

This item is the archived peer-reviewed author-version of:

From "manager" to "strategist" : an examination of the evolving role of persistent high-growth entrepreneurs

Reference:

Dillen Yannick, Laveren Eddy, Martens Rudy, De Vocht Sven, Van Imschoot Eric.- From "manager" to "strategist" : an examination of the evolving role of persistent high-growth entrepreneurs
International journal of entrepreneurial behaviour and research - ISSN 1355-2554 - (2018), p. 1-27
Full text (Publisher's DOI): <https://doi.org/10.1108/JEBR-01-2017-0010>

From 'Manager' to 'Strategist': An Examination of the Evolving Role of Persistent High-Growth Entrepreneurs

Abstract

Purpose: Few high-growth firms (HGFs) are able to maintain high-growth over time. Our study tries to find out why only a small number of firms become persistent HGFs, explicitly focusing on the role of the founding entrepreneur in this process.

Design/Methodology/Approach: Initially, twenty-eight semi-structured interviews were performed with high-growth entrepreneurs to discover why so few founders could become persistent high-growth entrepreneurs. In a second phase, four case studies were conducted to uncover the factors that facilitate a swift evolution from the 'managerial' role to the 'strategic' role.

Findings: High-growth entrepreneurs, who quickly make a transition from a managerial role into a strategic role are more likely to keep their firm on its high-growth trajectory. This transition is made possible by 1/ the early development of strategic skills, 2/ the presence of a high quality human capital base and 3/ an organisational structure with characteristics from Mintzberg's 'machine bureaucracy'.

Practical implications: The results are vital for entrepreneurs of 'one-shot' HGFs with the ambition to make their firm a 'persistent' HGF. If high-growth rates are to be sustained, the three factors that emerged from our analysis should foster the delegation of managerial tasks, resulting in an easier transition towards a 'strategic role'.

Originality/Value: Insights are valuable as both founders and governmental institutions can benefit from knowing which factors contribute to a successful phase transition from 'manager' to 'strategist'.

Keywords: high-growth firms, high-growth, high-growth entrepreneur, persistence, strategic role, managerial role

Introduction

Generally being considered as the engine for job creation in a region high-growth firms (HGFs) (Littunen & Tohmo, 2003), have received widespread attention in recent years, both in academic and policy research (Coad et al., 2014a). Generally, applicable findings on the profile characteristics of HGFs, such as their age, industry and geographical location have emerged (Moreno & Coad, 2015). Another important stylized fact considers the persistence of high business growth. Most evidence suggests that HGFs do not tend to persist in their high-growth (Daunfeldt & Halvarsson, 2014). This has raised the question about the special characteristics of HGFs with persistent growth (Daunfeldt & Halvarsson, 2014). Do they possess certain vital characteristics that non-persistent HGFs do not have? The answers to this question are still largely uncovered (Moreno & Coad, 2015). Moreover, relatively few studies have gathered data on the founding entrepreneurs of HGFs (Wennberg, 2013).

Therefore, in this study, we initially conducted 28 semi-structured interviews with founding high-growth entrepreneurs. Fourteen of them were previously identified as 'persistent' high-growth entrepreneurs and fourteen have been categorized as 'one-shot', high-growth entrepreneurs. Hence, the initial research question emerged: 'which factors could explain why so few firms are able to become a persistent HGF?'. Based on these interviews, it became clear that the most prevalent factor was the transition in the functional role of the founding entrepreneur during the high-growth period. Entrepreneurs that could swiftly delegate managerial tasks to other people in the firm during the high-growth period were more able to focus on strategically important issues, facilitating further high-growth of the firm.

These functional roles directly relate to the seminal works of Greiner (1972) and Chandler & Janssen (1992) in which three phases can be identified and linked to three separate roles that the business founder has to fulfil during the period the firm is growing: (1) the technical-functional role, (2) the managerial role and (3) the entrepreneurial role. The interviewed entrepreneurs of HGFs that persisted in their high-growth did indeed make a swift transition from a 'managerial' to a 'strategic' role. Therefore, in a second phase of our study, we focused on this emerging explanatory factor by conducting four cases studies that explicitly focused on the role of the founder before, during and after the high-growth period. When carrying out these case studies, the dominant research question became: 'what factors determine a successful transition from a managerial role to a strategic role?'

Hence, this study is original in the sense that it explicitly tries to shed light on the reasons why certain high-growth entrepreneurs are able to delegate their managerial tasks, in order to take on a purely 'strategic role'. Addressing this question is important because the transformation of the founder towards 'phase 3' appears to be vital for achieving sustained high-growth rates. Our findings can help founders of 'one-shot' HGFs that have the ambition to sustain high-growth rates, as learning how to swiftly transform to the 'strategic' phase could bring their firm back to the persistent high-growth path. Furthermore, more persistent high-growth firms lead, in turn, to a healthier economy, with more persistent HGFs generating a large number of jobs.

This paper is structured in the following way. Firstly, we provide a theoretical background where we discuss the potential reasons for low persistence of high-growth and analyse the three phases through which high-growth entrepreneurs can evolve. This theoretical review is used to elaborate on the academic relevance of our research questions and to create the context for the semi-structured interviews and case studies. The next section presents the methodology of our research, consisting of twenty-eight semi-structured interviews and four case studies. Subsequently, the results and main findings are described. In the discussion section, we review the three dimensions that were identified and explore the implications of our findings. The paper closes with the limitations of the study and some avenues for further research.

Theoretical background

Persistence of HGFs

Most studies in the HGF-related literature have looked at HGFs from a static point of view, focusing on only one high-growth period (Coad et al; 2014a; Littunen & Virtanen, 2009). However, more recently, studies have focused on the persistence of high business growth (e.g. Daunfeldt et al., 2013; Daunfeldt & Halvarsson, 2014; Henderson et al., 2012) and reached the conclusion that high-growth has an episodic nature and is therefore, frequently a temporary phenomenon (Parker et al., 2010; Hölzl, 2014), resulting in a high number of 'one-shot' HGFs. Hence, only a low percentage of HGFs are able to persist in their high-growth. The exact reasons for this low persistence of high business growth are still largely left unstudied (e.g. Coad et al., 2014; Moreno & Coad, 2015), but there are some theoretical perspectives that can be linked to the lack of persistent HGFs.

- The life cycle theory of the firm (e.g. Greiner, 1972) considers a period of growth in general and a period of high-growth, in particular, as a temporary phenomenon which may occur several times during the life of a firm, as a high-growth period may occur each time an organisational crisis is solved. Given the existence of these crises, longer periods of high-growth are very rare.
- The minimum efficient size (MES) concept – where a firm may want to reach a certain minimum threshold to survive in their sector – might explain temporary high-growth, as firms will try to grow as quickly as possible to reach the MES-threshold (Almus & Neringer, 1999). Once this

threshold has been attained, however, growth rates are expected to stabilize to a more moderate rate of growth. Following this logic, a high-growth period can be viewed as a temporary phase in the life of a firm and few firms will have the ability to maintain growth over a longer time period.

- Gibrat's law considers the growth rates of firms as independent random variables, implying that firms that grow faster than other firms in one period will not grow faster (or indeed, slower) than other firms in a later period (Gibrat, 1932). A high-growth period would, consequently, be a temporary and one-off event in the life of a firm. Persistent HGFs are then merely firms that are on the 'good side' of the stochastic process.
- In addition, the growth theory of Penrose (1959) and the associated resource-based view (RBV) of the firm (Wernerfelt, 1984; Barney, 1991) give potential insights into the persistence of high business growth. In her seminal work, Penrose (1959) considered a firm as a collection of idiosyncratic resources, and it is the constellation of existing resources that provides the impetus and direction for further growth. A resource can be defined as anything that can be considered a strength or weakness of the firm (Wernerfelt, 1984). Hence, one can identify different resources that can lead to growth, with the founding entrepreneur and the uppermanagement team as one of the key resources (Nicholls-Nixon, 2005; Hambrick & Mason, 1984; Furlan et al., 2014). The most important resources for a firm are typically difficult to copy and imitate by competitors (Foss, 1993; Wernerfelt, 2013). Hence, as Rajan and Zingales (2001) state, at the root of most growing firms is an entrepreneur who can be considered to be a unique, critical and 'impossible to copy'-resource for the firm, as he or she are in the possession of ideas and excellent customer relationships which are vital for the continuous growth and success of the firm. However, this entrepreneur frequently does not possess all the required capabilities to manage a strongly growing firm (Davila et al., 2010; Covin & Slevin, 1990).

