

1. Introduction

Per Davidsson, Frédéric Delmar, Johan Wiklund

We – the three authors-editors of this volume – all started our respective research careers with a doctoral dissertation where the phenomenon of small firm growth had a central place. We have since returned to this topic in several other texts; together, alone and in collaboration with other colleagues. In this volume we have collected many of our most important works on firm growth. It is our hope that the bringing together of the knowledge we have developed in this area over the last two decades will provide readers with a comprehensive understanding of firm growth and assist other researchers in reaching further and deeper into this phenomenon.

Below we will first review our respective dissertation studies. While the main contents of these are not included in this volume the main results are relevant for the completeness of the picture we paint. It may also be useful for the reader to better understand the backgrounds of the authors and editors. We will then briefly comment on each of the eight works that are included in full. Alongside these presentations we will insert in suitable places some insights we have gained from other projects and papers that are for various reasons not included in this volume.

PRELUDE: THE DISSERTATION STUDIES

It all started with Per Davidsson's (1989a) dissertation study 'Continued Entrepreneurship and Small Firm Growth' – a title which introduces the connection between entrepreneurship and growth that reappears in the title of the current volume and which is scrutinized in one of the included chapters. A striking feature of this work is its – by today's standards – breadth and scope. An indication of this is its main question: 'Why do some firms continue to develop and expand, whereas others remain small and behave conservatively?' (p. 3). Moreover, it draws upon psychology and sociology as well as several strands of research in economics and management. In terms of approach it includes examples of pure exploration (Chapter 8) as well as deductive hypothesis testing based on theory (Chapter 7) or prior empirical

work (Chapter 6), but its main approach (Chapter 1–5) is best described as abductive – a wrestling back and forth between theoretical ideas and empirical observations (cf. Alvensson and Sköldbberg, 2000). Data collection for the work included case studies based on semi-structured qualitative interviewing supplemented by possibly the first entrepreneurship/small business application of conjoint methodology in the pilot study (Davidsson, 1986), and a main study supplementing data from a combined phone and mail survey with secondary data from statistical records. The presented data analyses include parametric and non-parametric univariate and bivariate methods as well as regression analysis, cluster analysis, discriminant analysis and a particular structural equations modeling (SEM) technique called partial least squares analysis (PLS) – which also appears in Delmar’s and Wiklund’s theses (cf. Hulland, 1999; Wold and Jöreskog, 1982).

This breadth reflects European research culture in general (at least at the time) and the cross-disciplinary research area in which it was created (Economic Psychology). To a considerable extent, however, it also reflects the status of the entrepreneurship/small business field of research (then often regarded as one and the same). Research in this area was at that time decidedly phenomenon-driven rather than theory-driven, so if one asked a broad question like ‘What contributes to the growth and non-growth of small firms?’ one would have to include a broad range of aspects and factors, otherwise the study would appear to be obviously lacking. Further, there was actually very little to build on in terms of theory and previous studies narrowly focusing on the growth of small firms and it was immensely more difficult to locate what actually existed before the occurrence of the internet and electronic databases of scholarly publications, so broad search along multiple routes was needed in order to find enough material to build a theoretical framework.

Existing research was typically on a rather low level of abstraction and with vague notions of the causal mechanisms involved – effectively long laundry lists of factors suggested or demonstrated to be somehow associated with small firm growth. This is also where the main contribution of this dissertation work lies (cf. Davidsson, 1991). A theoretical model is suggested which portrays all the specifics as aspects of three over-arching antecedents of firm growth: ability, need and opportunity. Further, it is argued that managerial action is governed by perceptions of these three factors, whereas outcomes are also influenced directly by objective ability, need and opportunity, whether correctly perceived or not. This introduces a level of abstraction that was uncommon in this literature at the time. In the empirical analysis it was demonstrated that PLS allowed the simultaneous analysis of up to 72 manifest variables, all regarded as aspects of either growth or the three over-arching, explanatory factors. The empirical results supported the importance of all three but pointed out **need as the relatively most important dimension. On an**

operational level this means that owner-managers who were higher in need for achievement (Murray, 1938) and lower in economic satisfaction had markedly higher growth motivation, and that firms that were older and larger had lower rates of actual growth (the argument being that firms that are larger, or which have existed longer at a given size, are less likely to strictly need to grow in order to survive or to yield a sufficient income to the owner-manager).

Frédéric Delmar's dissertation builds largely on the results from Davidsson's dissertation and uses the same methodological approach and type of analysis (PLS). If Davidsson was eclectic, blending several approaches in the study of small firm growth, Delmar decided to focus attention on the psychology of the entrepreneur. At that time, there was a debate about the value of psychological research in entrepreneurship (Gartner, 1988; Shaver and Scott, 1991). The questioning of the value of such research originated mostly in the lack of use of state-of-the-art psychological theory in entrepreneurship research. In order to overcome such limitations, Delmar developed a model of entrepreneurial behavior and firm growth based on a current social psychological approach. The model emphasized the role of intrinsic vs. extrinsic motivation; the interaction between ability and motivation; the role of task characteristics; and the need to distinguish between entrepreneurial performance and business performance. The results of Delmar's analyses confirmed the results of Davidsson's study. Entrepreneurial behavior or managerial action was influenced by perceived ability, need, and opportunity also in this study.

