1 INTRODUCTION

Research and development (R&D) leads to innovation and innovation to technological change. Technological change, in turn, is the primary driver of economic growth. Public/private partnerships leverage the efficiency of R&D and are thus a critical aspect of a nation's innovation system.

Public/private partnership is a term that is becoming more and more widely used in economics and in policy circles.[1] As is common in these and other disciplines, there are terms of art and terms of science; public/private partnership is a term of art without a precise, much less generally accepted, definition.

PUBLIC/PRIVATE PARTNERSHIPS

"Public," as the term public/private partnership is used within the context of this book, refers to any aspect of the innovation process—a term to be defined below—that involves the use of governmental resources, be they federal, state, or local in origin. "Private," refers to any aspect of the innovation process that involves the use of private sector resources, mostly firm-specific resources. And, resources are broadly defined to include all resources—financial resources, infrastructural resources, research resources, and the like—that affect the general environments in which innovation occurs. Finally, the term "partnership" refers to any and all innovation-related relationships, including but not limited to formal and informal collaborations in R&D.

---

[1] This discussion about the term "public/private partnership" draws in large part from a study funded by Link for the OECD Committee for Scientific and Technology Policy. The report was later published in an abbreviated form in Link (1999a).

The above definitions of "public" and "private" are straightforward, but some might pause over the definition of "partnership." Surprisingly, there is not a generally accepted definition for that term in the economics or policy literatures, especially with relevance to innovation. Coburn (1995, p. 1) used that term synonymously with cooperation by defining cooperative technology programs as:

> ... public-private initiatives involving government and industry—and often universities—that sponsor the development and the use of technology and improve practices to measurably benefit specific companies.

More narrowly, Link and Bauer (1989) defined research joint venture (RJV) partnerships as arrangements through which firms jointly acquire technical knowledge.

The National Research Council (Wessner 2003, p. 7) offered an explanation of a public/private partnership in terms of what it is and what it does:

> Public-private partnerships involving cooperative research and development among industry, government, and universities can play an instrumental role in introducing key new technologies to the market ... [Partnerships] often contribute to national missions in health, energy, the environment, and national defense and to the [N]ation's ability to capitalize on its R&D investments.

The definition set forth in this book follows in spirit from that used by the Council on Competitiveness (1996, p. 3):

> Partnerships are defined ... as cooperative arrangements engaging companies, universities, and government agencies and laboratories in various combinations to pool resources in pursuit of a shared R&D objective.

Based on the Council's definition, a public/private partnership is a relationship—either formal or informal among participants in the R&D process, or institutional—that involves the use of public and/or private resources be they financial, infrastructural, or research based.

The Council on Competitiveness's definition raises an important issue, namely: Why should public resources be used in partnership with private