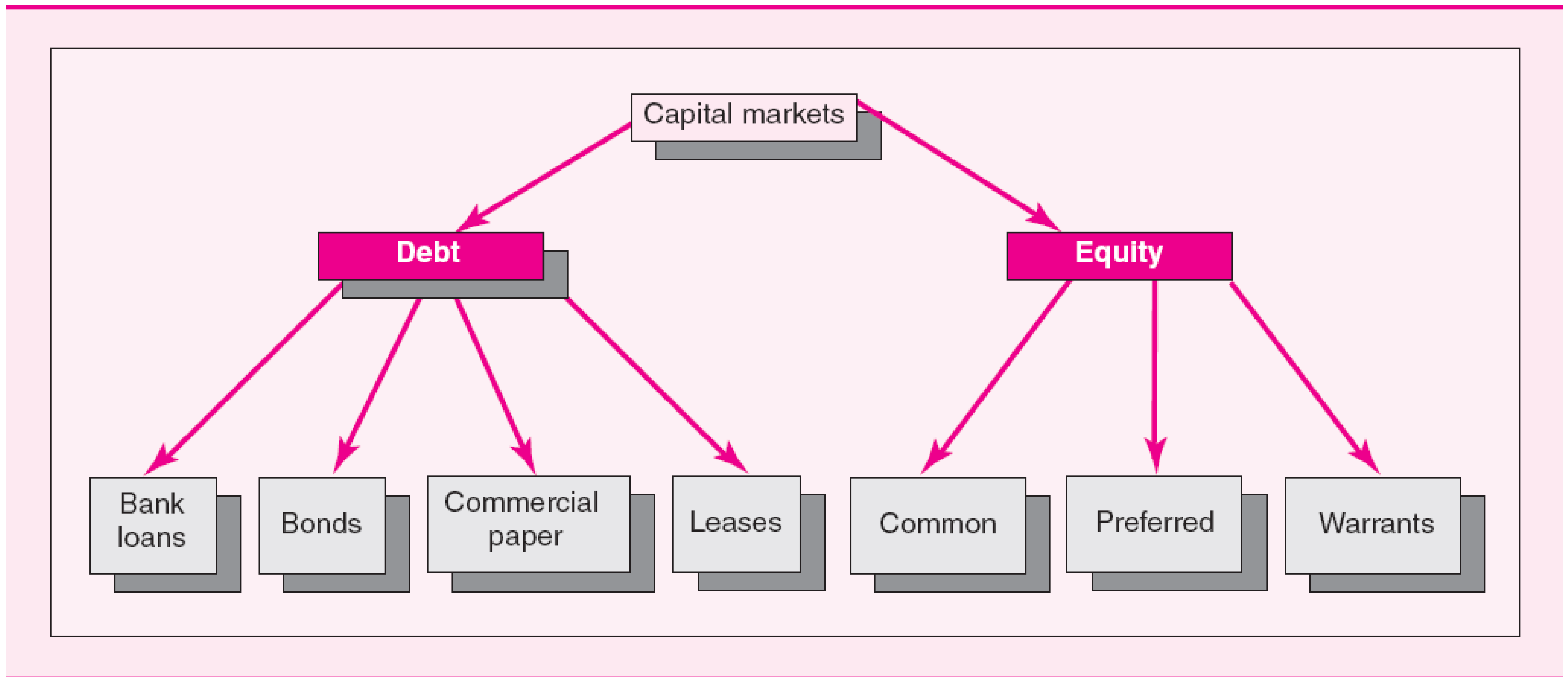
Raising Capital
The Process and the Players

Decisions Facing the Firms

- Firms can raise investment capital from many sources with a variety of financial instruments.
  - The firm's financial policy describes the mix of financial instruments used to finance the firms
- Internal Capital
  - Firms raise capital internally by **retaining the earnings** that generate
- External Capital: Debt vs. Equity
  - Firms must **gain an access to the capital** market and make a decision about a type of funds to raise.

