

The Promises and Properties of Rapidly Growing Companies

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The Promises and Properties of Rapidly Growing Companies: Gazelles

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United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2022

Editorial matter and selection © 2022 Florian Becker-Ritterspach, Christoph Dörrenbächer and Matthias Tomenendal.

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80117-819-8 (Print)

ISBN: 978-1-80117-818-1 (Online)

ISBN: 978-1-80117-820-4 (Epub)



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Chapter 1

Setting the Scene and Marking the Trail for New Directions in Gazelle Research

Florian Becker-Ritterspach, Christoph Dörrenbächer and Matthias Tomenendal

Abstract

This chapter introduces the readers to the theme of the book. The chapter starts by outlining the socio-economic importance of gazelles and by discussing definitional challenges of what gazelles or high-growth firms are. The chapter then points to the academic relevance and to unresolved issues in international gazelle research. The chapter closes with an outline of the three blocks and eight chapters of the book.

Keywords: Gazelles; definitions; growth determinates; research methods; empirical context; new research directions

Setting the Scene – Fundamentals of Gazelle Research

The German firm BioNTech, known to the world as one of the first firms to develop a viable vaccine against the Covid-19 virus, is a shining example of how fast-growing firms can contribute disproportionately to the economic development and wellbeing of an entire region. From its inception in 2008 BioNTech saw an impressive employment growth with roughly 2000 employees in 2021. BioNTech also saw an explosive revenue growth of more than 350% between 2017 and 2020. And there is no end in sight for BioNTech's success. For the year 2022, BioNTech expects to generate 17 billion euros revenue from its vaccine co-developed with Pfizer. Clearly, BioNTech massive revenue growth not only benefits the firm, its shareholders and employees, but also triggers an enormous tax revenue for the company's home city. In fact, the city of Mainz – home to the BioNTech company – was previously one of the most indebted cities in Germany. With the

enormous success of BioNTech, Mainz will soon be free of debt, announced to slash corporation tax and plans to develop a global biotech hub in the region (*The Guardian*, 2021). While the success story of BioNTech is clearly exceptional in a number of ways, it does illustrate the positive effects that fast-growing firms can have for the economic development of regions and nations.

There is a wealth of studies showing, that a small number of young, fast-growing companies create a positive contribution to job growth along with strong, positive effects on the dynamics of future economic development, making them highly relevant to their national economies as a whole (Acs & Mueller, 2007; Coad, et al., 2014; Henrekson & Johansson, 2010). An estimated 60–75 percent of all new jobs are created by those dynamically growing companies (Dautzenberg et al., 2012), for which David Birch coined the term "Gazelle" in the 1980s (Birch, 1979). Gazelles are understood as those companies that show fast growth over a longer period of time. Apart from this general understanding, a considerable number of different definitions as to what gazelles are have evolved. These definitions are generally tailored to the available data and make it, for this reason, highly difficult to compare the results of different studies.

One of the most widely used definition of fast-growing companies is the definition by the OECD (2007). According to the OECD, high-growth firms (HGFs) have an average employment or turnover growth of more than 20 percent over a three-year period with at least ten employees in the base year. Although these thresholds are often part of the many definitions used, there are numerous aberrations in particular with regard to the age of the firms considered. Fast growing firms or gazelles are often associated with young firms. It is important to note, however, that extant studies show that high firm growth and gazelle status may materialize at any company age and size. Relatedly, while the occurrence of gazelles is typically connected to certain industries, such as knowledge and technology intensive sectors (Bos & Stam, 2014; Daunfeldt, Elert, & Johansson, 2016; Eckhardt & Shane, 2011; Kubičková et al., 2018), there is equal evidence that gazelles are present in all industries (Acs, Parsons, & Tracy, 2008; Daunfeldt et al., 2016; Henrekson & Johansson, 2010).

Notwithstanding the substantial advances in international gazelle and HGF research (traced in detail in the chapter that follows this introduction), there is still an ongoing lack of consensus not only with regard to a generally accepted definition (Daunfeldt, Johansson, & Halvarsson, 2015), but also with regard to the essential growth factors (Delmar, Davidsson, & Gartner, 2003; Mohr & Garnsey, 2011). Against this background, this book picks up a range of unresolved issues in international gazelle and HGF research. It does so in three blocks and eight chapters. Specifically, this book commences by asking in the first block: What are gazelles? What characterizes them? Which factors have an impact on the development of gazelles? Building on the key internal and external gazelle growth drivers identified in the first block, the second block applies these insights to the context of Germany. The second block illustrates the importance of external and internal growth factors within the specific context of Germany, a context that has thus far received only little attention in gazelle research. The last block is dedicated to exploring in detail two new and promising research themes

in connection with gazelles and concludes the book by pointing more generally to new research directions within gazelle research.

