ATP Award Produces “Halo Effect” and Pursuit of R&D in Public Interest

Highlights from “Winning an Award from the Advanced Technology Program: Pursuing R&D Strategies in the Public Interest and Benefiting From a Halo Effect” by Feldman and Kelley

- ATP award produces a “halo effect.”
  - A “halo effect” is defined as a ‘certification’ or reputation effect from an award whereby award winners receive more favorable treatment from other funding sources compared with similar firms with similar R&D projects.
    - Other public and private organizations will likely use information about a company’s R&D activity that comes from a credible source, such as a government agency with a reputation for scientific integrity and programmatic expectations for economic impacts, in their investment and funding decisions.
  - An award from ATP may certify the quality of the research project and the company, and favorably dispose other public and private sources of funding to fill additional investment gaps.
    - All else being equal, a firm that wins an ATP award is more successful in securing additional funding from non-ATP sources than are non-winners.
      - One-fourth of the award winners in 1998 applied for additional funding in the year after the award. Nearly three in four were successful.
      - A large proportion of the non-winners in 1998, almost 50 percent, sought funding elsewhere, but only one in three were successful.

- ATP award winners have R&D strategies that help deliver public benefits from their R&D activities compared with non-winning applicants. Award winners in 1998 distinguished themselves from non-winners by having:
  - A more extensive set of business ties.
  - A greater tendency towards openness in research communications with other organizations.
  - An openness to research projects that are new to the firm.
    - Almost half of the projects proposed by ATP award winners were in an area new to the firm compared to only one in five projects of non-winning applicants.
  - A willingness to pursue projects that entail the formation of new R&D
collaborations with other organizations.
  - Compared to non-winning applicants, award winners were more likely to have a principal research partner who was a new collaborator.

- **ATP makes a difference in whether research is undertaken at all.**
  - Of the 1998 non-winners, over 60 percent did not proceed with their proposed projects in any way. Almost 30 percent of the rest went ahead on a smaller scale, 4 percent proceeded on a larger scale, and 5 percent went forward on the same scale they had proposed to ATP. Nearly half of those that did not proceed in any way went out of business.

- **Even non-winners consider the ATP competition process fair.**
  - Of the 1998 ATP award winners, 95 percent thought the ATP competition process was fair.
  - More significantly, two-thirds of the non-winners said the process was fair. Three out of five of the non-winners said they were likely to apply to ATP again.

- **ATP telephone debriefings to non-winners are helpful.**
  - More than three out of five non-winners elected to take part in telephone debriefings offered by ATP to give feedback on the strengths and weaknesses of proposals that are not selected for an award.
  - Almost 70 percent of those who elected to participate in the telephone debriefings said the feedback was helpful.

**Description of Study**

The study examined the characteristics of projects and firms selected by ATP for funding to determine the behavioral patterns and strategies that distinguish award-winning firms from other applicants and to consider whether ATP funding makes a difference to firms in attracting additional resources to carry out high-risk, potentially high-payoff R&D. The authors surveyed 1998 applicant firms—non-winning firms and award winners—in order to develop a set of indicators that measure the receptivity of an applicant to other firms’ use of its research results, the extent of the firm’s connections to the technical and financial resources of other organizations in R&D activities, and the potential for the proposed project to generate new pathways for disseminating innovation. The study was published in March 2001 (NISTIR 6577).

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