The distinction between entrepreneurial behavior and firm performance is an important development of Davidsson's original model. It is important because it emphasizes the evolution of a firm as a complex phenomenon that takes place in a dynamic environment only partly under the control of the entrepreneur. Based on available information, entrepreneurs might make correct or incorrect decisions but regardless, external circumstances could lead to unanticipated outcomes potentially reversing what was anticipated.

Furthermore, the complexity also leads to the number of choices of how to reach a particular firm-level outcome. The results from Delmar's dissertation showed that many of these decisions are made based on personal values and interests (intrinsic motivation) of the entrepreneur. The more intrinsically motivated the entrepreneur is by the prospects of growth, the more likely he or she is to engage in a growth process and succeed. On the other hand, if the growth process is chosen for extrinsic reasons, the entrepreneur is less likely to succeed in the endeavor.

Task characteristics and perceived ability were important determinants of achieved growth as well as growth motivation. Those entrepreneurs that had already experienced growth and employed staff that was open to changes were more likely to engage in and achieve further growth. Hence, there was a strong

interaction among previous performance, attribution of ability and firm performance.

Johan Wiklund's dissertation entitled 'Small firm growth and performance: entrepreneurship and beyond' was completed in 1998. It received the 1998 NFIB best dissertation award, which is awarded by the Entrepreneurship Division of the Academy of Management. As the title indicates, the dissertation builds on the preceding works by Davidsson and Delmar. The focus on the study lies on the actual activities and strategies that small firms utilize in order to achieve growth. The argument is made that regardless of the motivations and access to resources of the individual small business manager, he or she must be able to devise the appropriate strategies in order to take advantage of growth opportunities. This focus clearly sets this dissertation apart from those of Davidsson and Delmar who put the individual on center stage.

In reviewing the literature it became clear that most empirical studies using growth as the dependent variable relied on cross-sectional data. This is far from ideal as growth represents a process of change. In cross-sectional studies, the strategies and management practices used by the small business could thus represent effects of the growth taking place up to the point of data collection rather than causes of that growth process. In order to avoid such problems, the thesis used a longitudinal design collecting information on the independent variables at one point of time and the resulting growth outcomes later. It also took into account that small businesses may grow by setting up subsidiaries and by mergers and acquisitions and not only by organically expanding one organizational unit. The results supported that in particular those small businesses that pursued aggressive growth strategies tended to rely on a combination of internal growth and external growth mechanisms, which at the time was a novel finding. The finding spurred further investigation into how mergers, acquisitions and strategic alliances could be used by small firms to fuel growth (Wiklund and Shepherd, 2005a).

Specifically, the study used the entrepreneurial orientation (EO) construct developed by Miller (1983) and Covin and Slevin (1986; 1989) to tap into the strategic activities of the small firms. EO refers to a firm's strategic orientation, capturing specific entrepreneurial aspects of decision-making styles, methods, and practices. As such, it reflects how a firm operates rather than what it does and is a relevant conceptualization of entrepreneurship in existing firms.

In part, the focus of the thesis reflects that conceptual development had taken place since Davidsson's dissertation was published nine years earlier. Several valuable theoretical contributions had been made. However, the literature on small firm growth far from represented one coherent field and a major contribution of the thesis was its amalgamation of previous research into one coherent research model. The model suggests that the motivations of the

entrepreneur, the resources that the small business can access and the environmental conditions all affect growth. However, these effects are indirect, mediated by the strategies that the small business pursues, in this case its entrepreneurial orientation. To a large extent, the empirical results supported the model. The strategic choices made by small business managers affect its growth to a substantial degree, even when a broad range of other factors are taken into account, thereby challenging ecological and institutional theories emphasizing inertia and path dependence. Indirect positive effect of environmental dynamism on growth mediated by EO suggests that in dynamic environments, where market demand is constantly shifting, opportunities become abundant and growth is highest for firms having an orientation for pursuing new opportunities because they have a good fit between their strategic orientation and the environment. These ideas were developed further in an article testing how configurations of EO, environmental dynamism and the access to resources affect small business performance (Wiklund and Shepherd, 2005b).

THE WORKS INCLUDED IN THIS BOOK

Part I: The Conceptual and Empirical Complexity of the Firm Growth Phenomenon

What we have learnt more than anything else through our dissertations and other research is that firm growth is a complex phenomenon. It is not unidimensional. It is hard to predict and assess. Further, it can manifest itself in various ways, and consequently it can have differential effects on several different levels. This is important for researchers to realize because otherwise they will rush out and conduct ill-conceived studies employing poor or misplaced operationalizations applied to too heterogeneous samples of firms – and run the risk of learning nothing or drawing erroneous conclusions. It is equally important for managers and policy-makers to understand the multifaceted nature of firm growth. For managers, different forms of growth may be easier or harder to achieve. These will also pose different challenges as regards internal turmoil in the organization, and have different effects on results in the shorter and longer terms. For policy-makers the challenges include telling the difference between sound consolidation and unsound concentration of industries as firms grow larger; the static efficiency of large scale vs. the dynamic effectiveness of diversity; and genuine job creation as distinct from mere movement of jobs through acquisition-based firm growth.