The book connects various fields of research, disciplines and methods. In addition to business and entrepreneurship research, which focuses on companies in the post-founding and growth phase, the perspective of economic sociology and political economy research is included with a focus on social interactions in and between organizations and between organizations and society. Importantly, the book offers not only new insights and conceptual syntheses on core themes through comprehensive literature reviews, but also provides rich examples of diverse methodological approaches in gazelle research.

Lastly, we believe that the findings of this book not only have interesting implications for future research on gazelles but also provide important insights for managerial and political decision-makers. After all, the chapters of this book suggest a set of micro- and macro tools for accelerated firm growth, to be tested in further research and practice.

Marking the Trail – New Directions in Gazelle Research

The book is organized as follows: In the second chapter, entitled “Catching up with Gazelles: A Systematic Literature Review of High Growth Antecedents,” a systematic literature review of high-growth antecedents is presented by Preetam Gaikwad. The chapter, which coincides with the first block of the volume, reviews key definitions and factors of high company growth. The chapter details firm-level, industry-level, and macroeconomic-level growth factors, as well as their interactions. In a final step, the chapter feeds these different levels of analysis into an overarching conceptual model of firm growth. The chapter contributes to better understanding the growth of gazelles by theorizing the complex interactions between internal and external growth factors. The core finding of this chapter is that gazelle growth is complex and multidimensional in its scope and nature.

The second block of the book builds on three empirical chapters with a focus on Germany and German gazelles. The chapter entitled “Spotting Gazelles in Germany. Occurrence and Distribution of High-growth Firms in Europe’s Largest Economy” by Christian Raffer and Matthias Tomenendal analyzes empirical data on German gazelles. Focusing on the external environment of gazelles, the chapter empirically explores the regional and sectoral distribution of gazelles and their possible link to regional cluster initiatives. A main finding of this chapter is that gazelles can be found in all sectors and regions of Germany with little indication that targeted cluster policies make a difference for their regional or sectoral prevalence.

Moving from external to internal factors, the next chapter – “Leadership in High-growth, Venture capital-funded Startups – A Qualitative Study of Berlin-based Firms” by Miriam Hamam and Matthias Tomenendal looks empirically at a sample of venture capital funded high-growth startups in Berlin. The chapter draws on a qualitative grounded theory approach and explores the role of leadership systems in high firm growth. Specifically, Hamam and Tomenendal derive a leadership model and find that leadership behavior in Berlin’s high-growth

start-ups typically rests on strong employee motivation, personnel development, performance orientation, and growth achievement. The authors propose that the growth benefits of the observed leadership behavior may very well be conducive beyond the narrow empirical context of their study.

The next chapter entitled “Gazelle Policy Conundrums: Some Prudent Avenues for Supporting Gazelles in Germany” by Preetam Gaikwad and Christoph Dörrenbächer provides a systematic account of Germany’s gazelle policies. The chapter starts by discussing different gazelle policy views as well as challenges and drawbacks of supporting gazelles. The main contribution of the chapter is evaluating Germany’s policies and framework conditions in support of gazelles. Drawing on different sources of qualitative data, Gaikwad and Dörrenbächer find that while Germany’s general policies and framework conditions create necessary conditions for gazelles to emerge, they are insufficient to guarantee their prevalence. They find that Germany’s policy schemes are not in tune with the state-of-the-art insights on how to foster sustainable gazelle development. Specifically, they argue that general entrepreneurship policies and high-growth entrepreneurship (gazelle) policies are distinct policy domains, which often have divergent and conflicting objectives and support mechanisms. They suggest that divergent policy schemes can only be effective if synchronized.

The three following chapters make up the third and final block of the book. Two chapters are dedicated to advancing two rather under-explored areas in gazelle research. Moving out of the empirical context of Germany, the chapter entitled “How and Why Internationalization Facilitates High Firm Growth” by Florian Becker-Ritterspach rests on a literature discussion. The chapter asks first about the evidence of internationalization as a determinant of high firm growth. In the second and third step, the chapter explores what we know about the ways in which and the circumstances under which internationalization contributes to high firm growth. Becker-Ritterspach finds that while all three questions have been addressed to some extent, significant research gaps remain in gazelle research. He concludes that while there is clear evidence that internationalization can be an important determinant of accelerated firm growth, our knowledge is still limited on how different circumstances of the firm at the micro-, meso-, and macro-level interact to condition growth opportunities through internationalization.