Therefore, as Davila et al. (2010) state, an explanation for the failure of many firms to persist in their ambitions for growth can be found in the functional role of the founding entrepreneur, as he or she is considered to be the firm's main resource. In a small firm, the founder typically assumes multiple roles and needs to control almost every aspect of the workplace. However, once the firm starts to grow at a high pace, a drastic change in how the firm is managed is required. The founder is then required to assume managerial responsibilities for which specific capabilities are needed (e.g. Hambrick & Crozier, 1985). The founder, however, frequently does not possess enough of those managerial capabilities to run a fast-growing company and will have to delegate these tasks to other more experienced managers (Williard & Krueger, 1992). As stated by Clifford & Cavanaugh (1985, p.24) 'the founder-owner often feels that he (or she) really wants to do it all himself rather than manage others, so the further growth potential of the business is strictly limited to the personal capacities of the founder'. Consequently, it appears that the characteristics of the firm's most valuable resource, the entrepreneur, are vital for its chances of sustained high-growth. After all, if the founder can handle this 'delegation crisis' (Buchele, 1967) and place more suitable people in the operational management positions, sustained high-growth is still possible (Williard & Krueger, 1992).

A literature review on HGFs by Wennberg (2013) of 134 published studies between 1985 and 2013 revealed that only 30 studies had data on the founding entrepreneurs of HGFs. Hence, Wennberg (2013) states that – with few exceptions – we still do not know much about the role of founders and managers in HGFs, notwithstanding that their role appears to be a crucial factor in the ability to sustain high-growth rates (e.g. Demir et al., 2016; Williard & Krueger, 1992; Patton, 2005). Therefore, further and more profound research on the exact factors why certain entrepreneurs face difficulties in the delegation crisis seems appropriate.

With respect to the situation of slow-growth firms, one could state that their founders are likely to face similar issues regarding their functional role. Therefore, one could indeed argue that we should not solely focus on *high-growth* entrepreneurs. However, the founders and managers of HGFs are expected to have more difficulties in determining what type of organizational changes are needed compared to the situation in slow-growth firms, given the greater internal complexity that HGFs face (Wennberg, 2013). Moreover, given the higher growth pace, the organizational structure of a HGF faces more pressure than the structure of their non-high-growth counterparts and it is expected that the HGF's external environment also becomes more complex, as most firms attract new competitors to their market (Covin & Slevin, 1990; Arbaugh & Camp, 2000). Major changes in systems, structures and capabilities will be required to cope with the increased overall complexity that accompanies high-growth (Garnsey et al., 2006; Wennberg, 2013). For these reasons, we have deliberately chosen to focus on *high-growth* firms and not on *slow-growth* firms, as the phenomenon is likely to be much more present in the case of HGFs.

The changing role of a high-growth entrepreneur

As Smallbone et. al (1995) stated, founders who aspire to significant firm growth over an extended period are required to change their role. In the previous section, we have already touched upon the importance of the functional role of the founding entrepreneur for sustaining high-growth rates. In their seminal work, Chandler and Janssen (1992) identify three roles that the business founder has to fulfil during the period of firm growth: (1) the technical-functional role, (2) the managerial role and (3) the entrepreneurial role.

- (1) In the *technical-functional* role, the business founder must have the ability to use the tools, procedures and techniques of a specialized field. The specific skills are determined by the industry within which the firm operates.
- (2) In the *managerial* role, the ability to develop budgets and procedures, to evaluate performance and to perform other tasks that are essential to the operational management of the business become critical. Individuals with strong managerial skills enjoy high levels of responsibility and authority. The effective manager must possess conceptual competences (i.e. the mental ability to coordinate all of the organization's interests and activities), human competences (i.e. the ability to work with, understand and motivate other people, both individually and in groups) and political competences (i.e. the ability to enhance one's position and establish important connections).
- (3) The *entrepreneurial* role, eventually, comprises the scanning of the business environment, the selection of opportunities and strategy formulation. Here, the capability to recognize and take advantage of opportunities are considered to be important.

In what follows, we have a preference for the term '*strategic role*' over '*entrepreneurial role*', as the entrepreneur is the subject of analysis, and this term also highlights the importance of new strategy development in this phase.

Greiner's classic theory on the phases of growth (1972) also contains a description of the founder's role in the growth stages. He states that in the birth stage of a firm, the business founder is usually technically and entrepreneurially oriented and refrains from developing management activities. Their energy is absorbed in making and selling the new product or service. Once the firm starts to grow, its founders are then obliged to organise and promote management responsibilities. At this point, certain founders find themselves burdened and will still try to act as they did in the past, when the firm was still small. They will often resist stepping aside, even though they are probably temperamentally unsuited to the job (Davila et al., 2010). In some cases, a strong manager is needed, one who possesses the necessary knowledge and skills to introduce new business techniques. Hence, to overcome this '*delegation crisis*', the founder will have to step aside or at least devolve certain managerial tasks to other – more suited – people in the organization. As implied by Baum and Bird (2010) and as pointed

out by Nicholls-Nixon (2005), successfully managing an HGF over a long time period is dependent on installing effective operational management practices, that are controlled by experienced and motivated managers or a management team (Demir et al., 2016, Hambrick & Mason, 1984). The effectiveness of the appointment of new managers may however, be limited, as their knowledge is not fully applicable to the new firm-specific setting. This may be an additional barrier, that impedes high-growth firms from continuing on their growth trajectory over a longer time period.

Overall one may conclude that a key element in the transition from a managerial to a strategic role concerns the delegation of operational management tasks to other people in the firm. As Bushardt et al. (2001) state, the delegation process should be an integral part of the entrepreneur's job which involves the assignment of tasks to others, providing them with the authority needed to execute those tasks and holding them accountable for the results. Table 1 gives an overview of the characteristics of each of the three phases [1].

[Insert Table 1 about here]

Methods

To gain insights in to the low persistence of high-business growth and the exact role of the founding entrepreneur during this process, we initially interviewed twenty-eight HGF founders. In a second phase, four in-depth case studies were performed. In this section, we first describe the high-growth definition that we adopted, the database that was available and the way in which the interviewed founders were selected. After that, we focus on the case studies that were conducted. An overview is given of the data collection process, the data analysis, the research design and the characteristics of the analysed firms.

High-growth definition

Widely divergent high-growth definitions have been used in the past with different growth indicators to conceptualize business growth (e.g. sales, workforce, market share, profits, ...). However, an increasing number of studies have adopted the OECD definition of a high-growth firm (e.g. Du & Temouri, 2014; Hölzl, 2014; Daunfeldt & Halvarsson, 2015). According to this definition, a HGF is a firm *'that experiences annualized growth rates in employees (or turnover) greater than 20 percent per annum over a three year period with a minimum of 10 employees at the beginning of the study period.'* (Eurostat – OECD 2007, p.61). Consequently, a researcher using the OECD definition can still choose between two growth criteria, depending on the data availability and the research purpose. We decided to focus on employee growth given its higher social impact, as it will automatically lead to job creation.

Database

By having access to a database that was provided by the Central Balance Sheet Office of the National Bank of Belgium that contained firm information of all Flemish firms [2] (i.e. the northern part of Belgium), we analysed all firms that were qualified as a HGF in Flanders in the period 2000-2013. With the abovementioned OECD definition of a high-growth firm as a starting point and choosing the 'number of employees' as the growth indicator, eleven partly-overlapping groups of HGFs were identified that have experienced high growth in terms of employees (i.e. a group of HGFs for the period 2000-2003, a group for the period 2001-2004 and up until the last group of HGFs for the period 2010-2013). It appeared that more than half of the firms identified as a HGF in the period 2000-2013 could only maintain this status for one period of three years within this period. This group of 1764 firms was denominated the *'one-shot HGFs'*. Conversely, there was a group of 184 firms that were at least six out of eleven periods qualified as a HGF in the period 2000-2013. We labelled this group as the *'persistent HGFs'*.

