Turning up the Heat: How Venture Capital Can Help Fuel the Economic Transformation of the Great Lakes Region

Appendices

Appendix A

Key Venture Capital Words, Phrases and Concepts[1]

Venture capital refers to cash invested by professional investors in new companies with prospects for rapid growth, substantial size, and attractive profitability.

The definitions of **pre-seed, seed, and early stage** venture investing refer to the earliest stages of professional investing, often when the company does not yet have all of the components of a fully functioning enterprise, namely: management, developed products, and sales. **Pre-seed investments** usually take place before a company is formed and finance the early stages of technology development and company formation. These stages are succeeded by **seed** and **early stage** investing, when some elements of company operations are in place, but where management teams, products, and markets are not fully tested against the competition. Generally speaking, all three investment phases occur pre-revenue or before meaningful revenue is earned.

Investors in start-up companies include the business **founders,** their **friends and families, angels,** and **professional venture capitalists.** Investing in these businesses generally starts with the founders and proceeds through friends and family members who personally know the founders; investors may also include angel investors who may not have personal acquaintance with the founders, and/or professional venture capitalists who are investing in the business without any necessary prior involvement with any of the company's other investors.

Historically, **angel investors** were high net-worth individuals who provided investment cash without becoming involved in management of the enterprise. Today, angel investors are more likely to be members of **angel networks** or investors in **angel funds** that consider investments together and often assist company managers with ongoing advice. These angel networks make information sharing about potential deals more efficient and are gradually becoming more consciously organized and led throughout the Great Lakes region.[2] Angels, whether or not in a network, may or may not invest together. Angels have become increasingly important in seed and early stage investing, as venture capital firms have been driven "upstream" by the demands of financial efficiency that require them to raise larger venture funds and to make larger (i.e. later stage) investments.

Examples of angel networks can be found throughout the Great Lakes states. For example, RAIN Source Capital in Minnesota works with 12 local angel groups in Minnesota and Iowa in a network of angel RAIN funds.[3] And 17 angel networks have been formed in Wisconsin since 2000.[4]

Professional **venture capitalists** are usually organized as partnerships with both general and limited partners.[5] **General Partners** are the venture capitalists themselves, who manage the venture fund in return for an annual fee (usually two to two and a half percent of the fund's principal annually) and a share (usually 20 percent) in the profits from their venture investments. The General Partners obtain their money from **Limited Partners**,

institutions and high net-worth individuals who make capital contributions to the venture fund but take no part in managing the fund's investments. Examples of institutional Limited Partners are public and private pension funds and university and foundation endowments. Limited Partners ordinarily share in 80 percent of the returns from fund investments.

Limited Partners make **asset allocations** among the various components of their investment portfolios. Just as individuals diversify their holdings, Limited Partners allocate their holdings across a range of risks. Most such investors will allocate a portion of their investments to **private equity**, which includes venture capital and the now much larger **hedge fund** category. Private equity refers to investments that are not traded on public stock exchanges, like the New York Stock Exchange. Because the shares in venture capital-backed companies are not, in the beginning, publicly traded, they are one type of private equity and generally regarded as higher risk than investments in publicly-traded shares. Asset allocations to venture capital are generally a very small percentage of total assets under management by institutional investors. Among public pension funds in the Great Lakes states, for example, venture capital allocations range from zero at many funds to 5.7 percent at the Minnesota State Board pension fund.[6]

In deciding how to make their asset allocations, pension funds and other institutional investors rely on independent **investment advisory firms**, often called **"gatekeepers."** These firms are one part of the troika of decision-makers for institutional investors, the other two being the investor's management and its board. The role of the gatekeepers in determining asset allocations is critically important, especially in situations where the investor's board is not composed of financial professionals.

In the beginning years of venture investing, venture capital funds invested in start up businesses in their early stages. Today, they more often invest at a later stage of a company's development, when most technology and product problems have been solved, a full management team is in place, and some sales revenues have been earned. Venture investing that takes place when a company has reached—or is clearly on track to reaching—this stage is commonly composed of professional or outside **financing rounds** that may come in several installments, called "A", "B", "C" rounds. The **size of rounds** varies greatly depending on the stage of company development. In friends and family and angel rounds, an early stage company may be looking for total investments ranging from a few hundred thousand dollars to $1 million. In the first professional round, the "A" round, total investments may be $2 million to $5 million or more, depending on the size of the company and its opportunity.