In the entrepreneurship literature it is often taken for granted that growth is entrepreneurial and that growth is good. In our work we have found reason to question the uncritical acceptance of both of those notions. In

‘Entrepreneurship as Growth; Growth as Entrepreneurship’ – the first chapter in Part 1 – we take a deeper look at the connection between entrepreneurship and growth, a theme we had all had reason to contemplate in our respective dissertation works. The original context for this manuscript was a by-invitation research meeting on the interface between entrepreneurship and strategy held at the Kauffman Foundation facilities in Kansas City in 2001, which later led to the publication of a book edited by the conference organizers (Hitt, Ireland, Camp and Sexton, 2002). In that context, we wanted to explore growth as an obvious area of potentially fruitful collaboration and cross-fertilization between entrepreneurship and strategy research as well as examine for what aspects of firm growth entrepreneurship researchers were likely apt to make unique contributions.

We find that old or implicit notions of entrepreneurship defined as ‘owner-management of independent firms’ naturally include growth as an aspect of entrepreneurship. Contemporary definitions are more exacting: either ‘entrepreneurship’ is reserved for an emergent stage and growth is regarded as a different (and later) phenomenon, or only such growth that is based on the introduction of new offerings in the market is indicative of entrepreneurship. As young and small firms tend to grow organically whereas old and large ones primarily grow through acquisition (cf. below) the assumption that growth reflects entrepreneurship is reasonable for the former type of firms but questionable for the latter. We further argue that the growth of particular business activities, such as the launching of a new product, represents a phenomenon that has greater relevance for entrepreneurship researchers than has the growth of the firm as a business organization. This marks a difference compared with strategic management, where firm performance is the dependent variable of choice.

The second selection for Part I – ‘Conceptual and Empirical Challenges in the Study of Firm Growth’ – has a similar origin and first publication outlet. This chapter was prepared for a by-invitation conference organized by Donald Sexton in Fort Lauderdale in 1999, for the last in his series of ‘State of the Art of Entrepreneurship Research’ books (Sexton and Landström, 2000; Sexton and Kasarda, 1992; Sexton and Smilor, 1986, 1997; cf. Kent, Sexton and Vesper, 1982). It reflects issues arising in connection with empirical studies we were involved in at the time, such as Wiklund’s thesis work as well as Davidsson–Delmar’s project on high-growth firms (the three chapters in Part 111 of this book are from these two projects). Our discussions of the need for theoretical input and longitudinal design emanate mainly from the experiences from Davidsson’s thesis project and the groundwork for Wiklund’s dissertation project. So do our discussions of the need to be careful not to equate one entrepreneur with one firm. This mix-up of levels of analysis has been a very common mistake or shortcoming in entrepreneurship research. We have

recently had reason to revisit the issue in more general terms than just discussing growth (Davidsson, 2004 forthcoming) and it has also been highlighted by other authors (Sarasvathy, 2004; Scott and Rosa, 1996). If the fundamental interest is on the individual level and the study uses psychological theory as a starting point, then the study needs to consider all the businesses the individual is involved in and not just one that happens to be included due to firm-based rather than individual-based sampling. If the interest is genuinely at the firm level, then in many cases the founder represents but a fraction of the human capital available to the firm.

This chapter on conceptual and empirical challenges also discusses the fundamental elusiveness of the growing firm, with empirical illustration from the high-growth firm study. In short, the problem is that growth implies change. At the same time the researcher does not want the firm to change so much that at the end of the observation period it can no longer meaningfully be regarded 'the same' firm, because if the firm does not in some meaningful manner remain the same there is no way we can assess how much 'it' has grown! In addition, this chapter provides an elaborate discussion of the challenges and importance of matching theories, knowledge interests, firm conceptualizations and operationalizations of growth so that they fit logically together. While this discussion may not offer complete and satisfactory solutions for all researchers' design dilemmas we think it provides illuminating food for thought for any researcher about to conduct a study of firm growth. We are aware of no corresponding discussion elsewhere in the literature.

The next chapter – 'Measuring growth: methodological considerations and empirical results' – discusses the choice of specific operationalizations of growth at much greater depth. It actually preceded the previous two chapters in time as it first appeared in *Entrepreneurship and SME Research: On its Way to the Next Millennium* (Donckels and Miettinen, 1997). The origin of the chapter is the observation Delmar made when writing his dissertation and trying to understand what was already known on firm growth and what results had been replicated in different studies. Instead of finding a homogenous field centered on common concepts he found a plethora of different and unrelated results. A source to this lack of theory and empirical development was the heterogeneity of different growth measures – researchers use a wide variety of concepts to measure growth. These differences in measurement affect the relationship among the independent variables and the dependent variable, and hence theory development. In order to examine the previous statement, 55 growth studies were reviewed, and data from a sample of small businesses were used to examine the effects of different growth measures.

As different measures were used, a direct comparison among studies is made difficult, if not impossible. It was found that most studies were based on

samples from manufacturing industries. Furthermore, the results indicated little knowledge of the effects of the choice time period, and the effect of the choice of indicator. It was also found that growth measured in absolute or relative changes yielded totally different results. Other authors later found similar results among large stock listed companies (Weinzimmer, Nystrom and Freeman, 1998). A major contribution of the included text is that it highlights the need to treat the operationalization of growth very carefully. A failure to do so will hamper the development of growth research.