Semi-structured interviews

In the first phase, twenty-eight semi-structured interviews with high-growth entrepreneurs were conducted across Flanders. Fourteen interviews were performed with entrepreneurs whose firms qualified as *'one-shot HGF'* (i.e. firms that have realised high-growth rates in only one of the eleven three year periods) and fourteen interviews were performed with firms that qualified as *'persistent HGFs'* (i.e. firms that were able to sustain high-growth rates for at least six out of the eleven three-year periods) [3]. We selected the twenty-eight entrepreneurs based on the following criteria:

- Their firms had to be independent entities at the time of the high-growth period;
- The realized growth had to be to the utmost extent, endogenous [4];
- We decided to perform industry-wide research to minimise sectoral biases and to allow for diversity. This approach could potentially lead to differences that relate to industry-specific characteristics but had the advantage that it helped to reveal common patterns that are attributed specifically to the particularities of a high-growth environment (e.g. Bamiatzi & Kirchmaier, 2014).

Initial contact was established with all high-growth firms that met our criteria by an introductory letter sent to the founder, followed by an email several days later. We telephoned all the founders that replied to this letter or email to give more context to the research and to check if they were willing to cooperate. Twenty-eight interviews were scheduled with entrepreneurs of firms from eleven industries [4]. We deliberately chose to balance the number of interviews with *'one-shot'* high-growth entrepreneurs and *'persistent'* high-growth entrepreneurs. All interviews were conducted at the company site and lasted between 42 and 83 minutes, with an average of 57 minutes, and were taped and summarized afterwards. During the site visits, we kept a record of our observations and impression which gave additional information. The size of the analysed *'one-shot HGFs'* ranged from 22 employees to 156 employees, with an average of 59 employees. For the *'persistent HGFs'*, the average size was 113 employees, with a minimum of 34 and a maximum of 300 employees. Table 2 gives an overview of the twenty-eight HGFs of which the entrepreneur was interviewed, their activity and size at the end of the high-growth period.

[Insert Table 2 about here]

Case studies

The four cases were selected on the basis of our preliminary interview round in which we interviewed 28 Flemish high-growth entrepreneurs. We asked two of the persistent high-growth entrepreneurs of which we knew that the evolution from *'manager'* to *'strategist'* went swiftly and successfully, to further cooperate. We first sent an email, followed by a phone call to ask if they were willing to serve as a case study. Both entrepreneurs answered positively to this question. We followed the same procedure for two entrepreneurs of *'one-shot'* HGFs that clearly mentioned the struggle into the *'manager'*-phase.

By deliberately selecting these cases, we met a number of criteria that Myers (2008) prescribed for evaluating case study research in business: the cases should be *'interesting'* in a way that they are likely to *'display sufficient evidence'*. We knew from the preliminary interviews with the entrepreneurs of the selected firms that the evolutions which we want to study (i.e. difficulties in the *'manager'*-phase and a swift transition to the *'strategist'* phase) are clearly present in the selected cases. Two *'one-shot HGFs'* were selected of which the entrepreneur had difficulties in phase 2 and could not evolve to phase 3 at the end of the high-growth period and two *'persistent HGFs'* were selected of which the entrepreneur had evolved from phase 2 to phase 3 in an early stage of their high-growth.

All four firms are independent entities, active in different industries and their growth was to the utmost extent endogenous [5]. Given their track record of sustained high-growth in terms of employees, the

two '*persistent HGFs*' are currently clearly larger than the two '*one-shot HGFs*'. One could claim that this size difference could distort the subsequent findings. However, the size of the four firms at the end of their first high-growth period (i.e. the first three-year period of high-growth for the '*persistent HGFs*' and the only period of high-growth for the '*one-shot HGFs*') was situated in the same range, with firms O1, O2, P1 and P2 having respectively 43, 62, 54 and 46 employees. Consequently, for these dimensions to play a role in the transition between phases 2 and 3, we find it useful to make the link with the situation as it was at the end of the '*first*' high-growth period. In what follows, a short description of the four HGFs and their entrepreneurs is given and summarized in Table 3.

[Insert Table 3 about here]

Semi-structured open-ended interviews were conducted with the founding entrepreneurs of the four analysed firms. As to Myers (2008), a more in-depth case study relied on interviews with many people in the organization as these people represented diverse perspectives. Interviews with '*key informants*', those who know most about a particular topic in the organization (Myers, 2008), were also carried out (e.g. Cassia & Minola, 2012). Besides the main interview with the entrepreneur, we conducted interviews with the most important people '*surrounding*' the entrepreneur. Mostly, these were people who had been active in the firm for many years and who had evolved to the function of COO, CFO or business unit manager. Besides the founding entrepreneur, we interviewed the COO and a business unit manager in firm P1, the COO and CFO in firm P2, the COO, CFO and HR manager in firm O1 and the CFO and COO in firm O2 (see Table 4).

[Insert Table 4 about here]

Data collection

The data was collected in three rounds (see Table 5). The first round consisted of an initial interview with the four founding entrepreneurs. The main objective of these sessions was to gain an insight into the factors that determined the phase transitions. At the end of the interview, the founding entrepreneur was asked to name the most important people that had assisted him with the phase transitions. For firm P1 three people were indicated, whereas the entrepreneurs of firms P2, O1 and O2 mentioned two people within their firm. In the second round, interviews with these nine '*key informants*' were conducted. The objective of these conversations was to get a broader view on the evolution of the entrepreneur, to check some of their statements and emerging findings from the interviews in the first round. In the third round, a second interview with the founding entrepreneur was conducted to provide a contrast to the statements that were made by the '*key informants*' and to have a discussion on the preliminary findings, in order to ensure the adequacy of the data interpretations.

Hence, a total of 17 interviews were conducted. All interviews were audiotaped, with notes taken during the interview of any possible emerging links or insights. The length of the interviews varied from 45 minutes (for an interview with a '*key informant*') to 95 minutes (for a first round interview with a founding entrepreneur). After each round, the recordings were listened to and memos were drafted and compared with the notes that were taken during the interview. The documents that were created in this way served as the basis for the next round of interviews.

[Insert Table 5 about here]

Data analysis

The collected data was subsequently analysed using first-order analysis and second-order analysis (Van Maanen, 1979). The first-order findings portrayed the dominant themes of the interviewees, and the second-order analysis involved putting these findings into a broader theoretical structure. Hence, the overall explanatory framework was a combination of a first and second-order analysis where the first-order analysis was used to discover themes and patterns and the second-order analysis had the objective to triangulate the obtained themes with extant theory. This method does not reject or confirm

hypotheses, but it provides a description of an event that allows for alternative ways of seeing, by revealing direct evidence of emerging themes.

Firstly, the interview data was deconstructed into literal interviewee quotes and descriptive phrases that synthesized the information provided. Subsequently, the deconstructed interview data was grouped and coded into first-order themes with the objective to remain close to the interviewee language (Guetta and Vandenbempt, 2013). The themes from the interview data are depicted in the right column of Table 6 and represent the situation as it was for the founders and their firms at the moment the founder had evolved to the '*strategist*'-phase. In the next step, the first-order findings were linked to theoretical concepts. To do so, we navigated iteratively between the empirical material on the one hand and theories in the broad field of entrepreneurship and growth transitions on the other. The middle column of Table 6 displays the theories and theoretical concepts that were connected with the themes from the interview data. In a fourth step, the themes from the interview data and the theoretical concepts were combined into three aggregate dimensions (i.e. the left column in Table 6) - these are the main factors that played a role in the transition of the high-growth entrepreneurs from the '*manager*'-phase to the '*strategist*'-phase.