Sources of Capital



Public and Private Source of Capital

- Firms raise debt and equity capital from both **public** and **private sources**
  - Capital raised from public sources must be in the form of registered securities
- Securities are publicly traded financial instruments
- **Public securities** differ from private instruments because they can be **traded in public secondary market** like NYSE, PSE, FSE etc.
- Private capital comes at most in the form of **bank loans** or in the form called as **private placements**
  - Financial claims takes of the registration requirements that apply to securities
  - To quality for this private placement exemption, the issue must be restricted to a small group of sophisticate investors – fewer than 35 in number – with minimum income or wealth requirements
    - These sophisticate investor are very often represented by insurance companies of pension funds

Public and Private Source of Capital

- Public markets tend to be anonymous, that is, buyers and sellers can complete they transactions without knowing each others identities
  - Uninformed investor run the risk of trading with other investors that are more informed because they have "inside" information about the particular company and can make a profit from it.
    - Although, insider trading is illegal and uninformed investors are at least partially protected by laws that prevent investors from buying and selling public securities based on insider information.
    - Insider information is an internal company information that has not been made public
      - In contrast, investors of privately placed debt and equity are allowed to base their decision of information that is not publicly known.
        - Because traders in private market are assumed to be sophisticate investors who are aware of each other's identities, inside information about privately placed securities in not as problematic
    - Because private market are not anonymous, they generally are less liquid
      - Transaction costs associated with buying and selling private debt and equity are generally much higher than the costs of buying and selling public securities

The Environment for Raising Capital

- A bulk of regulations govern public debt and equity issue.
  - These regulations certainly increase the costs of issuing public securities, but also provide protection for investors which support the value of securities.
    - Markets that are highly regulated are e.g. markets in Western Europe or in the US
    - less regulated are e.g. emerging market
      - Major risk in emerging markets is that shareholder rights will not be respected and as a result and, many stocks traded in these markets sell for substantially less than the value of their asset

The Environment for Raising Capital

- For example:
  - In 1995 Lukoil, Russia's biggest oil company with proven reserves of 16 billion barrels, was valued at 850 USD million, that implies that its oil was worth 5 cents a barrel
  - At the same time Royal Dutch/Shell with about 17 billion barrels of reserves, had a market value 94 billion USD, making its oil worth more than 5 USD per barrel
  - Lukoil is worth so substantially less because of uncertainty about shareholder's rights in Russia.

Investment banks

- The most important subject in the process of issuing of securities
- Modern investment banks are made up of two parts
  - Corporate businesses
  - Trading businesses

Investment banks

- The Corporate Business
  - The corporate side of investment banking is a fee-for-service business
    - Investment bank sells its expertise
  - The main expertise banks have is in underwriting securities
  - But they are also sell other services
    - Merge and acquisition advice
      - Prospecting for takeover targets
      - Advising clients about the price to be offered for these targets
      - Finding financing for the take over
      - Planning takeover tactics or on the other side takeover defenses
  - Major investment banking houses are also actively engaged in the process of new financial instruments design
    - ETFs, investment certificates, etc.

Investment banks

- The Sale and Trading Business
  - Investment banks that underwrite securities sell them to the bank's institutional investors
  - These investors include mutual funds, pension funds or insurance companies
  - Sales and trading of these institutions also consists of public market making, trading for clients, etc.
    - Market making requires that investment bank act as a dealer in securities. It means that is standing ready to buy and sell, respectively, announces its **bid** and **ask** prices. The bank makes money from the difference between the bid and ask price called bid-ask spread.

The Underwriting Process

- The underwriting of a security issue performs four functions
  - Origination
  - Distribution
  - Risk bearing
  - certification

Origination

- Origination involves giving advice to the issuing forms about
  - the type of security to issue
  - the timing of the issue
  - and the pricing of the issue
- Origination also means working with the firm to develop the registration statement and forming a syndicate of investment bankers to market the issue

Distribution

- It is the second function in underwriting process, distribution means selling of the issue
- Distribution is generally carried out by a syndicate of banks formed by the lead underwriter
- The banks in the syndicate are listed in the prospectus along with how much of the issue each has aggregate to sell