While at the time of this writing the manuscripts selected for Part I are four to eight years old, we feel that they still hold up as sources of essentially sound advice for researchers interested in studying firm growth and – at least to some extent – for practitioners contemplating the consequences of different modes of firm growth. However, we have also learnt more since these works were published. As a result we would today more emphasize that if the true interest is in firm performance rather than growth specifically, it is not really defensible to use growth as the sole performance indicator. Growth is not necessarily an indicator of sound, sustainable development in the best interest of the firm's various stakeholders. On the contrary, in recent work we have concluded that trying to 'grow profitable' from a starting point of below-average profitability may be a very risky prospect more likely to lead to poor performance along both dimensions than to the ideal state of profitable growth (Davidsson, Steffens and Fitzsimmons, 2005). Therefore, if the interest is really in performance rather than growth specifically the study should at least include other performance measures alongside growth (Dahlqvist, Davidsson and Wiklund, 2000; Wiklund, 1998).

When growth is the true interest and under emphasized issue in the above readings is that researchers should be wary not to make unwarranted linear assumptions. Non-growth or shrinkage may in part be a different phenomenon than just 'less growth'. Hence, one should not necessarily expect variables to have the same relative effect on size changes along the entire spectrum (Cooper, Gimeno-Gascon and Woo, 1994; Dahlqvist et al., 2000; Penrose, 1959). Further, we would today be less inclined to suggest that sales growth is the best indicator overall. From a technical standpoint we have learnt from ongoing research that employment growth is actually the indicator that has the highest correlation with other alternative growth measures (sales growth, equity growth, income growth, and assets growth) and is most robust to different operationalizations (Wiklund and Shepherd, 2005a). Other on-going work has revealed that it is possible to find theoretical explanations for when sales and employment growth are more and less highly correlated. More specifically, hypotheses derived from transaction cost economics can help explain why sales growth is sometimes not accompanied by corresponding employment growth, at least in resource-

constrained environments (Chandler, McKelvie and Davidsson, 2005). Overall, we would today even more emphasize the importance of letting theoretical considerations govern the choice of growth indicator (Wiklund and Shepherd, 2005a). Other researchers have demonstrated that theory-driven research on growth within relatively homogenous samples of firms is a sound way to go for firm growth research (Baum and Locke, 2004). With more homogenous samples it may also be possible to use industry-specific growth indicators that may be the best choice for the particular industry although they cannot be employed when a more heterogeneous sample is studied. We would also suggest that it is sounder practice to test several growth indicators separately rather than using just one indicator or an index combining several indicators to a growth index that is assumed to be uni-dimensional. If several measures are used separately the researcher will likely arrive at a more complete understanding of the phenomenon than when just one measure is selected.

Part II: Growth Aspirations and Motivation

Davidsson's dissertation study (Davidsson, 1989a, 1991) used both growth motivation and actual growth as dependent variables. However, as the study was cross-sectional in design he could not strictly prove that the two were causally related. It was only through the similarity of influence of arguably time-invariant independent variables in two separate analyses using outcome variables that he could make a case for the manager's growth motivation having its own, important role to play with respect to achieving actual growth apart from objective characteristics of the firm and its environment. In more recent work we have directly investigated the relationship between the manager's growth motivation and the actual, subsequent growth of the firm. Building on the theory of planned behavior (Ajzen, 1991), Wiklund and Shepherd (2003) showed that the access to growth opportunities in the environment and the access to resources needed for devising growth strategies moderate the relationship between growth motivation and growth. Delmar and Wiklund (2003) used cross-lagged regression analysis to tease out the causality between growth motivation and growth, demonstrating that while effects run both ways the effect of motivation on growth is stronger than the reverse. These supportive results make the studies included in Part II more relevant as we now know that growth aspiration/motivation is not just an unsatisfactory and unproven proxy for 'the real thing' but actually has independent predictive power with respect to subsequent growth.

The chapter 'Firm size expectations of nascent entrepreneurs' was one of the first papers based on the Swedish counterpart to the Panel Study of Entrepreneurial Dynamics (Gartner, Shaver, Carter and Reynolds, 2004). It

was presented at the Babson Conference in 1999 and included in the proceedings *Frontiers of Entrepreneurship Research* (Reynolds et al., 1999). Before we actually had any longitudinal data from the project we used growth aspirations as a dependent variable, as did some of our international colleagues who were in the same situation. Thus, we were here interested in examining the factors affecting the future firm size expectations of nascent entrepreneurs. The proposed model was based on four different components that were tested together as well as separately in order to assess their unique and combined effect on size expectations. The four components are: initial human capital; personal/business goals; environmental and business context; and activities to organize the new firm. The dependent variable reflects the growth trajectories that new firms can take.