[Insert Table 6 about here]

The interpretive validity (Maxwell, 1992) was ensured by involving four additional researchers in the analysis process. Given time constraints and individual schedules, it was not possible to conduct the interviews with multiple researchers. However, the summaries of the interviews were handed over to an evaluation team of four people who were from the beginning, closely involved with the research project. Subsequently, a discussion was organized to triangulate the findings of each evaluator and to develop a broader and deeper understanding of the process that we were analysing. The themes that are included in the framework of Table 6 and will be discussed in the next section were brought forward by all four investigators, which increased the validity of the findings.

Research design

Myers (2008) defines case study research in business as research that uses empirical evidence from one or more organizations where an attempt is made to study the subject matter in context. Multiple sources of evidence are used, although most of the evidence comes from interviews and documents. Our research is based on an exploratory case study (Thomas, 2011; Yin, 2009), adopting a qualitative interpretive methodology (Eisenhardt, 1989). The objective of the cases is to generate a rich process understanding of the evolution of the role of high-growth entrepreneurs before, during and after the high-growth period of their firm. In order to scrutinize the entrepreneur's evolution, we adopted an interpretive design that aims to provide rich contextual detail and '*thick descriptions*' of a complex process (Guetta and Vandenbempt, 2013). Given the fact that our objective was to discover the factors that enable high-growth entrepreneurs to evolve to a phase in which their role is more '*strategic*' than '*managerial*', this case study research was exploratory, as the research context still required data for the formulation of valid hypotheses. Hence, our purpose was not to provide generalizable research findings though, but to generate a rich understanding of a phenomenon in a specific context. As such, the research aimed to extend the literature on high-growth firms and high-growth entrepreneurs in a way that hypotheses can be made in future research, based on our contribution to the theory in the research field. The case analyses are cross-sectional, containing reflections on the processes that occurred in the past (Langley, 1999; Van de Ven and Huber, 1990). The focus is placed on how events have evolved over time as we tried to chart the path the entrepreneur had followed before, during and after the period in which his firm realized high-growth rates.

Overview of the analysed firms

Persistent HGF 'P1'

Firm P1 [6] was established in 1997 and is active in the ICT service industry. They provide ICT services for infrastructure and applications. The company has grown from 10 employees in 2000 to approximately 425 employees in 2013 and has set a track record of sustained high-growth of at least twenty percent each year [4]. The firm diversified from ICT consulting services to the additional offering of ICT infrastructural services. In the summer of 2013, the firm made a first major acquisition with a branch of a multinational corporation that led to a workforce increase of 120 employees. The rest of the growth was achieved in an organic manner. The main reason for their persistent high-growth is, according to the entrepreneur, the flexibility and knowhow they could offer to their clients. As firm P1 was one of the first companies in Belgium to offer a specific IT-related service, they could build up knowledge and quickly reach a *'medium'* size that offered them the flexibility they needed to serve large customers. The entrepreneur of firm P1 had a background as industrial engineer and started his career as an employee at a multinational corporation. He founded firm P1 because he saw an emerging opportunity in the marketplace. The phase transition of the entrepreneur went fairly smoothly: the entrepreneur was situated in phase 1 for approximately four years, in phase 2 for about four years and evolved to phase 3 in the last eight years, in which the operational management tasks were completely performed by the person in the COO position.

Persistent HGF 'P2'

Firm P2 [7] was founded in 1993 and existed in the form of a sole proprietorship in the first six years after the establishment. The activity of the firm was, at that time, the trade of dietary supplements. By the end of the 20th century, the business model had changed and firm P2 started to produce dietary supplements based on amino acids. This change boosted the growth of the company and led to the realization of persistent high-growth for more than fourteen years, resulting in an employee base of approximately 140 people at the start of 2014 [6]. The growth was realized in a completely endogenous way. The broad product range, the high production flexibility and the diversification from merely *'sports food'* to *'health food'* were, according to the entrepreneur, the most important drivers for the sustained high-growth. The entrepreneur has an educational background in chemistry and was employed in a large chemical company for six months before he founded firm P2 because he saw great long-term opportunities in the European market for dietary supplements, which was still in its early stages at that time. Phase 1 lasted for about six years. Between 1999 and 2005, the entrepreneur was situated in phase 2, whereas from then on, he evolved to phase 3.

One-shot HGF 'O1'

Firm O1 [8], a producer of oven foods, was established in 1990. During the first ten years, the product range remained fairly limited which resulted in a relatively modest size of approximately ten employees. Between 2005 and 2008, the firm passed through a period of rapid growth, during which the employee base increased from 22 to 43 employees [6]. The move to a larger production site, that allowed a steep increase in the product range, was cited as the main reason for the growth boost. From 2009, the growth levelled off because of cash flow problems and the fact that the organizational structure could not keep up with the strong increase in workflow and employees. From 2009 to 2013, the size of the firm remained relatively stable at approximately 42 employees. The entrepreneur of firm O1, who had a background as a butcher and was active as an employee in a food production company before he founded the firm, evolved from phase 1 to phase 2 about three years before the high-growth period. At the end of the high-growth period, the entrepreneur was still in phase 2. After the high-growth period, the firm and the entrepreneur took a deliberate *'break'*, that lasted for about five years. In 2013, the entrepreneur stated that he had clearly evolved to the *'strategist'*-phase, reporting that his firm was ready for a renewed period of strong growth.

One-shot HGF 'O2'

Firm O2 [9] was founded in 1998 and is active in a niche market - moisture control and the insulation of cavity walls. From 2005 to 2008, the company experienced a period of high-growth during which they grew from 15 to 62 employees. The main reasons for this leap was the sharply increasing demand for moisture control experts in the marketplace and the diversification into cavity wall insulation that took place in 2006. Just like firm O1, firm O2 deliberately chose to take a break from rapid growth from 2009 onwards. The organizational structure was not adequately adjusted to the new size of the firm and the entrepreneur could no longer manage the state of affairs within his growing business. The entrepreneur of firm O2, who had a marketing background and who worked as a salesman at the firm who are still the biggest competitor of firm O2, evolved from phase 1 to phase 2 about four years after the firm was established. At the end of the high-growth period, the entrepreneur was situated in phase 2, where he remained until the end of 2012. At that time, a transition to phase 3 was initiated in which he assigned the operational management tasks to a COO and a business unit manager. In the year 2013, the firm was back on the high-growth track with more than 20 percent annual employee growth.

Results

Firstly, the main findings from the twenty-eight interviews are presented followed by the results of the four in-depth case studies.

Interviews with HGF founders

For both *'one-shot HGFs'* and *'persistent HGFs'*, the role of the entrepreneur could initially be characterized by being active as a *'worker'* in his own firm. This involves performing technical and functional tasks, for example placing cooling installations (P4), placing solar panels (P3), operating the zinc production system (P14) or simply being a cook (O1). This first phase can be linked to the technical-functional role that was described by Chandler and Jansen (1992): the business founder must have the abilities to use the techniques of a specialized field, where there is evidence that suggests that small business founders initially prefer technical-functional tasks to managerial tasks (Hoy and Hellriegel, 1982).

In a next phase, when the firm is growing fast, the founder/CEO is involved with many more operational management activities, which can be linked to the *'second role the business founder must fulfil: the 'managerial' role* (Chandler and Jansen, 1992, p. 225). Here, he will stop being a *'worker'* and will become a fulltime *'manager'*. Or, in the words of the entrepreneur of firm O9, they have to stop working *'in'* the firm and learn to work *'on'* the firm instead.

"When I founded the firm nearly twenty years ago, I genuinely did everything. Placing cooling installations, dealing with the administration, attracting new employees, ... This has gradually changed, as the firm kept on growing, to a point where I was overloaded with operational management tasks." (entrepreneur of firm P4)

In ten of the analysed *'one-shot HGFs'* (O1, O2, O3, O4, O5, O6, O9, O11, O13, O14), the interviewed entrepreneur reported to have faced difficulties in the *'manager'*-phase as they were not fully skilled in all the divergent tasks that they had to perform. The managerial role requires the ability to develop procedures, to evaluate performance, to coordinate the organization's interests and to motivate other people (Chandler and Jansen, 1992). The lack of these abilities was noted to be an important barrier for the further high-growth of their firm. They could no longer consider a larger and more complex organization as expedient and manageable and started to find having full control over the organization unmanageable. The entrepreneurs we interviewed reported a loss of the *'helicopter view'* of the firm and a shared fear that they would lose control of the firm if it kept on growing at the same pace.