In the Great Lakes region, there is some investing capacity to lead seed, early stage and A rounds. This is important, but not enough. Leadership of later investment rounds is a key to who eventually profits from company growth. Often, B and C rounds are led by larger venture firms because company growth demands larger investments to finance it. These firms may be entirely different from the investors who have preceded them. It is not uncommon for the B and C round investors to **squeeze** or **cram down** or out earlier investors, i.e. to pay them for their investment to date, but effectively preclude them from

profiting substantially or at all from further growth. This is an especially dangerous period for Great Lakes investors and companies, because the absence of many large funds in the region almost inevitably means that B and C rounds are led by non-regional investors. This means in turn that investment management and returns move out of the region and pressure builds on the company itself to move its headquarters or a substantial operational base close to the B and C round lead investors. If this happens, *successful Great Lakes company growth fuels wealth creation, re-investing capacity,y and employment outside of the region.*

Venture firm capacity to invest is driven by their **capital pool**, their **fees and expenses**, the requirements for **follow-on funding** for their portfolio companies, and the **sectors** in which they specialize. Illustrative, simple arithmetic is this: A $100 million fund will have, after fees and expenses, $80 million to invest over the life of the fund. A fund of this size can afford professional managers for around 15 investments. This means an average of around $5 million per company. This amount will not be invested all at once. Instead, that amount will typically be invested in two or more installments, depending on company performance and the sector involved. If there are three installments, then each may be on the order of $1 million to $2 million. For the later installments, if company growth is promising, this amount may not be adequate; other investors will be needed, and an A or subsequent round of investments will be organized. For high growth companies, B and C rounds will almost certainly require investors from outside the region, because regional funds are not big enough to participate in these larger rounds as a matter of course.

Analogous arithmetic illustrates the impact of fees on staffing. Assuming that the investment agreements between Limited Partners and the venture fund limits fees to 2 percent of invested capital annually, this means that for a $25 million early stage fund approximately $400,000 to $500,000 a year is available for all activities of the fund. This will ordinarily support no more than two professionals and support staff, even assuming that some professionals receive less than competitive regular compensation. This is a very thin budget from which to pay for the extensive work necessary for early stage investing.

Venture capital funds expect the **holding period** of their investments to average from five to seven years. During this period, unsuccessful companies are discontinued, moderately successful ones are maintained often with additional investment, and highly successful companies attract new investors for later investment rounds. In general, relatively few venture capital investments are highly profitable; most do little more than return the capital invested in them or fail. Overall returns are driven by averages in which a few hugely successful companies play a critically important role.

There will usually be one or more rounds of professional investment and a holding period before the company reaches the stage that the venture investors arrange to **exit** the company, usually receiving in cash or stock the value of its original investment plus any profit from increased company value. The investors thereby gain **liquidity** and will distribute a portion (commonly 80 percent) of the exit proceeds to their limited partners.

For many years, the conventional exit or liquidity event was an **initial public offering** (IPO), in which shares in the company were listed on a stock exchange and sold to the public. Today, IPO's are not as frequent, and exits often take the form of acquisitions by larger companies, hedge funds, or other forms of private equity.

There are different ways of measuring venture capital returns, the most common of which are **internal rate of return** (IRR) and **cash-on-cash** return. The IRR is typically more complex, requiring a calculation of how long individual rounds of investment remained in the company. Cash-on-cash simply compares the total amount invested and total proceeds from the liquidity event, without taking into account the holding periods of various investment rounds.

As noted above, venture funds pay **general partner compensation** in two ways, fees and profits. The first comes from the annual fees charged against the fund's capital, i.e. against the investments of the limited partners.[7] These are generally around 2 to 2.5 percent per year. Profits come from liquidity events for the fund's portfolio of investments. Net proceeds are usually split 20 percent for the General Partners, 80 percent for the Limited Partners. While it is the 20 percent of profits that constitute the motivating compensation for the General Partners, it is the fees that finance their activities during the fund's life. These fees pay for all the firm's overhead, most importantly, for the work of finding, vetting and structuring deals and managing the portfolio of investments after deals are done. All this work must be performed whether the investment is $200,000 or $2 million. The larger deal can take little more effort than the smaller. If the smaller deals are early stage companies, investing in them can take *more* work than larger investments because the company's participants may be less experienced, the products less well developed. and the markets less well understood. These factors make the smaller deal much less efficient to do and therefore more costly. Consequently, venture capital firms typically steer away from seed and early stage deals because it is simply too expensive to do them within the conventional fee structure.[8]

All venture fund limited partners are looking for **high yields** for their investments. This is true whether these limited partners re **high net-worth individuals**, **foundations or university endowments**, or **public and private pension funds**. In the case of the public pension funds, returns are carefully watched because their beneficiaries are former public employees with significant political influence. Even though public funds are not government agencies, they often have several board members who are elected by beneficiary classes and others appointed by political officeholders. Practice varies greatly among states in the degree to which elected office holders, e.g. Governors and State Treasurers, can direct public pension fund investments. In general, public pension funds are highly protective of their discretion to invest independently of political influence and resist vigorously attempts to legislate investment guidance.