The chapter entitled “Exploring the Janus-faced Nature of Gazelles’ Corporate Citizenship: Societally Engaged Gazelles Versus Superstar Firms” by Christoph Dörrenbächer, Matthias Tomenendal, Anna-Luisa Grebe, and Julia Thielemann questions the socio-economic role and corporate citizenship of gazelles. In doing so, the chapter illuminates another under-researched area of gazelle research, that is, the dark sides of high firm growth, most notably its negative externalities. The chapter points to the important distinctions between quantitative and qualitative growth as well as between profit- and purpose-driven gazelles. Drawing on case study evidence, Dörrenbächer et al. exemplify not only how quantitative and qualitative growth is interrelated but also discuss properties and impediments of purpose-driven gazelle growth. The chapter closes with a reflection on the Janus-faced nature of gazelles including a discussion on what conditions could foster the emergence of more purpose-driven gazelles.

Finally, the chapter entitled “Taking Stock and Moving Forward: Some Concluding Remarks on Gazelle Firms and Gazelle Research,” by Matthias Tomendal, Florian Becker-Ritterspach, and Christoph Dörrenbächer, is closing the book. It provides a summarizing account of the contributions in this volume and highlights main findings and avenues for further research, including some final contemplation on the use of the term “gazelle.”

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Chapter 2

Catching Up with Gazelles: A Systematic Literature Review of High Growth Antecedents

Preetam Gaikwad

Abstract

Research on high-growth firms (HGFs) or gazelles is expanding due to their significant contribution to job growth and economic development. However, the knowledge about the conditions and factors that set these firms on their rapid growth trajectory remains fragmented. Therefore, this chapter provides an abreast inventory of the surging gazelle studies by systematically reviewing the international gazelle growth literature and consolidating firm-level, industry-level, and macroeconomic-level growth factors and their interactions as elaborated in the studies. Based on the review of 62 international empirical studies, this chapter finds that the gazelle growth is complex and multidimensional in its scope and nature. The firm's growth intention and entrepreneurial nature emerge as necessary but not sufficient conditions to guarantee rapid growth as it results from the impact of and interaction between various firm-level and external factors. The different growth-influencing factors are summarized using a theoretical gazelle growth model, which supports the rare and temporal nature of the gazelle growth.

Keywords: High-growth firms; gazelles; growth factors; systematic literature review; gazelle growth antecedents; gazelle growth model

1. Introduction

High-growth firms (HGFs), or gazelles,¹ as they are popularly known, are often considered crucial for jobs and economic growth (Acs & Mueller, 2007; Delmar, Davidsson, & Gartner, 2003). Though representing a tiny minority of total firms, gazelles are shown to contribute significantly to job growth (Henrekson & Johansson, 2010), productivity enhancement (Du & Temouri, 2015), and innovation success (Hözl, 2016; Hözl & Friesenbichler, 2007). Owing to such positive attributes, research on gazelles is expanding. However, despite the extensive research, we lack a comprehensive knowledge of factors and conditions that aid rapid growth (Coad, Daunfeldt, Holz, Johansson, & Nightingale, 2014).

One reason for this dearth of knowledge about the gazelle growth mechanics is the lack of theoretical development in firm growth studies. The topic of firm growth has long been a popular research topic among diverse disciplines such as economics, sociology, management, and psychology. As such, there are various theories in the literature that elaborate the firm growth process, for example, optimum size (Viner, 1932; Williamson, 1967), growth of fitter (Dosi, 2007; Nelson & Winter, 1982), Gibrat's law of proportionate effect (as cited in Mansfield, 1962; Sutton, 1997), population ecology (Geroski, 2001; Hannan & Freeman, 1977), Penrose's theory of growth (1995), and behavioral theory (Cyert & March, 1963). Among the various theoretical conceptualizations, Gibrat's law of proportionate effect deserves a special mention as it is often used as the first proposition in most firm growth studies (Lotti, Santarelli, & Vivarelli, 2009). This model essentially describes that the growth rate of any firm is independent of firm age and size. Though many earlier studies supported this notion (Caves, 1998; You, 1995), other econometric evaluations contradicted this and showed that a negative relation between firm size and growth is a statistical regularity (Sutton, 1997, p. 46). Considering the mixed empirical results that vary across different industries and size classes, many reviews conclude that Gibrat's law is neither systematically supported nor rejected (Daunfeldt & Elert, 2013; Santarelli, Thurik, & Klomp, 2004). Similarly, other theoretical models though intuitively appealing, only provide a partial explanation of why and how some firms grow (Coad, 2009; McKelvie & Wiklund, 2010; O'Farrell & Hitchens, 1988).

Another reason for the patchy knowledge about gazelle growth is the use of heterogeneous methodological approaches for defining what constitutes growth and how to measure it (Coad et al., 2014a; Delmar et al., 2003; McKelvie & Wiklund, 2010). Moreover, there is no standard definition regarding what represents high growth. The gazelles were defined initially as firms registering an

¹Though some studies differentiate between HGFs and gazelles based on their age (e.g., according to OECD (2002), gazelles are younger than five years old hence are considered a subset of HGFs), this chapter uses these terms synonymously for considering rapidly growing firms.