The four *'one-shot HGFs'* (O7, O8, O10, O12) for which the entrepreneurs did not encounter difficulties in the *'manager'*-phase were affected by the economic crisis that arose in 2008. The entrepreneurs stated that their firms would have been able to sustain high-growth rates if the crisis had not occurred.

The entrepreneurs of the *'persistent HGFs'* P7, P10, P11 and P13 could have been situated in the *'manager'*-phase throughout the entire high-growth period of their firm. However, the entrepreneurs of the other ten *'persistent HGFs'* (P1, P2, P3, P4, P5, P6, P8, P9, P12 and P14) reported to have transitioned relatively quickly from the management phase to a third phase, namely a phase in which they took a step back from the operational management tasks and instead adopted a strategic role. Once the firm was on course for high-growth, the business founders started to pass on their managerial roles to, a larger extent, other people in the organization. Their new roles consisted mainly of safeguarding the growth of the organization, maintaining relationships with key customers and outlining the strategy of the firm. This allowed them to rid themselves of operational management tasks that could be performed by other – eventually less experienced – people, so they could focus on the further expansion of the firm. This is indeed in line with the classic *'entrepreneurial role'* as defined by Chandler and Jansen (1992) and Mintzberg and Waters (1982): business founders scan their environment, select promising opportunities and formulate strategies.

"I started in a 'working phase', then I evolved to a 'management phase', whereas now I am in a phase in which I take up a strategic and entrepreneurial role. During the management phase, I have built up a team of people that engaged in helping with the daily management of the firm. By gradually passing on all repetitive operational management tasks, I became superfluous and I could occupy myself with the bigger picture. In this phase, I have time to work on the company strategy, liaising with important clients and motivate my employees." (entrepreneur of firm P2)

Some of the entrepreneurs of the *'one-shot HGFs'* (O2, O5, O9, O13) reported that they evolved to this third phase after a deliberate pause in the growth of their firm, which triggered a renewed ambition for growth. They stated that they had overcome any experienced growing pains and that they had a more solid structure with which to face any growth challenges. By building a more professional structure, these *'one-shot HGFs'* retrieved their growth aspiration. The founder of firm O5 reported that hiring an external CEO was a difficult task, as it was hard to find the right profile, but that it allowed the firm to professionalize by creating a separate financial, commercial and human resources department. By doing this, the founder could take one step back, spending his or her time outlining the strategic direction of the firm. The founder of firm O9 did not hire an external CEO but followed specific managerial and entrepreneurial courses that allowed him to cope better with all the organizational challenges, which convinced him that his firm was ready for a renewed high-growth period.

Links with the theoretical concepts

In the theoretical section at the start of this paper, we raised four concepts that could possibly explain the presence of the low number of *'persistent HGFs'*. The minimum efficient size, the life cycle theory of the firm, Gibrat's law and the growth theory of Penrose were all presented as possible explanations for the observed phenomenon of temporary high-growth. The conducted interviews have given us additional insights and have proven that the changing role of the founder during the high-growth period play an important role.

In this context, the most cited reason that was given by the entrepreneurs of the *'one-shot HGFs'* for failing to attain the status of a *'persistent HGF'* was linked to the difficulties they had with ceding control over the day-to-day operations of the firm. The entrepreneurs of the *'one-shot HGFs'* frequently stated that they had deliberately ceased the high-growth of their firm as they had difficulties within their new *'managerial'* role. A longer high-growth period would have forced them to release even more control and to create more managerial positions in the organizational structure, which they avoided.

This finding could be linked to the statements that were made in the context of the life cycle theory and Penrose's growth theory. Phelps et al. (2007) identified that the different stages in the life cycle of a firm can be related to managerial problems. In order to achieve a period of rapid growth, a firm must successfully resolve the challenges that are associated with each phase. Using this logic, a period of high-growth is a temporary phenomenon that only can be prolonged when certain organizational issues are resolved. In this case, the entrepreneurs of the 'one-shot HGFs' were clearly not able to overcome the challenges they faced and preferred instead, to take a breather from the firm's growth trajectory.

The growth theory of Edith Penrose (1959) can also be linked to the managerial problems of 'one-shot HGFs'. In this theory, management availability is considered to be the most constraining element in firm growth. Managers function as a catalyst in the conversion of the firm's resources into capabilities. However, the pool of managerial resources is limited and not easily transferrable from one firm to another as the experience of the management with the firm-specific resources produces knowledge is unique to the firm. Hence, experience-based knowledge is proprietary as it cannot be easily purchased on the market and transferred to new managers (Kor & Mahoney, 2004).

Hence, the interviews have clearly pointed to the fact that high-growth entrepreneurs who successfully and rapidly make a transition from the managerial to an entrepreneurial and strategic role are better able to take their firm on to the persistent high-growth path. This leads us to a subsequent research question: 'what factors determine a swift and successful transition from the managerial to strategic role?'. In the next section, we will describe how we have performed four cases studies in order to gain more in-depth insights into this phenomenon.

Case studies

In this section, we analyse the case data based on the framework that was introduced in Table 6. Three dimensions are discussed that play an important role in the evolution of a high-growth entrepreneur. The most important switch in the role of the entrepreneur from phase 2 to phase 3 concerns the delegation of the operational management tasks to employees in a management position. The human capital base of the HGF, its organizational structure and the managerial and strategic capabilities of the founder came forward as the three main factors that enabled a swift phase transition between the 'manager'-phase and the 'strategist'-phase. Once in this phase, the entrepreneur has the latitude to explore new opportunities for the firm which will eventually result in an expansion of the firm's product or service offerings. This might contribute, in turn, to the continuation of high-growth for the 'persistent HGFs' or lead to a renewed high-growth period for the 'one-shot HGFs'. Figure 1 gives a schematic overview of this phase transition process.

[Insert Figure 1 about here]

Human capital base

The human capital of employees has been shown to facilitate high-growth (Almus, 2002). The resource-based theory of firm growth suggests that rapidly growing firms need to hire capable individuals with extensive human capital to handle the challenges associated with high-growth (Coad et al., 2014b). In other words, from a resource-based perspective, HGFs have to increase their stock of human capital by hiring employees that offer complementary capabilities needed to sustain and expand the scope of operations in the firm. This perspective, especially the availability of managerial resources, can be seen as the most constraining element to firm growth. This goes back to the view of Edith Penrose (1959), who stated that the managerial resources pool is confined and cannot be easily transferred between two firms, as the effectiveness of the appointment of new managers will be limited, given the fact that their knowledge is not completely applicable to a new firm-specific setting.

An additional obstacle relates to time. There is often a high degree of urgency in hiring new people at HGFs and they can consequently not afford to lose time when it comes to attracting new employees. In a recent study, Coad et al. (2014b) stated that HGFs are more likely to employ 'outsiders' from the

labour market: young individuals, those who are less educated and sometimes those who have experienced long periods of unemployment. This finding is in line with the case study evidence in Barringer et al. (2005), who observed that HGFs are not selective in their hiring decisions. So, in contrast to the resource-based theory's emphasis on growing firms that employ individuals with high human capital, HGFs might be expected to compromise on the quality of their new hires for reasons of speed. The entrepreneurs of firm O1 and O2, who had difficulties evolving from phase 2 to phase 3, reported that the quality of the human capital base of their firms was poor at the end of the high-growth period and that they used the break after the high-growth period to reinforce the human resource base of the firm, by attracting external managerial knowledge and experience.