The results show that growth aspirations are modest. While it was difficult to predict intended start size we had some success at predicting expected early growth. Moreover, the results show that nascent entrepreneurs expecting high growth also expected a larger start size. Their goal was more often to make the future business their main income source. Other studies on growth ambitions of nascent entrepreneurs reach similar conclusions. First, nascent entrepreneurs are relatively modest in their aspirations. For example, Human and Matthews (2004) show that aspirations are typically low for US-based nascent entrepreneurs as well. The median expected revenue after five years is a mere US\$100 000, and on a dichotomous attitudinal item 78 per cent say they prefer to keep the firm at a manageable size rather than growing it as large as possible. Despite the low aspirations other research indicates they are still over-optimistic about what they will be able to achieve (Schoett and Bager, 2004). In summary, the analyses of nascent entrepreneurs' growth aspirations have helped create a realistic image of the modesty of the typical new venture start-up.

Data from another of our projects, The 1994 Start-up Cohort, has confirmed that it is not just early growth aspirations that are modest. Young firms in Sweden show very modest actual growth on average (Dahlqvist and Davidsson, 2000; Dahlqvist et al., 2000). In 'What do they think and feel about growth? An expectancy-value approach to small business managers' attitudes toward growth' – the second selection for Part II – we delve deeper into the reasons behind this. This chapter has a long history. The core set of questions on expected consequences of growth was included in Davidsson's dissertation study and the topic of the first journal article emanating from it (Davidsson, 1989b). However, it was only mentioned as a side issue in the dissertation itself. The question package was included but remained a side issue in Delmar's and Wiklund's respective thesis studies as well. In 1997 Wiklund took the initiative to perform a joint analysis of the three data sets in what was

Delmar and Aronsson, 1997). It then took a full six years – due more to our own preoccupation with other commitments than an overly lengthy review process – before the version included here appeared in the journal *Entrepreneurship Theory and Practice*.

Building on expectancy-value theory, the article shows that small business managers' attitudes towards growth can be reasonably well explained by the consequences that they expect from growth. Given that three large data sets were merged for the study, we were able to split the sample in multiple ways and conduct fine-grained analyses. A consistent finding across the multiple analyses is that expectations concerning the effect of growth on employee well-being come out as the most important determinant of growth attitude. It suggests that the 'soft qualities' of the small business are of great concern to small business managers. Had this result appeared in a single study, skeptics could have regarded it a peculiarity of little consequence. When replicated in three studies and multiple sub-sample analyses, the suggestion that this non-financial concern may be more important than financial ones (for example, the personal income variable included in the study) in determining overall growth attitude has to be taken seriously. In sum, the concern for the atmosphere of the work place and the well-being of the staff (including the business owner) appears to provide a relevant explanation to the lack of growth aspirations found in our own and others studies noted in the above.

The chapter also points to the value of replication, which is common in many scientific fields but largely missing in entrepreneurship. The same measures were used in three samples including somewhat different firms and different phases of the business cycle. Other than the consistent strong effects of employee well-being, each of the samples only produces three or four results that were statistically significant at the conventional 5 per cent level. However, while not statistically significant across all studies, all effects were positive, and the likelihood of finding positive effects this large or larger in three separate studies of this size is actually extremely small. The fact is that all the results of the combined studies support the theory.

We have advocated replication in studies of growth also elsewhere. The Dahlqvist et al. (2000) article deliberately tests if results obtained by a single study replicate in a different context. Some do, suggesting great generality for these particular findings, while others don't, warranting additional testing. However, we have also noted that – at least among new firms – growth results are likely not to replicate because researchers operationalize growth in very many different ways and identical growth measures across studies are very rare. The problem with this is that the correlation between different growth measures is low suggesting limited concurrent validity (Wiklund and Shepherd, 2005a). We therefore recommend that researchers replicate growth research utilizing identical growth measures.

Part III: Patterns and Determinants of Actual Growth

It is probably fair to suggest that the majority of firm growth studies are geared toward explaining variance in growth rates across firms and to attribute relative strength of explanatory power to the independent variables included in the analyses. Although our respective dissertation projects have such an exercise as their main objective it is not the focus we have chosen for the selection of manuscripts for this section on actual growth. As regards ‘factors influencing growth’ across all kinds of firms and contexts we would hold that the research community has probably come as far as it can come: a wide range of known factors on the individual, firm and environment levels have some influence, and no single factor has a dominant influence (see for example, Storey, 1994). In order to reach further we would suggest researchers turn to theory-driven analysis of the influence of specific sub-sets of factors in specific contexts (Baum and Locke, 2004).

Nonetheless, our first selection for Part III – ‘The sustainability of the entrepreneurial orientation performance relationship’ is about performance prediction. However, this manuscript, which originates from the continued data collection from the sample studied for Wiklund’s dissertation and first appeared in *Entrepreneurship Theory and Practice* in 1999, is not about the total and relative influence of a laundry list of common sense based growth predictors. Instead, it is narrowly focused on the role of an important and recurring concept in entrepreneurship studies: entrepreneurial orientation. Even more importantly, it is one of few examples of studies addressing a huge but largely ignored issue in management studies: over what time span should the independent variables reasonably be assumed to exert their influence on business outcomes? On the one hand it is reasonable to assume that it takes some time for entrepreneurial initiatives to pay off suggesting studying performance outcomes over long periods of time. For example, the income streams from new product launches are not immediate. On the other hand, over longer periods of time, the business may go through changes so that the level of the independent variables change, or factors not included in the model may intervene and disturb the relationships between independent and dependent variables. The empirical results showed that EO had positive implications for the performance in the subsequent year as well as in the following year, but that the results were stronger in the latter case. This suggests that the performance implications of EO on performance are long term rather than short term. This supports the underlying logic of the EO construct as a strategic variable and not simply a quick fix.

