



## B. Kristine Johnson, president of Affinity Capital Management

State should do more to support venture capital investment in promising startups

A Civic Caucus Focus on Human Capital Interview

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### Present

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### Summary

According to venture capitalist B. Kristine Johnson, president of Affinity Capital Management in Minneapolis, the State of Minnesota is not doing enough to encourage risk capital to support startup companies at the front end. She says Minnesota is falling behind, because other states are using state dollars to invest in venture funds that back companies located in their own states. She does not think, though, that the state should pick which industries should get the investments. And she believes that larger companies in Minnesota could also help make capital available to small startups.

Johnson notes that Minnesota companies receive less than one percent (0.9 percent) of all venture capital investments in the country. In 2013, that amounted to \$270 million in investment in Minnesota companies. She says there are fewer, perhaps half as many, venture capital firms operating in Minnesota compared with 12 years ago, reflecting a national trend.

She points out that, nationally, venture-backed companies skew towards medical technology (a key area for Minnesota), biotechnology, IT and technology. Technology includes software, hardware, telecommunications and new consumer and enterprise applications. 2013 data show that venture capital investment nationally is going largely to California, Massachusetts, New York and other big states associated with technology investing. Those top three states accounted for 70 percent of the total national venture capital investment of \$29.5 billion in 2013.

Johnson believes state support of the University of Minnesota is critical, since it's the state's only research university. But she says the Legislature shouldn't decide which areas of research the University should pursue.

## Biography

B. Kristine Johnson is president of Affinity Capital Management, a health care focused venture capital firm. Prior to joining Affinity in May 1999, Johnson was senior vice president and Chief Administrative Officer (CAO) of Medtronic. During her 17 years at Medtronic, she was also president and general manager of Medtronic's vascular business and its Tachyarrhythmia Management business. Prior to her time at Medtronic, she spent nine years in various executive positions at Cargill.

Johnson was president of the Citizens League in 1981-1982. She currently serves on the boards of directors of several Affinity portfolio companies, as well as other for-profit and nonprofit organizations. Since 2000, she has served on the Board of Regents of St. Olaf College and is the current Board Chair, a position she has held since 2013. She received her B.A. from St. Olaf College.

## Background

Since the Civic Caucus released its statement on human capital in September 2014, it has concentrated on learning more about the challenges of maintaining a strong workforce in Minnesota in the coming years. The Civic Caucus interviewed B. Kristine Johnson to get her perspective on the role of venture capital in supporting the creation of startup businesses in Minnesota, especially in the high-tech field, and helping them grow and succeed.

## Discussion

**Medical technology is a key investment area for Minnesota.** According to Affinity Capital Management President B. Kristine Johnson, medical technology is one of the key areas of investment for Minnesota and is a major interest of venture capitalists.

**Minnesota accounts for less than one percent of all venture capital investments in the country.** Johnson pointed out that reporting on venture capital is uneven, because it's all voluntary and venture capital is one of the least regulated areas of investment. Small and large venture capital firms as well as angel investors all get lumped together in the data. (An angel investor is a person who supports a business financially, typically investing private capital in a small or newly established enterprise.)

That said, according to the National Venture Capital Association (NVCA), in 2013, Minnesota accounted for 0.9 percent of all venture capital investments in the U.S. Johnson called that a reasonable amount. But she said that's down from its high this century of 1.7 percent in 2004. The last year Minnesota was above one percent was 2009. She noted that the percentage figure goes up and down over the years, because Minnesota participates to a disproportionately high extent in health care and medical technology. If those fields are a big percentage of national venture capital investments in a particular year, Minnesota will have a larger proportion of those investments. Similarly, if those fields are a smaller percentage of national investments, Minnesota's proportion will decrease.

**Venture-backed companies skew towards medical technology, biotechnology, IT and technology.** Johnson said the U.S. is in a bit of a technology bubble currently. "There is a lot of investment in consumer software and in tools used for social media and online businesses," she said. "When that technology spending goes way up, it tends to dwarf what goes on in medical technology."

NVCA figures show that nationally in 2013, software was the leading sector for venture capital investment, receiving 37.3 percent of total funding. Biotechnology came in second, at 15.4 percent; media and entertainment were third, at 9.9 percent; and fourth were medical devices and equipment, at 7.2 percent.

**There are fewer, perhaps only half as many, venture capital firms operating in Minnesota compared with 12 years ago.** "That may be cyclical," Johnson said. "But in a lot of firms, people are retiring and the firms go away. Also, some of the principals of the firms move out of Minnesota and then you don't have a Minnesota-based firm. It's a fragile part of the business."