'In 2005, we were growing at a pace at which we needed to hire at least 15 employees at short notice. Given financial and time constraints, we could not find the right people and had to settle with second-rate employees. The newly hired employees did not have the same mindset as the existing workers.' (Entrepreneur firm O1)

'A large part of the workers that we hired during the high-growth period left the company very quickly as we could not employ them in a stable environment. We were forced to recruit people who did not meet the requirements that we set ourselves. They were thrown to the wolves without much attention for on-the-job training or additional courses. I had the feeling that we had no in-house people that could grow into a management position. The absence of in-house knowledge about the specific managerial problems we faced at that time and the difficulty of finding managers on the external market have impeded the firm from extending the high-growth period.' (Entrepreneur firm O2)

On the other hand, the entrepreneurs of firms P1 and P2 stated that the delegation of management tasks that took place in the transition between phase 2 and phase 3 were facilitated by the presence of a high quality, versatile and flexible human capital base: their firms had the employees with the ability and willingness to evolve to a role in which they would take over the operational management tasks that were initially performed by the founding entrepreneur. The firms applied a strict and extensive recruitment policy, in which high demands were set for people hired into a 'back office' function. The aim was to gradually develop the managerial capabilities of these employees so that they were able to create a personal growth trajectory that was in line with the high-growth path of the firm.

'Notwithstanding the limitation in terms of budget and time, we have always invested in the recruitment process to attract people in core functions of which we thought they had the capabilities to grow along with the firm. A clear focus on on-the-job training and permitting key employees to follow additional courses that enhance their management skills has paved the way for the internal promotion of these employees to management positions. A consequence is that the firm now has a young management team without much experience, but the main advantages are that they know the 'in and outs' of the firm, that they are used to work in a high-growth environment.' (Entrepreneur firm P1)

'In certain years, we were realizing turnover growth rates of more than 50%. Hence, we were forced to act quickly when it came to the recruitment of new employees. However, I have always ensured that we had a solid HR department that kept the standards high when attracting new workers. They acted anticipatively in scanning the job market and that paid much attention to the image of our firm at job market. For certain key positions, for example the production managers, we relied on the services of an external recruitment office.' (Entrepreneur firm P2)

The situation for firm O1 and O2 is in line with the statement of Coad et al. (2014b) that the workforce among HGFs is characterized by less educated employees. Coad et al. (2014b) state that HGFs choose marginal employees because there was an urgent need to quickly find new manpower, and that they could not afford to spend much time searching for employees. For those less educated workers, it can be more difficult to move into management positions as they lack the capabilities they could have acquired through education. To raise the level of skills of these employees to that of the more educated workers, an additional investment in training and development is required. However, the

'quality' human capital base of firms P1 and P2 during their high-growth period points to the contrary and implies that these HGFs may choose to add human resources by first evaluating their current configuration of human resources and will only add workers that appropriately match the existing human resource base (Lepak and Snell, 1999; Penrose, 1959). The more time spent searching for suitable employees, the higher the cost, but the better the expected match and the higher the possibility that employees will be, in a subsequent phase, competent to take over managerial tasks from the founding entrepreneur.

Organizational structure

The organizational structure can be defined as the set of relations between the roles of an organization, manner in which tasks are distributed within an organization and the manner in which coordination between sub-tasks is established (Grossi et al., 2007). According to Eisenhardt and Schoonhoven (1990), the organizational structure of HGFs is dynamic and rapidly changing. Given the high internal complexity, the structure of HGFs is exposed to much more pressure than the structure of their non-high growing counterparts (Arbaugh and Camp, 2000). The entrepreneurs of firms O1 and O2 reported that an inadequate structure, was an important reason why the phase transition from phase 2 to phase 3 took so long, as it was not properly adapted to the growing organization. In terms of Mintzberg's configuration of organizational structuring, firms O1 and O2 had a 'simple structure' at the end of the high-growth period in which the structure was minimally elaborated and still highly centralized (Mintzberg, 1990). There was virtually no functional division of tasks and no clear division of labour. Consequently, the delegation of operational management tasks was hampered by the lack of formal coordination between tasks or divisions.

Referring to Mintzberg's terminology, these firms had been investing in the 'operating core' (i.e. the employees who produce the basic products and services of the organization or directly support the production), but not sufficiently in a 'technostructure' (i.e. the organizational part that consists of analysts out of the formal line structure like accountants, work schedulers or financial planners) and 'middle line' employees (i.e. the managers who sit in a direct line between the founding entrepreneur and the operating core).

'The problems that we encountered at the end of the high-growth period in 2008 were mainly due to an unadjusted organizational structure. We had been growing fast for more than three years and we had lost track completely. I had to build a more 'professional' structure first with a stronger back office team and control mechanisms, before I could move away from my managerial and operational tasks. This has been a process that took nearly four years.' (Entrepreneur firm O2)

Firms P1 and P2 had an organizational structure at the start of the high-growth period that was already evolving from a 'simple structure' to a more developed structure that could be characterized as a combination of elements from the 'simple structure' and the 'machine bureaucracy'. It should be noted that the two entrepreneurs of the 'persistent HGFs' previously worked in large firms earlier on in their careers, where they became accustomed to working in a professional organizational structure.

Firms P1 and P2, a service firm with relatively simple and repetitive work (i.e. the installation of IT applications) and a production firm of dietary supplements, had specialized but routine operating tasks with formalized procedures and a reliance on the functional basis for grouping tasks throughout the structure. There was still a relatively centralized power for decision making with use of formal control systems. The 'technostructure' becomes an important part in the structure with the analysts who are responsible for standardizing production and the service offerings and an administrative structure that becomes more elaborate. However, firms P1 and P2 clearly had fewer rules and regulations in process and a more informal chain of authority than the 'machine bureaucracy' as described by Mintzberg. The entrepreneurs remained in tight control and still at the centre of the structure, like he is in the 'simple structure' (especially in the first years of the high-growth period), and the firms retained their flexibility

to quickly respond to new opportunities as the environment in which they were active remained dynamic.

'Once the firm started to realize high-growth rates, we started to invest strongly in the creation of a structure that could face the challenges of high-growth. I worked in a multinational corporation before I founded the firm, where I learned to work in a highly developed structure. I tried to take over the positive aspects of this structure in my own firm, like certain formalized procedures, a clear functional division of tasks and the installation of monitoring systems so that I had a management dashboard with KPIs to control the operations. Notwithstanding this relatively formal structure, I tried to keep the flexibility of a small entrepreneurial firm with short decision lines. The presence of this type of structure made it much easier for me to move away from the day-to-day operations in a later stadium of our high-growth.' (Entrepreneur firm P1)

Managerial and strategic skills

In business, entrepreneurs are expected to possess certain managerial and strategic skills. Acquiring a high level of both managerial and strategic skills can be seen as an enabler to effectiveness for an entrepreneur (Parente et al., 2012). Managerial skills are considered to be a combination of hard and soft skills. Skills such as analysis, critical thinking and problem solving are considered to be traditional management or 'hard' skills, originating from a traditional list of managerial requirements which include skills such as planning, organizing and controlling (Whetten and Cameron, 2007; Michalisin et al., 2004; Robbins and Hunsaker, 2000). Managerial responsibilities such as the motivation of subordinates and influencing people are considered to require a different set of managerial skills, the so-called soft' skills, that include providing clear communication and meaningful feedback, resolving conflicts and understanding human behaviour in group settings (Halfhill and Nielsen, 2007; Rapert et al., 2002). Parente et al. (2012) state that once entrepreneurs have acquired these hard and soft managerial skills, they will be better able to acquire strategic skills, at a later stage. Entrepreneurs face a number of challenges regarding strategic issues that can be addressed by being grounded in traditional and soft managerial skills. Having a decent understanding of the operations of the different functional areas seems to be a logical precursor for being able to fulfil a strategic role in the organization. The extent to which they possess these managerial capabilities is expected to be positively related with the success of future strategic initiatives (Parente et al., 2012).

