ATP Helps Bridge Gap Left by Venture Capitalists

The Advanced Technology Program provides cost-shared funding for early stage technology development with potential to deliver widespread economic benefits that would likely not be developed because private sector capital is unavailable.

Between Invention and Innovation, a Funding Gap Exists

- The United States system of university- and national lab-based basic research is the best in the world. These labs are supported in large part by the Federal government.
- There is a class of technologies that is not yet developed enough for private sector investment, but is "too commercial" to sufficiently interest the universities or national labs, says David Morganthaler, an active venture capitalist since the late 1960's.
- In the phase between science-based "inventions" and commercially viable "innovation," inefficiencies exist in our capital markets, according to Harvard Professors Branscomb and Auerswald's new study. These capital market inefficiencies contribute to the funding gap for early stage technology development.

Why is there a Funding Gap?

- The technical risks and market uncertainties associated with early stage technologies are high, and the inability of innovators to capture the full benefits makes it an unattractive investment.
- Venture capital funds raised approximately \$43 billion dollars in 2001, up from \$2.5 billion in 1991. Most of this money funds the growth of companies (product development and business development)—very little goes into early-stage research. (Price Waterhouse Coopers, 2002)
- Venture capitalists are making larger investments per deal for efficiency reasons:
 - Between 1990 and 2001, the average deal size has grown to \$16.5 million from \$2.5
 - It takes about as much work to identify and monitor a \$1 million dollar investment as it does a \$10 million dollar investment.
 - Thus, venture capitalists are not as interested in opportunities requiring lower dollar amounts.
- According to David Morganthaler, "when we [venture capitalists] invest in Nobel prize winning research, we do it by mistake." "[Venture capitalists should] very rarely invest in enabling technology." Venture capitalists, he says, should not invest in early-stage, high-risk technology research.

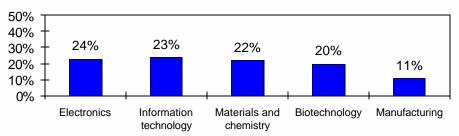
¹ These findings are taken from Branscomb and Auerswald's forthcoming report to ATP, Between Invention and Innovation: An Analysis of the Funding for Early Stage Technology Development.





What does ATP do that Venture Capitalists do not do?*

- As of June 30, 2002, venture capital money remained concentrated in two regions of the country: (Price Waterhouse Coopers, 2002).
 - Northern California accounted for 35% of venture capital investments.
 - The New York/New England area accounted for 18% of venture capital investments.
 - Most venture capitalists are unwilling to consider an investment more than a few hours travel away because of the inconvenience of monitoring it.
- In contrast, the ATP funds many regions of the country.
 - The ATP spends about 18% of its total award funding on projects in Northern California.
 - About 16% of total ATP award money goes to the New York/New England area.
 - The ATP also has projects across 41 states.
- Venture capital is concentrated in one technology area:
 - Computer-related companies received approximately 85% of venture funding in 2001.
 - By contrast, such important areas as industrial/energy companies received only 2% of venture funding.
- In contrast, a wide variety of important technologies receive ATP funding*:



Technology Sector

- Venture capitalists typically provide funding to companies for business development and commercialization activities.
- In contrast, ATP funds projects to develop early-stage, high-risk technologies. The ATP does NOT fund business development or commercialization activities, but does require that companies plan ahead.
- The "bottom line" for venture capitalists is the direct monetary return on their investment.
- In contrast, the "bottom line" for ATP is broad, national economic benefit.

Factsheet 1.C2 (November 2002)





^{*}Data are for all projects funded between 1993 and September 2002.