Venture capital investing is closely associated with **entrepreneurs** and e**ntrepreneurship**. Widely differing definitions of these terms exist. In the common parlance, entrepreneurs are viewed as taking large risks to pursue highly profitable results. Entrepreneurs in this view are often regarded as cutting edge innovators, creating new—

sometimes revolutionary—products and services and reaping the large financial rewards that their vision and daring legitimate. A contrasting definition includes any business person who is self-employed. Under this definition, entrepreneurial companies are numerous, very small, not innovative, low growth, and marginally profitable. It needs no emphasis that venture capitalists have no interest in opportunities that fit the latter definition. Thus, this study adopts a definition that emphasizes companies that use innovation to exploit high growth, high profit opportunities.[9]

Appendix B

The Stages of Company Growth

In addition to a clear focus on competitive financial returns, there is another key objective for a sustainable venture capital strategy for the Great Lakes region: a smooth continuum of smart capital available in the region to finance successive stages of company growth. This continuum has been variously described and includes the following stages.

- idea development and initial business planning, usually financed by the originating entrepreneur, and his/her friends and family. In some cases, professional angel investors play a role at this inception stage. In some locations, public or philanthropic sources may help fund pre-seed investment funds. If an idea has been developed within a research institution, an institutional validation fund may help to develop the idea.

- company formation, including attracting the first professional CEO and other key executives, writing a formal business plan, and developing and testing a product prototype. Angel investors and professionally managed seed funds may play a funding role at this stage. Some research institutions have assembled resources that play a constructive role during this transitional period.

- company development, including initial manufacturing and marketing, expansion of staff, and first sales. Seed and other early stage funds will help fund this stage of company development. Some angel investors may continue to participate.

- company growth, following first sales, will be financed by the so-called "A" round of professional investment, which usually includes venture capital firms that have not previously been involved in financing the company's start-up or early development. Further rounds of venture investment, "B" and "C" rounds, if needed, will usually be led by the "A" round investors, often with new venture investors. Changes in CEO and other executive level officers may take place as the company grows and places new demands on senior executives.

- venture investor exit or liquidity event will occur when the company has demonstrated the ability to generate adequate sales and has a professional management team in place. Liquidity can occur through an IPO, an acquisition by a corporate business partner or a private equity investment fund or another private transaction.

Scarcity of Great Lakes capital at any of these stages can threaten the company's existence. Capital from outside the region may be accompanied by the risk that the new investors will condition their funding on a company's move to another location. Thus it is essential for the Great Lakes region that an adequate capital continuum is available *in the region* so that regional financial investors can lead deals throughout a company's growth cycle. This will assure that they and their co-investors receive their expected

returns while optimizing the likelihood that the company's subsequent business activity remains headquartered in the region and contributes to its economic growth.

Providing the actual financial capital needed across the continuum of business formation and growth is predominantly the responsibility of private sector capital pools and their managers. Public and philanthropic sources can assist, especially at the earliest stages of business ideation and formation, by funding the catalytic enterprises that exist in most Great Lakes states. This assistance essentially finances the added overhead associated with early stage venture investing that cannot realistically be born by conventional venture capital fees.

[1] Definitions adapted from The Funding Post at www.fundingpost.com/glossary/venture-glossary.asp and the National Venture Capital Association, at www.nvca.org.
[2] Their national organizations are the Angel Capital Association, www.angelcapitalassociation.org, and the affiliated Angel Capital Education Foundation, www.angelcapitaleducation.org. The ACA website contains a list of angel networks by region and state that are ACA members. These membership lists are helpful, although they probably understate angel network and fund activity. The ACA and ACEF have been strongly supported by the Ewing Marion Kauffman Foundation, www.kauffman.org.
[3] See www.rainsourcecapital.com.
[4] See www.northstareconomics.com and www.wisconsinangelnetwork.com.
[5] National Venture Capital Association at www.nvca.org, and the National Association of Seed and Venture Funds at www.nasvf.org.
[6] Pensions & Investments, "The Top 200 Pension Funds/Sponsors," (2006), available at www.pionline.com.
[7] Venture fund general partners can and do invest their own money in the venture capital funds they manage. However, the vast bulk of their funds comes from Limited Partners.
[8] There are firms in the Great Lakes that decide to plow back a portion of their *profits* into the business to establish and maintain the firm infrastructure necessary to do early stage deals. They are the exceptions. They help to make the point that early stage deal-making cannot be supported by the conventional venture capital *fee* structure that is acceptable to limited partners.
[9] One recent work provides a sober view of venture capital-backed entrepreneurship, although its import for formulating strategy may be limited because it defines all self-employed workers as entrepreneurs. See Scott Shane, *The Illusions of Entrepreneurship: The Costly Myths that Entrepreneurs, Investors, and Policy Makers Live By* (New Haven: Yale University Press, 2008). This report's working definition of entrepreneurship is more closely allied to Peter Drucker's formulation that "all entrepreneurial strategies, that is all strategies aimed at exploiting an innovation, must achieve leadership within a given environment." See Peter F. Drucker, *The Essential Drucker: In One Volume the Best Sixty Years of Peter Drucker's Essential Writings on Management* (New York: Harper Collins, 2001), p. 275.