However, fulfilling a strategic role requires other skills than merely being able to offer soft and hard managerial skills. Entrepreneurs will have to go 'a step further' and will additionally need the skills to integrate the functional knowledge, the ability to implement ideas and assess the relationship between the firm and its environment (Stumpf and Mullen, 1991; Kachra and Schnietz, 2008). Strategic skills provide managers with a long-term perspective: they are more complex and ambiguous as they involve organizational-wide issues that span functional domains (Mintzberg et al., 1976.; Stumpf and Mullen, 1991).

The literature from both an entrepreneurial and psychological perspective is replete with conceptual and empirical investigations of the notion that managerial and strategic skills are malleable attributes that can be acquired through considerable experience and training (e.g. Burke and Day, 1986; Gully et al., 2002; Holman et al., 1997; Mostovicz et al., 2009). In this stream, Varela et al. (2013) state that both managerial and strategic skills can be taught to individuals who can apply this knowledge in a way that, over time, these capabilities become implicit in nature. There are several ways in which managerial and strategic skills can be obtained. Skill acquisition is frequently accomplished through work experience, which requires however, a considerable amount of time. Another way is through management education in the form of short-term specialized training programs or formal certificate programs (Bager et al., 2015; Gomez-Mejia et al., 2004). However, because of the complexity involved in the acquisition of strategic skills, the traditional classroom approach may be relative ineffective (Parente et al, 2012; Yau and Sculli, 1990).

In this context, learning networks among entrepreneurs are considered to be effective (Bergh et al., 2012). Entrepreneurs earn their living recognizing and acting upon business opportunities. As such, to develop the skills to recognize business opportunities, they can often use an outsider's perspective that gives insight into the competences and experiences of their peers (Bergh et al., 2012). Entrepreneurs that join such a peer-to-peer network are asked to invest resources such as money and time to gain the anticipated outcome of being able to more effectively exploit opportunities in which new products, services or organizing methods can be introduced (Bergh et al., 2012; Shane and Venkataraman, 2000).

The transition from the '*manager*' to the '*strategist*' phase appeared to be facilitated by the acquisition of both managerial and strategic skills by the founding entrepreneur during the high-growth period. All four entrepreneurs of the analysed firms did not have a high level economic or management education before they founded the firm. Once their firm was on track for high-growth the entrepreneurs of firms P1 and P2 stated that, apart from the skill acquisition through work experience, they obtained managerial and strategic capabilities by following management courses and by the membership of '*peer-to-peer*' entrepreneurial networks. The management courses served to improve both the '*hard*' conceptual skills (i.e. those requiring analytic abilities in the field of finance or marketing) and the '*soft*' human skills (primarily dealing with interpersonal issues in the human resources domain). The entrepreneurs brought this knowledge into the peer-to-peer networks of which they became a member. Here, they reflected on strategic issues with other entrepreneurs of HGFs or entrepreneurs of firms with the ambition and potential to become a HGF. An arena was provided to exchange experiences, to challenge '*old truths*' and to stimulate new ideas. This entails the awareness that taking a step back from the operational management tasks could be key to sustained high-growth rates.

'Given the fact that I never had a profound management education before I founded the firm, I knew that it was key to develop these capabilities in the first years after the establishment of the firm as I would have to deal with a large number of managerial challenges once the firm got on the high-growth track. The acquisition of these management skills by participating in different management training programs has made me more capable of handling the high-growth challenges that came across. However, once I also started to participate in networks where growth entrepreneurs discussed several strategic issues, I realized that I had to prepare myself to evolve to a role in which I could focus on the further development of the business, rather than on the management of the day-to-day operations. The knowledge that I got there has definitely speeded up the delegation process as I gained the insight that I could only fully apply the acquired strategic skills when I would get rid of the day-to-day operational management tasks.' (Entrepreneur firm P1)

The entrepreneurs of firms O1 and O2 reported that they used the '*time-out*' after the high-growth period to enhance their management and strategic skills as they realised that the absence of these skills during their three-year high-growth period had an influence on the cessation of rapid growth. They took the initiative to appeal to management schools to make use of the knowledge of these institutions.

'Looking back at the high-growth period of our firm, it was a shortcoming that I did not have a decent level of management skills. I became responsible for so many organizational issues for which I had not enough capabilities that I would not have been able to handle a longer period of high-growth. In the years after our high-growth period, I decided to develop myself by following various management courses and participating in peer-to-peer networks with other entrepreneurs. The skill acquisition that was the result of this courses and network participation has given me the feeling that I will be able to fulfil my strategic role in a better way than I have fulfilled my managerial role in the past.' (Entrepreneur firm O1)

Discussion

The results that were presented above have suggested that high-growth entrepreneurs are better able to delegate their operational management tasks and move to a strategic role if their firm develops a

strong human capital base with a talented pool of managers, if they start building a 'professional' organisational structure in an early phase and if they acquire the necessary strategic skills during the high-growth period. Once the high-growth entrepreneurs reached the 'strategist' phase, they all stated that the whole firm benefited from their new role. Shifting the focus from the day-to-day operational management to a focus on spotting promising business opportunities eventually led to the offering of a broader product range, the existence of more business units or the acquisition of other entities.

'As soon as I delegated the majority of my managerial tasks to the people who are currently holding the position of CFO and COO, I could focus again on the development of the business. Before this, I was too busy with the exploitation of the existing business units, which has undoubtedly resulted in missing certain promising opportunities. Recently, we started up a third business unit which was only made possible by the time that I created for exploring new opportunities within my network. Eventually, I believe that this broader service offering will lead to a renewed period of high-growth for our firm.' (Entrepreneur firm O2)

The findings in our research may have certain implications for entrepreneurs with the ambition to run a high-growth firm in the future or for the entrepreneurs of 'one-shot HGFs' with the ambition to pass through a renewed high-growth period in the future. Floundering in this 'management' phase for too long should be avoided by (future) high-growth entrepreneurs if they want to stretch the high-growth period of their firm. In doing so, our research has suggested that these entrepreneurs should keep three things in mind.

Firstly, these firms should not compromise on the quality of their human capital and enforce a strict recruitment policy. HGFs might be tempted to quickly hire new employees to meet the increasing demand and workload. However, if this leads to the recruitment of people who do not have the right capabilities, culture and work attitude, this may impede the delegation process for the entrepreneur and create a drag on the firm's future growth.

Secondly, the organizational structure should quickly move to a more elaborate form with formalized procedures and control mechanisms, but without losing flexibility and short decision lines. This might seem contradictory to the lean and organic organizational structure that HGFs are expected to have. However, quickly evolving to a more formal structure was found to facilitate the transition of the high-growth entrepreneur to the 'strategist' phase, which might, in turn, contribute to the realization of sustained high-growth rates.

Thirdly, we point to the importance of the development of management and strategic skills. Acquiring these skills through work experience, education or participation in peer-to-peer networks will not only make the entrepreneurs better managers, but it will also stimulate the desire of these entrepreneurs to create more time for strategic activities in which they can focus on the exploration of new growth paths. As was stated at the start of this paper, HGFs are confronted with a higher internal complexity as procedures and structures quickly have to be developed for the rapidly growing organization. There might also be a call for setting up more management courses and peer-to-peer networks that are specifically targeted to (potential) high-growth entrepreneurs and that deal with particular high-growth challenges that they will be facing, for example, the high need of attracting new employees and building a solid organizational structure as it is under greater pressure than those of their non-high growing counterparts.

Limitations and further research

Our research is subject to certain limitations. Firstly, the data is based on the representations of the interviewees and on the interpretations of their experiences after the transformation process of the entrepreneur took place. This may have affected certain reconstructions as there could have been a distorted recollection or hindsight bias in some cases. However, we believe that sufficient interviews have been conducted and that data triangulation has been carried out to limit this risk to a minimum.

Secondly, our research is based on a case study with four firms. This has provided the depth to generate rich descriptions, but has limited the generalizability of the findings. We tried to touch on certain dimensions that play a role in the transformation process of the entrepreneurs of high-growth firms. Applying a more deductive and quantitative research design, in order to test the dimensions that came across in this research and to discover potential additional dimensions, is highly recommended as it is likely that this will add value to our findings and may lead to theory development. Thirdly, this study has tried to 'scratch the surface' as it has pointed to the importance of diversification and business development that resulted from the high-growth entrepreneur being active in phase 3, which might imply that a changing business model and/or revenue model might be an important factor with respect to the content of the growth strategy that the entrepreneur has formulated and that he wants to pursue in the future.