Risk Bearing

- The third function the underwriting process is risk bearing
- In most cases, the underwriter has agreed to buy the securities the firm is selling and to resell them to its clients
- The Rules of Fair Practices prevents the underwriter from selling securities at a price higher than that agreed on at the pricing meeting, so the underwriter's upside is limited
- If the issue does poorly, the underwriter may be stuck with securities that must be sold at bargain prices

Certification

- An addition role of an investment bank is to certify the quality of an issue, which requires that the bank maintain a sound reputation in capital markets
- An investment banker's reputation quickly decline if the certification task is not performed correctly
- If an underwriter substantially misprices an issue, in the future business is likely to be damaged
  - Studies suggested (Booth and Smith 1986) that underwrites require higher fees on issues that are harder to value

Underwriting Agreement

- The underwriting agreement between the firm and the investment bank is the document that specifies **what** is being sold, the **amount** that being sold and the **selling price**.
- The agreement also specifies the underwriting spread, which is the difference between the total proceeds of the offering and the net proceeds that is accrue to the issuing firm
- The underwriting agreement also shows the amount of fixed fees the firm must pay like listing fees, taxes, etc.

PROSPECTUS

2,500,000 Shares

Common Stock

All of the 2,500,000 shares of common stock, $0.01 par value (the "Common Stock"), offered hereby are being sold by QuadraMed Corporation, a Delaware corporation ("QuadraMed" or the "Company"). Prior to this offering, there has been no public market for the Common Stock. See "Underwriting" for a discussion of the factors considered in determining the initial public offering price. The Common Stock has been approved for quotation on the Nasdaq National Market under the symbol "QMDC."

The shares offered hereby involve a high degree of risk.

See "Risk Factors" beginning on page 6 herein for a discussion of certain matters that should be considered by potential investors.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	Price to Public	Underwriting Discount(1)	Proceeds to Company(2)
Per Share	$12.00	$.84	$11.16
Total(3)	$30,000,000	$2,100,000	$27,900,000

(1) The Company has agreed to indemnify the several underwriters identified elsewhere herein (the "Underwriters") against certain liabilities under the Securities Act of 1933, as amended (the "Securities Act"). See "Underwriting."

(2) Before deducting expenses payable by the Company estimated at $900,000.

(3) The Company has granted the Underwriters a 30-day option to purchase up to 375,000 additional shares of Common Stock on the same terms and conditions as set forth above, solely to cover over-allotments, if any. If the Underwriters exercise this option in full, the total Price to Public, Underwriting Discount and Proceeds to Company will be $34,500,000, $2,415,000 and $32,085,000, respectively. See "Underwriting."

The shares of Common Stock are offered by the Underwriters, subject to prior sale, when, as and if issued to and accepted by the Underwriters and subject to approval of certain legal matters by counsel for the Underwriters. It is expected that delivery of the Common Stock will be made against payment therefor on or about October 15, 1996, in New York, New York.

Jefferies & Company, Inc. **Pacific Growth Equities, Inc.**

October 10, 1996

UNDERWRITING

Subject to the terms and conditions of the Underwriting Agreement, the Company has agreed to sell an aggregate of 2,500,000 shares of Common Stock to the Underwriters named below (the "Underwriters"), for whom Jefferies & Company, Inc. and Pacific Growth Equities, Inc. are acting as representatives ("Representatives"), and the underwriters have severally agreed to purchase from the Company the number of shares of Common Stock set forth opposite their respective names in the table below at the price set forth on the cover page of this Prospectus.

