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**The Economic  
Benefits and Costs  
of Entrepreneurship:  
A Review of the Research**

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# The Economic Benefits and Costs of Entrepreneurship: A Review of the Research

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**C. Mirjam van Praag**

*Amsterdam Center for Entrepreneurship  
University of Amsterdam  
Roetersstraat 11, 1018WB  
Amsterdam  
The Netherlands  
C.m.vanpraag@uva.nl*

**Peter H. Versloot**

*Tinbergen Institute  
University of Amsterdam  
The Netherlands*

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## The Economic Benefits and Costs of Entrepreneurship: A Review of the Research\*

C. Mirjam van Praag<sup>1,2,3,4</sup> and  
Peter H. Versloot<sup>2,5</sup>

- <sup>1</sup> *Amsterdam Center for Entrepreneurship, University of Amsterdam, Roetersstraat 11, 1018WB, Amsterdam, The Netherlands, C.m.vanpraag@uva.nl*
- <sup>2</sup> *Tinbergen Institute, University of Amsterdam, The Netherlands*
- <sup>3</sup> *Max Planck Institute of Economics, Germany*
- <sup>4</sup> *IZA Institute for the Study of Labour, Germany*
- <sup>5</sup> *University of Amsterdam, The Netherlands*

### Abstract

Many studies in the entrepreneurship literature are motivated by the statement that entrepreneurship has important economic value, for instance, in terms of productivity and growth, employment generation or, innovation. This claim is often substantiated by a reference to (at most) one or two studies finding supporting evidence. However, whether the cited reference was one of the few out of many studies that “happened” to find supportive evidence is not yet clear. This paper examines to what extent recent empirical evidence can collectively and system-

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\* A shorter version of this article is being published as What is the Value of Entrepreneurship? A Review of Recent Research by C.M. van Praag and P.H. Versloot in *Small Business Economics*, volume 29, number 4, pp 351–383.

atically substantiate the claim that entrepreneurs cause important economic benefits. Hence, a systematic review is provided that answers the question: What is the contribution of entrepreneurs to the economy in comparison to non-entrepreneurs? We study the relative contribution of entrepreneurs to the economy based on four measures that have most widely been studied empirically. Hence, we answer the particular question: What is the contribution of entrepreneurs to (i) employment generation and dynamics, (ii) innovation, and (iii) productivity and growth, relative to the contributions of the entrepreneurs' counterparts, i.e., the "control group?" A fourth type of contribution studied is the role of entrepreneurship in increasing individuals' utility levels. Based on 57 recent studies of high quality that contain 87 relevant separate analyses, we conclude that entrepreneurs have a very important — but specific — function in the economy. They engender relatively much employment creation, productivity growth and produce and commercialize high quality innovations. They are more satisfied than employees. More importantly, recent studies show that entrepreneurial firms produce important spillovers that affect regional employment growth rates of all companies in the region in the long run. However, the counterparts cannot be missed as they account for a relatively high value of productivity and growth, a less volatile and more secure labor market, higher paid jobs and a greater number of innovations and they have a more active role in the adoption of innovations.

*Keywords:* Entrepreneur; entrepreneurship; self-employment; productivity; economic development; growth; employment; innovation; patents; R&D; utility; remuneration; income.

*JEL codes:* D24, D31, E23, E24, J21, J28, J31, L26, M13

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# 1

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## Introduction

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Almost without exception, academic studies on entrepreneurship are motivated by the economic benefits of entrepreneurship. Most studies refer to one or two academic studies showing that entrepreneurship indeed leads to substantial benefits in terms of, for instance, employment generation or innovations. However, whether the motivation is based on a very carefully selected study that “happens to find” positive benefits, has, so far, remained unclear. This paper examines to what extent recent empirical evidence can collectively and systematically substantiate this claim. Entrepreneurs and their counterparts are defined and compared in terms of their contribution to the creation of economic value. Hence, the aim is to review recent empirical literature that provides an (statistically supported) answer to the following question: What is the contribution of entrepreneurs to the economy in comparison to their counterparts, i.e. non-entrepreneurs? Given the existing base of empirical studies into this subject, we arrive at four measures to quantify the economic benefits of entrepreneurs. Hence, we answer the following particular questions: What is the contribution of entrepreneurs to (i) employment generation and dynamics, (ii) innovation, and (iii) productivity and growth, relative to the contributions

## 2 Introduction

of the entrepreneurs' counterparts, i.e., the "control group?" A fourth type of contribution that we study is the role of entrepreneurship in increasing individuals' utility levels.