The study used ‘performance’ and not ‘growth’ as the dependent variable. Yet it is included in this volume on growth. The reason is that the performance construct was measured by a range of indicators relating to multiple dimensions

of growth as well as multiple indicators of financial performance, including objective as well as self-perceived measures. There has been a debate in the literature about the most suitable indicators of small business performance and the decision was made to take a broad view on these issues, as recommended by some authors (Birley and Westhead, 1990). Interestingly, there was a high correlation among the different indicators and they could be summed to an index with favorable measurement properties (Cronbach's Alpha above 0.70). This suggests that small businesses that expand their operations also perform better financially. Although this is not the major finding of the article, it is important because it supports the observation that small businesses grow primarily on the basis of retained earnings and not by extending debt or outside equity. In doing so it opposes the idea that growth would be a trade-off for financial performance. This is not necessarily at odds with Davidsson et al.'s (2005) finding that firms that grow from a starting point of low profitability rarely become more profitable as a result of their expansion.

The second entry in Part III – 'High-growth firms and their contribution to employment: the case of Sweden 1987–96 – has been on a long and winding journey. It has previously appeared as a conference paper and a report to the OECD in the late 1990s before being translated and published in a scholarly journal in French (Davidsson and Delmar, 2002). It was then committed to a book project, which the editors in the end were never able to pull off, which is why – in effect – it appears as an original publication in the English language in the present volume. As its title indicates this is essentially a piece of descriptive policy research. As such, it can serve as a warning example to young researchers: without theoretical interpretation it does not matter how good the data are and how interesting the results might seem to a researcher or practitioner in that country at that time; it is simply not very interesting to others a few years later what percentage of job creation was attributable to certain industries, regions and firm size classes.

However, despite its somewhat atheoretical character this paper has – largely due to its unique data – some features that make it deserve being included here. Most importantly, the study is probably the only one so far of this scope that distinguishes between organic and acquisition-based growth. This made it possible for us to detect rather dramatic differences by firm age and size class regarding *how* rapidly growing firms achieve their growth. In short, young and small firms grow organically while older and larger ones achieve expansion more or less exclusively through acquisition of other units already in existence. This implies these categories of firm fulfill different roles in the economy and clearly demonstrates that firm growth does not necessarily translate to employment growth in the economic system of which the firms form part. Another unique feature of the study is that it follows the firms' development through an entire business cycle. It turns out that the high-growth

firms, as a group, appear much less affected by the swings in the economy than the majority of 'other' firms. A deeper analysis (not reported in the paper) shows that the high-growth firms are able to maintain their growth in the downturn by increasing their emphasis on acquisitions as the room for organic growth diminishes with the general recession. In the battle between 'population ecology' (Hannan and Freeman, 1977) and 'strategic choice' (Child, 1972) this suggests that at least a significant minority of firms is able to shape its own destiny, supporting the conclusions from Wiklund's dissertation study.

The final chapter – 'Arriving at the high growth firm' – first appeared as a Babson paper under a different title and was later published in *Journal of Business Venturing* in its present form (and adding Bill Gartner as co-author). It utilizes the same data set as the previous paper but analyses it in a different way. With its focus on different patterns and measures of growth it neatly connects back to the challenges and measurement issues discussed in Part I. We here observe the heterogeneity of how firms actually grow. Using cluster analysis techniques we find seven distinct growth patterns that firms might use. These growth patterns differ in pace, in content, and regularity, and are dependent on the age, size and the industry affiliation of the firm concerned. For example we found that firms that were able to grow substantially both in terms of employees and in sales were mostly found among small- and medium-sized firms in knowledge-intensive industries, whereas firms that chose expansion by acquisition often were older, part of a company group and located in traditional industries such as paper and pulp; steel and manufacturing.

These results indicate that the question of '*how* do firms grow' is as relevant a question as '*why* do firms grow'? Because we show that growth patterns are to some degree ordered, there might be a potential for gaining a deeper understanding of how firm growth occurs. Apparently, firms differ in why they start to grow and how they grow. The consequences of growth do also differ on a number of levels of analyses. A firm that grows by acquisition is faced with different problems than a firm that grows organically. In the first case, the special problems related to merging two different cultures arise, but the firm may be able to rapidly achieve a new strategic posture. In the second case, integration of new employees can be done under different circumstances, but it might be hard to rapidly find sufficient resources to meet the demand of growth.

Moreover, with a focus on the process of firm growth, we might also address one of our initial observations in this introductory chapter: growth implies change, and it is important to understand the origin of these changes; how and what has changed, and what has persisted in the growing firm. A growing firm might change location, legal structure, company structure and products. Still, as researchers we often regard the firm as the same unique entity, which may be an unjustifiable conclusion.