Underwriter	Number of Shares
Jefferies & Company, Inc.	930,000
Pacific Growth Equities, Inc.	930,000
Bear, Stearns & Co. Inc.	40,000
Alex. Brown & Sons Incorporated	40,000
Donaldson, Lufkin & Jenrette Securities Corporation	40,000
Lehman Brothers Inc.	40,000
Montgomery Securities	40,000
Morgan Stanley & Co. Incorporated	40,000
Prudential Securities Incorporated	40,000
Smith Barney Inc.	40,000
Brean Murray, Foster Securities, Inc.	20,000
Cowen & Company	20,000
Fahnestock & Co. Inc.	20,000
First of Michigan Corporation	20,000
Hampshire Securities Corporation	20,000
M.H. Meyerson & Co. Inc.	20,000
Morgan Keegan & Company, Inc.	20,000
Needham & Company, Inc.	20,000
Piper Jaffray Inc.	20,000
Punk, Ziegel & Knoell	20,000
The Robinson-Humphrey Company, Inc.	20,000
Unterberg Harris	20,000
Vector Securities International, Inc.	20,000
Wessels, Arnold & Henderson, L.L.C.	20,000
Wheat First Butcher Singer	20,000
The Williams Capital Group, L.P.	20,000
Total	2,500,000

The Underwriting Agreement provides that the obligation of the Underwriters to purchase shares of Common Stock is subject to certain conditions. The Underwriters are committed to purchase all of the shares of Common Stock (other than those covered by the over-allotment option described below), if any are purchased.

The Underwriters propose to offer the Common Stock to the public initially at the public offering price set forth on the cover page of this Prospectus, and to certain dealers at such price less a concession not in excess of $0.52 per share. The Underwriters may allow, and such dealers may reallow, a discount not in excess of $0.10 per share to certain other dealers. After this offering, the public offering price, the concession to selected dealers and the reallowance to other dealers may be changed by the Representatives. The Representatives have informed the Company that the Underwriters do not intend to confirm sales to any accounts over which they exercise discretionary authority.

The Company has also granted to the Underwriters an option, exercisable for 30 days from the date of this Prospectus, to purchase up to 375,000 additional shares of Common Stock at the public offering price, less the underwriting discount. To the extent such option is exercised, each Underwriter will become obligated, subject to certain conditions, to purchase additional shares of Common Stock proportionate to such Underwriter's initial commitment as indicated above in the preceding table. The Underwriters may exercise such right of purchase only for the purpose of covering over-allotments, if any, made in connection with the sale of the shares of Common Stock.

Classifying Offering

- IPO
  - Initial Public Offering
    - Issuing equity to the public for the first time
- SEO
  - Seasoned Offering
    - If a firm has already publicly traded and is simply selling more common stock
- Both IPO and SEO can include primary and secondary issues
- In a primary issue
  - A firm rises capital for itself by selling stock to the public
- In a secondary issue
  - It is undertaken by existing shareholders who want to sell a number of shares they currently own

The Costs of Debt and Equity Issues

EXHIBIT 1.7 **Direct Costs as a Percentage of Gross Proceeds for Equity (IPOs and SEOs) and Straight and Convertible Bonds Offered by Domestic Operating Companies, 1990–1994**

	Equity						Bonds					
	IPOs			SEOs			Convertible Bonds			Straight Bonds		
Proceeds (millions of dollars	*GS*[a]	*E*[b]	*TDC*[c]	*GS*	*E*	*TDC*	*GS*	*E*	*TDC*	*GS*	*E*	*TDC*
$ 2–9.99	9.05%	7.91%	16.96%	7.72%	5.56%	13.28%	6.07%	2.68%	8.75%	2.07%	2.32%	4.39%
10–19.99	7.24	4.39	11.63	6.23	2.49	8.72	5.48	3.18	8.66	1.36	1.40	2.76
20–39.99	7.01	2.69	9.70	5.60	1.33	6.93	4.16	1.95	6.11	1.54	0.88	2.42
40–59.99	6.96	1.76	8.72	5.05	0.82	5.87	3.26	1.04	4.30	0.72	0.60	1.32
60–79.99	6.74	1.46	8.20	4.57	0.61	5.18	2.64	0.59	3.23	1.76	0.58	2.34
80–99.99	6.47	1.44	7.91	4.25	0.48	4.73	2.43	0.61	3.04	1.55	0.61	2.16
100–199.99	6.03	1.03	7.06	3.85	0.37	4.22	2.34	0.42	2.76	1.77	0.54	2.31
200–499.99	5.67	0.86	6.53	3.26	0.21	3.47	1.99	0.19	2.18	1.79	0.40	2.19
500 and up	5.21	0.51	5.72	3.03	0.12	3.15	2.00	0.09	2.09	1.39	0.25	1.64
Average	7.31%	3.69%	11.00%	5.44%	1.67%	7.11%	2.92%	0.87%	3.79%	1.62%	0.62%	2.24%

Note:

[a]GS—gross spreads as a percentage of total proceeds, including management fee, underwriting fee, and selling concession.