That reflects what's going on nationally, according to NVCA data. In 2000, 1,050 firms in the U.S. invested \$105.1 billion, the largest annual investment amount on record, with \$951.7 million of that going to Minnesota. In 2013, the number of venture capital firms was roughly half that, at 548 active firms that invested \$29.5 billion, with \$270 million going to Minnesota.

Part of the Minnesota picture, Johnson said, is that it's been very difficult to make money investing in medical technology over the last decade. "The dollars required to invest have gone up," she said. "The time to get an exit has been extended." Large companies reduce their risk by waiting to acquire a small company until after it has gained regulatory and reimbursement approvals.

**Venture capital investment nationally is going largely to California and Massachusetts and other big states associated with technology investing.** According to the NVCA, in 2013, the top three states accounted for 70 percent of the total national venture capital investment of \$29.5 billion: California (50 percent), Massachusetts (10 percent) and New York (10 percent). The top 10 states together-California, Massachusetts, New York, Texas, Washington, Maryland, Virginia, Pennsylvania, Illinois and Colorado-accounted for 86 percent of the total national investment. Thus, the other 40 states, plus Washington, D.C., accounted for only 14 percent of total venture capital investment.

**In 2013, Minnesota companies received \$270 million in venture capital investment.** Johnson said some recent data from LifeScience Alley show that in 2014, a much bigger figure than that went into the state's life sciences sector alone. She said part of the difference might be differences in what the NVCA and LifeScience Alley include in their data, but 2014 was clearly a better year. NVCA data show that 2014 was the strongest year for Minnesota since 2008, with \$368 million in venture capital invested.

She said historically, Minnesota and Illinois have been the strongest states in the Midwest in venture capital investments, ranking in about the top 15 states. But in recent years, Ohio has moved ahead of Minnesota in terms of dollars invested and both Ohio and Michigan have moved ahead in terms of number of deals. She noted that there is a lot of debate over why Minnesota doesn't have more venture capital investment. "Is it a lack of ideas?" she asked. "Is it a lack of money?" She said there's a synergy that makes it difficult to know which comes first.

**Venture capital firms like to invest where they are located.** "The practice in venture investing is that you're a hands-on investor," Johnson said. "You're going to the board meetings and you're spending time with the CEO as a mentor, counselor and advisor. Getting on a plane to do that is more difficult."

She said, for example, that most of the venture capital firms in Silicon Valley are located together. They like to invest in companies that are no more than an hour's drive away. "For the most part they can do that," she said. "The startup environment there is hugely different than it is here."

**Minnesota has always had a niche in medical technology.** That's a function, she said, of Medtronic and the companies it spun off and of all the people who came out of Medtronic, St. Jude, Boston Scientific and Guidant. "It's a matter of critical mass," Johnson said. "Once you get enough people, you then build up the support industries around them. So, we have regulatory resources, reimbursement resources, and the human capital and leadership available to support med-tech companies. Minnesota doesn't have that in technology." She described technology as traditional software, hardware, telecommunications and new economy companies that are developing consumer and enterprise apps. "That's where tremendous numbers of dollars are going," she said.

**New companies are frequently built on ideas that are generated by research.** Johnson said that could come, for example, out of universities or the work physicians do. "Somewhere you need to get ideas and a floor for creativity," she said. "There are a lot of universities that struggle with how to get the idea generation into commercial applications. The University of Minnesota (U of M) does that reasonably well, but not to the same degree seen at Stanford. It's just a very different climate."

**Historically, investment in medical technology has been less subject to real highs and real lows than investment in technology companies.** "There's a certain amount of money that's gone into medical technology," Johnson said. "When technology companies are really hot, then dollars flow to them and medical technology bounces along with a certain amount, but without the highs and lows. Most people do not invest in med tech expecting they'll get a 20-to-one payout. An exceptional payout is eight-to-one. It is quite different."

**Venture-backed companies look for people who have skill in the areas they need and who are willing to take risks.** Historically, Johnson said, Minnesota has had a workforce with a high level of skills, but perhaps less willingness to take risks. "It might be the flip side of Minnesota having so many Fortune 500 companies," she said. "If you're looking for stability and don't want to take too much risk, you'll work for 3M, Medtronic or Cargill. You're not going to go to work for a venture-backed company that has 18 months of capital and may or may not be able to raise more money. There's a very different mindset in California, where people do that all the time."