CONCLUSION

While the selection of papers for this volume gives a fair overview of our personal research efforts regarding firm growth it cannot, of course, do justice to what the research community as a whole has had to say about firm growth. However, it is our hope that this collection of chapters will serve as an interesting overview of insights into this phenomenon as well as a source of inspiration to conduct new studies that reach further. A conventional approach in this concluding section would be to spell out detailed advice for future research. However, we feel that the works selected for the volume already include enough of that sort. Instead, we hope that readers find inspiration from connections across these works and their prior knowledge to come up with new research questions and approaches beyond what we are able to conceive of. That would be an instance of Schumpeterian ‘entrepreneurship’ in the form of ‘new combinations’ (Schumpeter, 1934) leading to ‘growth’ – in this case of collective, cumulative knowledge.

REFERENCES

- Ajzen, I. (1991), ‘The theory of planned behavior’, *Organizational Behavior and Human Decision Processes*, **50**, 179–211.
- Alvesson, M. and K. Sköldbberg (2000), *Reflexive Methodology; New Vistas for Qualitative Research*, Thousand Oaks, CA: Sage.
- Baum, J. R. and E. A. Locke (2004), ‘The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth’, *Journal of Applied Psychology*, **89**(4), 587–98.
- Birley, S. and P. Westhead (1990), ‘Growth and performance contrasts between “types” of small firms’, *Strategic Management Journal*, **2**, 535–57.
- Chandler, G. N., A. McKelvie and P. Davidsson (2005), ‘A transaction cost perspective on the relationship between growth in sales and employment’, paper presented at the Academy of Management meeting, Honolulu.
- Child, J. (1972), ‘Organizational structure, environment and performance: the role of strategic choice’, *Sociology*, **6**(1–22).
- Cooper, A. C., F. J. Gimeno-Gascon, and C. Y. Woo (1994), ‘Initial human and financial capital as predictors of new venture performance’, *Journal of Business Venturing*, **9**(5), 371–95.
- Covin, J. G. and D. P. Slevin (1986), ‘The development and testing of an organizational-level entrepreneurship scale’, in R. Ronstadt, J. A. Hornaday, R. Peterson and K. H. Vesper (eds), *Frontiers of Entrepreneurship Research 1986*, Wellesley, MA: Babson College, pp. 628–39.
- Covin, J. G. and D. P. Slevin (1989), ‘Strategic management of small firms in hostile and benign environments’, *Strategic Management Journal*, **10** (January), 75–87.
- Dahlqvist, J. and P. Davidsson (2000), ‘Business start-up reasons and firm performance’, in P. D. Reynolds, F. A. O’Cm Brush, W. D. Bygrave, S. Manigandan

- Sapienza and K. Shaver (eds), *Frontiers of Entrepreneurship Research 2000*, Wellesley, MA: Babson College, pp. 46–54.
- Dahlqvist, J., P. Davidsson and J. Wiklund (2000), 'Initial conditions as predictors of new venture performance: a replication and extension of the Cooper et al. study', *Enterprise and Innovation Management Studies*, **1**(1), 1–17.
- Davidsson, P. (1986), *Tillväxt i små företag: en pilotstudie om tillväxtvilja och tillväxtförutsättningar i små företag* [Small Firm Growth: A Pilot Study on Growth Willingness and Opportunity for Growth in Small Firms] (Studies in Economic Psychology No. 120, Stockholm: Stockholm School of Economics.
- Davidsson, P. (1989a), 'Continued Entrepreneurship and Small Firm Growth', doctoral dissertation, Stockholm; Stockholm School of Economics.
- Davidsson, P. (1989b), 'Entrepreneurship – and after? A study of growth willingness in small firms', *Journal of Business Venturing*, **4**(3), 211–26.
- Davidsson, P. (1991), 'Continued entrepreneurship: ability, need, and opportunity as determinants of small firm growth', *Journal of Business Venturing*, **6**(6), 405–29.
- Davidsson, P. (2004), 'Researching Entrepreneurship', New York: Springer.
- Davidsson, P. (forthcoming), 'Method challenges and opportunities in the psychological study of entrepreneurship', in J. R. Baum, M. Frese and R. A. Baron (eds), *The Psychology of Entrepreneurship*, Mahway, NJ: Erlbaum, Chapter 13.
- Davidsson, P. and F. Delmar (2002), 'Les entreprises à forte croissance et leur contribution à l'emploi: le cas de la Suède 1987–1996', *Revue Internationale PME*, **14**(3–4), 164–87.
- Davidsson, P., P. Steffens and J. Fitzsimmons (2005), 'Growing profitable or growing from profits. Putting the horse in front of the cart?', Academy of Management Best Paper Proceedings.
- Delmar, F. (1996), 'Entrepreneurial behavior and business performance', doctoral dissertation, Stockholm: Stockholm School of Economics.
- Delmar, F. and P. Davidsson (1999), 'Firm size expectations of nascent entrepreneurs', in P. D. Reynolds, W. D. Bygrave, S. Manigart, C. Mason, G. D. Meyer, H. J. Sapienza and K. G. Shaver (eds), *Frontiers of Entrepreneurship Research 1999*, vol 19, Wellesley, MA: Babson College, pp. 90–104.
- Delmar, F. and J. Wiklund (2003), 'The effect of the entrepreneur's growth motivation on subsequent growth: a longitudinal study', paper presented at the Academy of Management Meeting, Seattle.
- Donckels, R. and A. Miettinen (eds) (1997), *Entrepreneurship and SME Research: On its Way to the Next Millennium*, Aldershot, UK: Ashgate.
- Gartner, W. B. (1988), "'Who is an entrepreneur?' is the wrong question", *American Small Business Journal*, **12**(4), 11–31.
- Gartner, W. B., K. G. Shaver, N. M. Carter and P. D. Reynolds (2004), *Handbook of Entrepreneurial Dynamics: The Process of Business Creation*, Thousand Oaks, CA: Sage.
- Hannan, M. T. and J. H. Freeman (1977), 'The population ecology of organizations', *American Journal of Sociology*, **82**(5), 929–64.
- Hitt, M., D. Ireland, M. S. Camp, D. L. Sexton (eds) (2002), *Strategic Entrepreneurship: Creating a New Mindset*, Oxford, UK: Blackwell.
- Hulland, J. (1999), 'Use of partial least squares (PLS) in strategic management research: a review of four recent studies', *Strategic Management Journal*, **20**, 195–204.
- Human, S. L. and C. H. Matthews (2004), 'Future expectations for the new business', in W. B. Gartner, K. G. Shaver, N. M. Carter and P. D. Reynolds (eds), *Handbook*