[b]E—other direct expenses as a percentage of total proceeds, including management fee, underwriting fee, and selling concession.

[c]TDC—total direct costs as a percentage of total proceeds (total direct costs are the sum of gross spreads and other direct expenses).

Source: Reprinted with permission from the *Journal of Financial Research*, Vol. 19, No. 1 (Spring 1996), pp. 59–74, "The Costs of Raising Capital," by Inmoo Lee, Scott Lochhead, Jay Ritter, and Quanshui Zhao.

The Costs of Debt and Equity Issues

- Debt fees are lower than equity fees
  - Equities are related with higher risk
  - Bonds are easier for pricing than stock
- There are economies of scale in issuing
  - Fixed fees decline as issue size rises
- IPO is much more expensive than SEO
  - IPOs are far riskier and much more difficult to price

Trend in Raising Capital

- Globalization
- Deregulation
- Innovative Instruments
- Technology
- Securitization

Globalization

- Capital market are now global
- Large multinational firms routinely issue debt and equity outside their domestic country
- By taking advantages of the differences in taxes and regulations across countries, corporation can sometimes lower their cost of funds
  - As firms are better able to shop globally for capital, we can expect regulation around the world to become similar and the taxes associated with raising capital to decline
    - As a result, the costs of raising capital in different part of worlds are likely to equalized

Deregulation

- Deregulation and globalization go hand in hand
- Capital will tend to go to countries where returns are large and restrictions on inflows and outflows are small

Innovative Instruments

- New instruments
  - Allow firms to avoid the constraints and costs imposed by government
  - Tailor securities to appeal to new sets of investors
  - Allow firms to diminish the effects of fluctuating interest and exchange rates
- The result of this process is a wide range of financial instruments available in the global amrket place

Technology

- Technology allows many of these recent trends to take place
  - Technology leads to continuous 24-hour trading around the world, thus producing a true world market in some securities

Securitization

- It is the process of bundling
  - that is, combining financial instruments that are not securities, registering the bundles as securities, and selling them directly to the public
    - E.g. CMOs – Collateralized Mortgage Obligations
      - Debt contracts based on the payoffs of bundles of publicly traded mortgages
    - Market of asset-backed securities

Investment Banks and Venture Capital Firms

Investment Banks

- Investment banks are best known as
  - **Intermediaries** that help corporations **raise funds**
- Investment banks provide many valuable and sophisticate services
  - Investment bank **is not a bank in the ordinary sense**, that is, it is not a financial intermediary that takes in deposits and then lend them out
- In addition to underwriting the initial sale of stocks and bonds
  - Investment banks also play a pivotal role as deal markets in **merges and acquisitions** area
    - As intermediaries in the buying and selling of companies
- Well-known investment banking firms are
  - Morgan Stanley, Merrill Lynch or Goldman Sachs

Investment Banks

- One feature of investment banks that distinguishes them from stockbrokers and dealers is
  - That they usually earn their income from **fees charged to clients** rather than from **commissions** on stock trades
  - These fees are often set as a fixed percentage of size of the deal being worked
  - The percentage fee will be smaller for large deals
    - 3%
  - And much larger for smaller deals
    - Sometimes exceeding 10%

Investment Banks: Background

- In the early 1800s most of the American securities had to be sold in Europe
- As a result, most of the securities firms developed from merchants that operated a security business as a sideline to their primary business
  - Morgans built their initial fortune with the railroads
  - To help raise the money to finance railroad expansion, J.P. Morgan's father resisted in London and sold their Morgan railroad securities to European investors
- Prior to the Great Depression, many large, money center banks in NY **sold securities** and **conducted conventional banking activities**
  - During the Depression, about 10.000 banks failed (about 40% of all commercial banks)
- This led to the passage of the **Glass-Steagall Act**, which **separated commercial banking from investment banking**

