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Albert N. Link
Laura T. R. Morrison

Innovative Activity in Minority-Owned and Women-Owned Business

Evidence from the U.S.
Small Business Innovation
Research Program



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Innovation Research Program

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Preface

Small businesses are the growth engine of the US innovation economy, creating jobs and growing economic output through research that leads to the commercialization of innovative products and services. Investments in fundamental science and technology research are thus an important building block of innovation. Closely related are investments in human capital through Science, Technology, Engineering, and Mathematics (STEM) education. Such investments enrich the human capital of a nation's workforce and thus leverage the ability of businesses to compete more efficiently and effectively in global technology-based markets.

The availability of survey-based information collected by the National Research Council (NRC) of the National Academies of Sciences, Engineering, and Medicine on publicly funded research-based entrepreneurial businesses, allows for an exploratory analysis of the outcome of funded research conducted by minority-owned and women-owned businesses. In this monograph, we investigate empirically whether the probability that technologies funded through Phase II Small Business Innovation Research (SBIR) program awards from the Department of Defense (DOD), the National Institutes of Health (NIH), the National Aeronautics and Space Administration (NASA), the Department of Energy (DOE), and the National Science Foundation (NSF) are commercialized—a primary goal of the SBIR program—is related to the minority status and gender status demographics of the owners of the businesses conducting the funded research.

Motivating the empirical analyses thought, this monograph is a charge implicit in *A Strategy for American Innovation*, namely, to understand innovation by minorities and women in the entrepreneurial ecosystem. Using data from the NRC, we examined SBIR-focused econometric models that are well established in the literature. We estimated (1) the probability that a funded project was not discontinued

(i.e., the project's research reached completion), (2) if the technology developed during the research process was commercialized, and finally (3) if the commercialized technology was successful in the marketplace (i.e., if the business realized sales revenue from the commercialized technology). Our focus throughout this monograph is on minority-owned and women-owned businesses.

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