- of *Entrepreneurial Dynamics: The Process of Business Creation*, Thousand Oaks: Sage, pp. 386-400.
- Jöreskog, K. G. and H. Wold (1982), 'The ML and PLS techniques for modeling with latent variables', in H. Wold (ed.), *Systems Under Indirect Observation*, vol 2, Amsterdam: North-Holland, pp. 263-70.
- Kent, C. A., D. L. Sexton and K. H. Vesper (1982), *Encyclopedia of Entrepreneurship*, Englewood Cliffs, NJ: Prentice Hall.
- Miller, D. (1983), 'The correlates of entrepreneurship in three types of firms', *Management Science*, **29**, 770-91.
- Murray, H. A. (1938), *Explorations in Personality*, New York: Oxford University Press.
- Penrose, E. (1959), *The Theory of the Growth of the Firm*, Oxford: Oxford University Press.
- Reynolds, P. D., W. D. Bygrave, S. Manigart, C. Mason, G. D. Meyer, H. J. Sapienza et al. (eds) (1999), *Frontiers of Entrepreneurship Research 1999*, vol 19, Wellesley, MA: Babson College.
- Sarasvathy, S. (2004), 'The questions we ask and the questions we care about: reformulating some problems in entrepreneurship research', *Journal of Business Venturing*, **19**(5), 707-20.
- Schoett, T. and T. Bager (2004), 'Growth expectations by entrepreneurs in nascent firms, baby businesses and mature firms', in T. Bager and M. Hancock (eds), *The Growth of Danish Firms. Part 2 of the Global Entrepreneurship Monitor, Denmark 2003*, Copenhagen: Boersens, pp. 219-230.
- Schumpeter, J. A. (1934), *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.
- Scott, M. and P. Rosa (1996), 'Opinion: has firm level analysis reached its limits? Time for a rethink', *International Small Business Journal*, **14**(4), 81-9.
- Shaver, K. G. and L. R. Scott (1991), 'Person, process, choice: the psychology of new venture creation', *Entrepreneurship Theory and Practice* (Winter), 23-45.
- Sexton, D. and K. Kasarda (1992), *The State of the Art in Entrepreneurship*, Boston, MA: PWS Publishing.
- Sexton, D. and R. W. Smilor (1986), *The Art and Science of Entrepreneurship*, Cambridge, MA: Ballinger.
- Sexton, D. L. and R. W. Smilor (1997), *Entrepreneurship 2000*, Chicago, IL: Upstart Publishing.
- Sexton, D. L. and H. Landström (2000), *The Blackwell Handbook of Entrepreneurship*, Oxford, UK: Blackwell.
- Storey, D. J. (1994), *Understanding the Small Business Sector*, London: Routledge.
- Weinzimmer, L. G., P. C. Nystrom and S. J. Freeman (1998), 'Measuring organizational growth: issues, consequences and guidelines', *Journal of Management*, **24**(2), 235-62.
- Wiklund, J. (1998), 'Small firm growth and performance: entrepreneurship and beyond', doctoral dissertation, Jönköping International Business School, Jönköping.
- Wiklund, J., P. Davidsson, F. Delmar and A. Aronsson (1997), 'Expected consequences of growth and their effect on growth willingness in different samples of small firms', in P. D. Reynolds, W. D. Bygrave, N. M. Carter, P. Davidsson, W. B. Gartner, C. M. Maston and P. P. McDougall (eds), *Frontiers of Entrepreneurship Research 1997*, Wellesley, MA: Babson College, pp. 1-16.
- Wiklund, J. and P. D. Shepherd (2003), 'Aspiring for and achieving growth: the

moderating role of resources and opportunities', *Journal of Management Studies*, **40**(8), 1911–41.

- Wiklund, J. and D. Shepherd (2005a), 'Knowledge accumulation in growth studies: the consequences of methodological choices', paper presented at the ERIM expert workshop Perspectives on the Longitudinal Analysis of New Firm Growth, 18–19 May, Erasmus University, Rotterdam, The Netherlands.
- Wiklund, J. and D. Shepherd (2005b), 'Entrepreneurial orientation and small business performance: a configurational approach', *Journal of Business Venturing*, **20**(1), 71–91.