Investment Banks: Background

- The Glass-Steagall Act made it illegal for a commercial bank to buy or sell securities on behalf of its customers
- The original reasoning behind this legislation was to insulate commercial banks from greater risk inherent in the securities business
- There were also concerns that conflicts of interest might arise that would subject commercial banks to increased risk
  - An investment banker working at a commercial bank makes a mistake pricing a new stock offering

Mergers and Acquisitions

- Investment banks have been active in the mergers and acquisitions market since the 1960s
- A merge occurs when two firms combine to form one new company
  - Both firms support the merger, and corporate officers are usually selected so that both companies contribute to the new management team
  - Stockholders turn in their stock for stock in the new firm
- In an acquisition, one firm acquires ownership of another by buying its stock
  - Often this process is friendly
  - At other times, the firm being purchased may resist
    - Resisted takeovers are called hostile
      - In these cases, the acquirer attempts to purchase sufficient shares of the target firm to gain a majority of the seats on the board of directors

Mergers and Acquisitions

- Investment bankers serve both acquirers and target firms
- **Acquiring firms require** help in **locating attractive firm** to purchase, soliciting shareholders to sell their shares in a process called a **tender offer**, and raising the require capital to complete the transaction
- Target firms may hire investment bankers to help **ward off** undesired takeover attempts

Private Equity Investment

- When is talking about investing there are usually discussing stocks and bonds
- However, there is an **alternative** to **public** equity investing, which is **private** equity investing
- With private equity investing, instead to raising capital by selling securities to the public, a **limited partnership** is formed that **raises money from a small number of high-wealth investors**
- Within the broad universe of private equity sectors, the two most common are
  - Venture funds
  - Capital buyouts

Venture Capital Firms

- Venture capital firms provide the **funds** a **start-up company** needs to get established
- This money is most frequently raised by limited partnerships and invested by the general partner in firms showing promise of high returns in the future
- Venture capitalists backed many of the most successful high-technology companies during the 1980s and 1990s
  - Apple Computer, Cisco Systems, Microsoft, Sun Microsystems, etc
- And number of service firms
  - Starbucks

Venture Capitalists Reduce Asymmetric Information

- Uncertainty and information asymmetries frequently accompany start-up firms
  - Especially in high-technology communities
- Managers of these firms may engage in **wasteful expenditures**, such as leasing expensive office space, since the manager may benefit from disproportionately from them but does not bear their entire cost
- Or biotechnology company founder may invest in research that brings personal acclaim but little chance for significant returns to investors
- As a result of these **information asymmetries**, **external financing may be costly**, **difficult, or even impossible to obtain**

Venture Capitalists Reduce Asymmetric Information

- First, as opposed to bank loans of bond financing, **venture capital firms hold an equity interest in the firm**
- The firms are usually **privately held**, so the stock does not trade publicly
- Equity interests in privately held firms are very illiquid
- As a result, venture capital **investment horizons are long-term**
- The partners do not expect to earn any return for a number of years, often as long as a decade

Venture Capitalists Reduce Asymmetric Information

- Investors in stocks or bonds are often unwilling to wait years to see in a new idea, process, innovation, or invention will yield profits
- Venture capital financing thus fills an important gap left vacant by alternative sources of capital
- As a second method of addressing the asymmetric information problem, venture capital usually comes with **strings attached**, the most noteworthy being that the **partners in a venture capital firm take seats on the board of directors of the financed firm**
  - Venture capital firms **are not passive investors**
    - They active attempt to add value to the firm through advice, assistance and business contracts

Venture Capitalists Reduce Asymmetric Information

- One of the most effective ways venture capitalists have of controlling managers is to distribute funds to the company in stages only as the firm demonstrates progress toward its ultimate goal
  - If development stalls or markets changed funds can be withheld to cut losses
- Implicit to venture capital financing is an expectation of high risk and large compensating returns
- Venture capital firms will search very carefully among hundreds of companies to find a few that show real growth potential