**Today's global economy influences the type of local workforce new companies need.** For example, Johnson's firm has invested in a Minnesota company making an implantable device to treat sleep apnea. The device is manufactured in Uruguay. "We need the engineers, we need the designers, but we don't have a manufacturing plant here," she said. "We have a prototype lab here. It's really a different world. Lots of jobs are not where the creators of a company are located."

**The role of the U of M as a research base is hugely important.** "It's not a sufficient part of the equation," Johnson said. "But if you don't have the idea generation over time, that's going to be a problem."

"I think the U of M is at the core," she continued. "President Eric Kaler is committed to supporting company and job creation. He is making it easier to do business with the University. Really creative people won't stay in an environment that doesn't allow creativity and reward innovation. No one thing will make all the difference. It's a climate and a culture both at the University and at the companies that will make things easier to do."

In the medical technology field, the U of M Medical School has worked closely with industry, she said. In some other areas of technology, the engineering side has come out of U of M research. "I think Kaler really understands the importance of interdisciplinary approaches," she remarked.

**Having the state pick industries to support is a bad idea.** "Philosophically, I'm not comfortable with trying to engineer the economy in that way," Johnson said. "Instead, I would do whatever we can to encourage a diverse economy. We can do that by encouraging research and education in areas that solve people's problems. That's the real growth driver. Plant enough trees and over time you'll get a forest."

"We need to train a workforce that can provide knowledge-based labor," she continued. "We should try to do it in a broad enough way that it's not just medical technology, but across the board."

**There is a certain amount of synergy when a large number of similar companies are located in the same area.** Johnson noted that in the med-tech field, cardiac companies are all located in Minnesota, while companies dealing with hips and knees are all in Warsaw, Ind.

**Minnesota is not doing enough to encourage risk capital at the front end.** We're moving further behind because other states are doing more of that, Johnson said. There are numerous existing and planned state programs, in myriad forms and sizes, aimed at supporting venture capital and innovation. To date, Minnesota is not one of them, but Indiana, Michigan and Ohio are among those states with programs funded by state pension or other non-tax dollars.

The larger companies in the state could also help make capital available, as they've done in Michigan, where significant public and corporate money is supporting venture firms that will invest in Michigan companies.

**One alternative is that the state could take some public dollars and match, or combine with private resources, to create a venture capital fund or funds and delegate someone to manage the investing.** That fund would invest in venture capital funds, with a focus of providing meaningful returns to investors and a preference for venture capital firms headquartered in Minnesota or with a demonstrated commitment to the state.

**It's important to have small, as well as large, venture capital funds in the state.** Johnson said having a fund in the \$25 million to \$75 million range is a hard spot to be. "But if we don't have those

smaller funds, we tend to miss the early-stage, smaller investments and to migrate to later-stage, bigger investments," she said. A Fund of Funds would make it easier for those small venture capital firms to exist.

**State support of the U of M is critical, since it's our only research university.** Johnson said the state needs some level of accountability for such support, but it doesn't make sense for the Legislature to decide what areas of research the University should pursue. "Under President Kaler, the University has shown a strong willingness to be transparent in where state funding goes," she said. "But I don't believe that St. Paul should be deciding on the areas of research. The U of M should get leaders in their fields and develop areas of research that address society's major problems.

Johnson said there's a whole continuum in the area of medical research. The National Institutes of Health funds research at the U of M to understand disease processes. "No company is going to fund that kind of research," she said. Once a company gets knowledge that could result in a product or process, then it will invest, she said. The University can also help with the engineering and in conducting clinical trials.

**Minnesota's Angel Tax Credit makes it easier for people to take investment risks.** It provides a 25-percent credit to investors or investment funds that put money into small startup companies headquartered in Minnesota. The companies must be engaged in technological innovation in fields such as nanotechnology, biotechnology, medical devices, pharmaceuticals, food technology, energy efficiency and conservation, etc. A total of \$16 million in tax credits is available, with a maximum credit of \$125,000 per person, per year.

"The things we've done with the angel credit are good," Johnson said. "Other areas of tax policy don't make a lot of difference. Being a high-tax state doesn't necessarily prevent you from being an effective place of business creation. Federal policy has more impact on likely success than state policy does. But you don't want a climate where it's not OK to make money."

**There can be a role for venture capital to encourage creativity in public-sector areas, if people can see a way to disrupt the traditional system.** Johnson said the venture dollars being invested in education are going to places that are competing with the public system. She noted that at the higher education level, companies like Coursera are delivering course content online through Massive Open Online Courses (MOOCs).