity firms offer this type of financing.
- The financing generally is a hybrid of senior debt and common equity.
- A frequently used instrument is subordinated debt with an equity “sweetener” or warrants.
- Warrants entitle the holder to buy shares of the firm’s common stock at a stated price for a period of time.
- For example, each \$1,000 of borrowing might provide the mezzanine lender with warrants to purchase 20 shares of stock at \$5 each.

Initial Public offering (IPO)

- **In an IPO**, the issuing company raises capital by selling registered equity shares to the public via a formal offering process.
- Since the IPO gives rise to a liquid market for company shares, it can be a convenient exit or harvesting mechanism for VCs and other investors.
- **Going public** provides a way for the venture to raise equity capital and for early investors to realize returns on their investments, achieve liquidity, and diversify.
- An IPO also. provides a market-determined valuation that can be used as a basis for negotiating merger and acquisition (M&A) transactions
- Where the venture's track record is clear, large amounts of capital are needed, and potential synergies with other firms are absent, an **IPO may bring a higher share price than a private placement.**
- Public ownership also provides a way to create equity incentives for employees.
- The stock price is a barometer of market expectations and can provide information about how investors expect economic events and managerial decisions to affect future earnings.

- Finally, a publicly traded firm may be able to raise additional capital more quickly and cheaply than if it were private.
- On the cost side, IPOs are expensive in terms of time and costs of the offering and ongoing compliance with SEC regulations and reporting requirements.
- Already-scarce managerial time must be diverted from the business and devoted to the IPO process and ongoing reporting.
- The presence of a visible stock price may also induce management to be unduly concerned with short-term stock price fluctuations.
- In recent years, the private equity market has developed to the point where some of the historical benefits of being public are less apparent.

later-stage Financing alternatives

- The list of financing sources could be extended considerably. Other possibilities include:
- merger and acquisition (M&A),
- leveraged buyout (LBO), and
- management buyout (MBO).

-- We address these alternatives later in the text when we analyze the choice of how early-stage investors harvest their investments.

- **M&A, for example, is a much more likely exit outcome for a successful start-up than is an IPO.**

Private debt (Debt financing)

- **Private debt**, such as commercial bank debt, sometimes is appropriate for small businesses, particularly those with steady, verifiable cash flows, where the business is not expected to grow rapidly.
- This type of financing is more likely for replicative types of entrepreneurial ventures, such as those that employ established business models and are created to serve a growing population—such as independently owned dry cleaners, bakeries, restaurants, and health clubs.
- The venture should be in a position to make the interest payments and to take advantage of the tax deductibility of interest payments.
- Debt financing may make sense for a rapidly growing venture. **There are two primary reasons for using debt to finance growth:**
- ***First***, because interest payments are tax deductible, debt may be less expensive than equity for a firm that has consistent earnings.
- ***Second***, debt holders usually cannot vote. Therefore, equity owners do not lose voting control when debt is issued. However, debt is a contractual obligation, so in the event of bankruptcy, bondholders have priority over equity owners and may effectively gain control.

Private Placements of equity and debt

- Sometimes a firm would like to raise a specific amount of capital quickly and would prefer to avoid the cost and time required to complete a public offering.
- This can be accomplished by **private placement of debt or equity**.
- The private placement market generally is more attractive than the public market for small equity or debt issues or for debt issues backed by complex security arrangements where flexibility is desired.
- **Angel and VC financing are equity private placements at early stages.**
- The term “**private placement**,” however, applies more broadly to any sale of equity or debt securities to a selected group of investors by means other than a public offering.
- **One advantage of private placements** is that the venture avoids the complex, ongoing reporting that would be required if it were to raise capital via public offering. In addition, an entrepreneur can use private placement to limit the number of people who gain access to strategic information about the venture.

- Stakeholders in the new venture, including employees, distributors, retailers, suppliers, and so on, are potential investors in equity private placements, as are insurance companies, pension funds, and high-net-worth individuals.
- **Institutional investors** such as insurance companies and pension funds **are candidates for buying privately placed debt.**
- Often, private equity is structured as convertible preferred stock. Preferred stock typically converts to common at an IPO.
- Privately placed debt may have some advantages as compared to a public issue.
- As with equity, the costs of a private placement of debt tend to be lower and the placement can be quicker.
- Also, it is possible to negotiate greater flexibility in the terms than would be possible for a public offering.
- A significant advantage of a privately placed issue is that it may facilitate monitoring.
- A public debt issue normally has many investors.
- The resulting diffuse ownership encourages free riding in terms of investor effort devoted to monitoring the company.
- In contrast, if a debt or equity issue is placed privately, ownership is concentrated and there are significant incentives to monitor management. The small number of investors also facilitates renegotiating the terms of the investment agreement if circumstances change.



Summary

- The modern VC firm has its roots in the U.S. in the mid twentieth century.
- Limited partnership is the most common structure for VC investment.
- The limited partners provide financial capital, while the general partner locates and cultivates the ventures and arranges for harvesting the investments.
- Harvesting usually takes the form of arranging for the venture to go public via an IPO, a private sale to another company, or a management buyout. LPs are precluded from active participation in fund management.
- The aggregate amount of capital invested in U.S. VC funds increased dramatically through 2000, largely as a result of institutional investors having more flexibility in their investment decisions. As commitments of capital increased, so did competition for deals. Intensified competition has heightened incentives to improve valuation methods and to develop more sophisticated approaches to generating and structuring deals, marketing them to investors, and designing exit strategies.
- Following an investment in a portfolio company, the GP's responsibility shifts to creating value in the portfolio company. This means that a partner of a VC firm may sit on the board of directors of the venture. The VC firm is responsible for monitoring operations, recruiting management team members, arranging additional financing, and generally providing expertise and industry contacts. The VC fund has a limited life span and at some point, usually after about 5 years, begins to harvest its investments. The chapter reinforces the role of reputation in the VC market.
- We considered the contracts that characterize the industry: contracts between the LPs and the GP. The terms and provisions of partnership agreements reflect issues regarding risk bearing and incentive alignment. LPs are passive investors who relinquish control of their investment to a GP that does not bear the full cost of its decisions. Among the issues that arise in this setting are sorting (selecting the portfolio companies from the deal flow) and controlling agency costs and operating costs. Contractual compensation reflects the respective functions of the two types of partners. If the fund does well, the GP realizes a significant return through its carried interest; if the fund does poorly, almost the entire loss accrues to the LPs. Hence, GP compensation is linked to value creation in an asymmetric way. The final section of the chapter deals with angel investing. Individual angels can make individual investments in start-ups or they can invest through an organized angel group or through an angel syndicate, which is a new and evolving investment platform.
- We document an increase in angel activity worldwide and the business practices that angel groups and syndicates use when making investments.
- Because the industry is highly fragmented, data on investment performance is sparse and relies on self-reported numbers.
- Recent studies suggest a positive role for angels as measured by successful exits and innovative activity.

See you next lecture 03

Thank You