Origin of Venture Capital

- The first true venture capital firm was **American Research & Development**, established in 1946 by MIT president Karl Compton
- The bulk of their success can be traced to on $70.000 investment in a new firm, the Digital Equipment Company
  - This invested money grew in value to $355 million over the next three decades

Origin of Venture Capital

- During the 1950s and 1960s, most venture capital funding was for the development of real estate and oil fields
- By the late 1960s, the U.S. Department of labour clarified the **prudent man rule**, which restricted pension funds from making risky investments
  - Explicitly allowed investment in some high risky assets
  - This resulted in a surge of pension fund dollars going into venture projects

Origin of Venture Capital

- Corporate funding of venture capital projects increased when many companies **reduced** their **investment** in their own in-house **R&D** in favor of outside start-up companies
- This change was fueled by evidence that many of the best ideas from in-house centralized R&D were unused or were commercialized in new firms started by defecting employees
  - Salaried employees tend not to be as motivated as businessman who stand to capture a large portion of the profits a new idea may generate

Structure of Venture capital Firms

- Most early venture capital firms were organized as **closed-end mutual funds**
  - Close-end mutual fund sells a fixed number of shares to investors
  - Once all of the shares have been sold, no additional money can be raised
  - Instead, a new venture fund is established
- The advantage of this organization structure is that it provides the **long-term money** required for venture investing
  - Investors **can not pull money** out of the investment as they could from an open-end mutual fund

Structure of Venture capital Firms

- In the 1970s and 1980s, venture capital firms began organizing as **limited partnerships**
- While both organizational forms continue to be used, currently most venture capital firms are limited partnerships

The Life of a Deal

- Most venture capital deals follow a similar life cycle
  - That begins when a limited **partnership is formed** and funds are raised
  - In the second phase, the funds are **invested in start-up companies**
  - Finally, the venture firm **exits** the investment

Fundraising

- A venture firms begins by soliciting **commitments of capital** from investors
  - Pension funds, corporations, wealthy investors
- Ventura capital firms usually have a **portfolio target** amount that they attempt to raise
  - Because the minimum commitment is usually to high, venture capital funding is generally out of reach of most average individual investors
- The limited partners understand that investment in venture funds are long term
  - It may be several years before the first investment starts to pay
  - In many cases, the capital may be tied up for seven to ten years
  - The illiquidity of the investment must be carefully considered by the potential investor

Investing

- Once the commitments have been received, the venture fund can begin the investment phase
- Frequently, venture capitalists invest in a firm before it has a real product or is even clearly organized as a company
  - **Seed investing** 60 %
- Investing in a firm that is a little further along in its life cycle is known as
  - **Early-stage investing** 25 %
- Finally, some funds focus on later-stage investing
  - Providing funds to help the company grow to a critical mass to attract public financing 15%

Exiting

- The goal of the venture capital investment is to help a firm *until* it can be **funded with alternative capital**
- Venture firms hope that an exit can be made in no more than seven to ten years
- Once an exit is made, the partners receive their **shares of the profits** and fund is dissolved

Exiting

- There are number of ways for a venture fund to successfully **exit** an investment
  - Through an IPO
    - At a public stock offering, the venture firm is considered as insider and receives stock in the company, but the firm is regulated and restricted in how that stock can be sold or liquidated for several years
- Once the stock is freely tradable, usually after two years, the venture fund distributes the stock to its limited partners, who may then hold the stock or sell it
- Over the last 25 years, over 3.000 companies financed by venture funds have had IPOs
- An equally common type of successful exit for venture investment is through merges and acquisitions
  - Venture firms receives cash or stocks from the acquiring company
    - These proceeds are then distributed to the limited partners

Venture Fund Profitability

- Venture investing is **extremely high-risk** and most start-up firms do not succeed
- If venture investing is high-risk, then there must also be the possibility of a high return to induce investors supplying funds
- Historically, venture capital firms have been very profitable
  - The 20-year average return is 16,5%
    - Seed investing is most profitable with a 20-year average return 20,4%, compare to about 13,5% for later-stage investing

Thank you for you attention