Besides emphasizing what our study might contribute, it is also worthwhile to acknowledge what it does not contribute. Economic or management *theories* about why and how entrepreneurs would contribute more or less to specific aspects of economic value creation, such as employment or innovation, are not included. They are beyond the scope of our study and provided elsewhere, as for instance in Parker (2004) and in most of the studies reviewed. We only provide an (rather thorough) overview of *empirical* studies such that we can evaluate the extent of contributions to economic value creation of entrepreneurs in practice.<sup>1</sup>

Surprisingly, given the relevance of showing the relationship between entrepreneurship and economic outcomes, this paper is the first review of the (primary) empirical literature in this area. More precisely, it is the first review of *high quality economics and management* studies, focusing on *various types of contributions* that entrepreneurs can make to the economy in terms of *quantifiable measures* and evaluating the entrepreneurs' performance in these areas *relative to their counterparts*, i.e., larger, older or incumbent firms. In these senses, our study is unique. Moreover, previous reviews were (obviously) based on older empirical studies. To our knowledge, five previous and recent studies are somewhat related.

The review by Acs and Audretsch (2005) studies the relationship between entrepreneurship and innovation based on an older database and a somewhat different strand of — both theoretical and empirical — literature. Therefore, their sample of studies is mostly non-overlapping with ours. Hence, Acs and Audretsch (2005) and the current paper can be considered complements. As a matter of fact, the results of both reviews are remarkably similar. The same holds for Carree and Thurik

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<sup>1</sup>Moreover, we do not relate the *behavior* of entrepreneurial firms to economic outcomes, as is done in, for instance Wynarczyk and Watson (2005), Maes et al. (2005), or Norton and Moore (2006). Nor do we assess how *institutional factors* affect the growth and productivity of entrepreneurial and other firms differently, i.e., Hartarska and Gonzalez-Vega (2006).

(2003) who discuss empirical macroeconomic studies on the relationship between entrepreneurship and economic growth, Biggs (2002), who discusses the importance of small and medium-sized firms (SMEs) for employment generation and innovation, Caves (1998), who focuses on firm entry, exit and turnover, as well as firm growth and production efficiency, and Sutton (1997), who reviews studies on employment generation (Gibrat's Law specifically) published prior to 1995.<sup>2</sup>

The remainder of the paper is structured as follows. Chapter 2 elaborates on the definitions of the key variables studied in this review, i.e., entrepreneurs, the entrepreneurs' counterparts, employment generation and dynamics, innovation, productivity and growth, and the indicators used in the literature of utility derived from entrepreneurship. Moreover, we discuss the details of the sample selection procedure and some statistics of the resulting sample. In Chapter 3, the entrepreneur's contribution to employment is evaluated by measuring the levels of and growth in employment they realize relative to the "control group." Moreover, employee remuneration levels are compared as an indicator of employment quality. Chapter 4 discusses entrepreneurs' relative contributions to innovation in terms of the production, commercialization, and adoption of innovations. In Chapter 5, the contribution of entrepreneurs to productivity and growth is assessed in terms of value added, labor productivity, and total factor productivity. Chapter 6 focuses on utility levels derived from entrepreneurship as compared to wage employment in terms of expected income levels, income volatility, and job satisfaction levels. Chapter 7 concludes.

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<sup>2</sup>Literature reviews prior to 1990 on the contributions to employment, in terms of employment generation and employee remuneration can be found in Brown et al. (1990) and Storey and Johnson (1987).

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