Conclusion

The literature on firm growth is filled with studies that try to uncover the determinants of (high) growth (e.g. O'Gorman, 2001; Dobbs & Hamilton, 2007; Smallbone et al., 1995). Frequently, firm-specific characteristics (e.g. the access to finance, the scalability of the business model, ...) and external characteristics (e.g. the health of the industry, the threat of new competitors, ...) are analysed and found to have an effect on a firm's further growth capacity. In addition, the characteristics of the high-growth entrepreneur and their impact on firm growth have been thoroughly analysed. Barringer et al. (2005) found that high-growth entrepreneurs are better educated, more highly motivated and have more experience than founders of non-high-growth firms. However, the functional role of high-growth entrepreneurs and its possible impact on sustaining high-growth rates have been largely left unstudied. Our study has tried to shed a new light on the transition in the role of high-growth entrepreneurs and on the reasons why certain founders easily transition out of the 'manager'-phase to assume a strategic role, which fosters the further growth of the firm.

A set of twenty-eight initial interviews with high-growth entrepreneurs were conducted to gain insight into the apparent phenomenon of low persistence of high-growth. A swift transition between the 'manager' phase and the 'strategist' phase appeared to be crucial in sustaining high-growth. Therefore, we further analysed the factors that could facilitate such a transition by adopting a case study approach in which four high-growth firms and their founding entrepreneurs were analysed. Three dimensions were identified that facilitated the transition between the phases.

Firstly, the human capital base of the HGFs was considered to be important. The presence of a high-quality, versatile and flexible human resource base with employees that possessed the skills to evolve to a management position made it easier for the high-growth entrepreneur to delegate operational management tasks to other people within the organization. To make this possible, a strict and extensive recruitment policy and a focus on training and internal promotion were applied.

Secondly, an organizational structure that quickly moved from a 'simple structure' to a more elaborate structure with formalized procedures, a clear functional division and the installation of certain monitoring systems also appeared to be a facilitator in the delegation process.

Thirdly, the development of the managerial and strategic skills of the entrepreneur played an important role. As firms increase in size and complexity, entrepreneurs face a number of problems for which more sophisticated capabilities and skills are required. The acquisition of the right management and strategic skills by participating in management development courses and peer-to-peer networks made the high-growth entrepreneurs more capable of handling the high-growth challenges, but also made them more aware of the importance of fulfilling a strategic role in the firm.

Our findings might be of interest for entrepreneurs with the ambition to put their firm on the persistent high-growth path, but also for policy-makers that aim to stimulate high-growth entrepreneurship in their region. In recent years, HGFs have attracted an increasing amount of attention from public

authorities as they see this group as the engine for job creation in the economy (Mason & Brown, 2013). In this context, policy-makers should try to stimulate the persistence of the high-growth firms that are present in their region, as this inevitably leads to more stable jobs. Therefore, assisting these high-growth entrepreneurs in the transition process from 'manager' to 'strategist' is recommended. This can be achieved by teaching entrepreneurs to delegate the operational management tasks in an early stage of high-growth. In doing this, they should always keep the three identified dimensions (e.g. human capital base, organisational structure and strategic skills) in mind.

Notes

[1]: One may state that 'phase 1' is preceded by a 'phase 0' in which the entrepreneur establishes the firm. Here, he will already have to perform certain 'phase 3'-activities like scanning the business environment and spotting opportunities.

[2]: The research is sponsored by the Chamber of Commerce of Antwerp. Therefore, the study is based on Flemish data given their specific interest in the Flemish economy.

[3]: With the 'O' referring to the first letter of 'one-shot HGF', whereas the P refers to the first letter of 'persistent HGF'

[4]: Industries that were covered are: Food services, Construction, Logistics, Manufacturing, Energy, Information Technology, Heating- Ventilation - Air Conditioning (HVAC), Communication, Retail and the broad service industry.

[5]: From an entrepreneurial point of view, endogenous firm growth is the most interesting to analyze as the focus is placed on value creation and the combination of resources (Davidsson and Delmar, 2006)

[6]: This firm corresponds with the firm that was denominated as P2 during the preliminary round of semi-structured interviews

[7]: This firm corresponds with the firm that was denominated as P5 during the preliminary round of semi-structured interviews

[8]: This firm corresponds with the firm that was denominated as O2 during the preliminary round of semi-structured interviews

[9]: This firm corresponds with the firm that was denominated as O9 during the preliminary round of semi-structured interviews

References

Almus, M. and Nerlinger, E. (1999), 'Growth of New Technology-Based Firms: Which Factors Matter?', *Small Business Economics*, Vol. 13 No. 2, pp. 141-154

Almus, M. (2002), 'What characterizes a fast-growing firm?', *Applied Economics*, Vol. 34 No. 12, pp. 1497-1508

Arbaugh, J.B. and Camp, M. (2000), 'Managing Growth Transitions: Theoretical Perspectives and Research Directions', in 'The Blackwell Handbook of Entrepreneurship', Sexton, D. and Landström, H. (eds.), pp. 308-328, Blackwell Publishers Ltd, Oxford, United Kingdom

Bager, T.E., Jensen, K.W., Nielsen, P.S. and Larsen, T.A. (2015), 'Enrolment of SME managers to growth-oriented training programs', *International Journal of Entrepreneurial Behavior and Research*, Vol. 21 No.5, pp. 578-599

- Bamiatzi, V.C. and Kirchmaier, T. (2014), 'Strategies for superior performance under adverse conditions: a focus on small and medium-sized high-growth firms', *International Small Business Journal*, Vol. 32 No. 3, pp. 259-284
- Barney, J. (1991), 'Firm resources and sustained competitive advantage', *Journal of Management*, vol. 17 No. 1, pp. 99-120
- Barringer, B., Jones, F. and Neubaum, D. (2005), 'A quantitative content analysis of the characteristics of rapid-growth firms and their founders', *Journal of Business Venturing*, Vol. 20 No. 1, pp. 663-687
- Baum, J.R. and Bird, B.J. (2010), 'The successful intelligence of high-growth entrepreneurs: links to new venture growth', *Organization Science*, Vol. 21 No.2, pp. 397-412
- Bergh, P., Thorgren, S. and Wincent, J. (2011), 'Entrepreneurs learning together: the importance of building trust for learning and exploiting business opportunities', *International Entrepreneurship and Management Journal*, Vol. 7 No.2, pp. 17-37
- Buchele, R.B. (1967), *Business Policy in Growing Firms*, Chandler Publishing Co., San Francisco, US
- Burke, M.J. and Day, P.R. (1986), "A cumulative study of the effectiveness of managerial training", *Journal of Applied Psychology*, Vol. 71 No.2 , pp. 232-245
- Bushardt, S.C., Duhon, D.L. and Fowler, A.R. (1991), 'Management delegation myths and the paradox of task assignment', *Business Horizons*, Vol. 34 No. 2, pp. 37-43
- Cassia, L. and Minola, T. (2012), 'Hyper-growth of SMEs: toward a reconciliation of entrepreneurial orientation and strategic resources', *International Journal of Entrepreneurial Behavior and Research*, Vol. 18 No. 2, pp. 179-197
- Chandler, G.N. and Jansen, E. (1992), 'The founder's self-assessed competence and venture performance', *Journal of Business Venturing*, Vol.7 No.3, pp. 223-236
- Clifford, D. K. and Cavanaugh, R.E. (1985), *The Winning Performance*, Bantam Books, New York, US
- Coad, A. (2009), *The Growth of Firms: A Survey of Theories and Empirical Evidence*, Edward Elgar, Cheltenham
- Coad, A. and Hözl, W. (2009), 'On the autocorrelation of growth rates', *Journal of Industry Competition and Trade*, Vol. 9 No. 1, pp. 139-166
- Coad A., Daunfeldt, S.-O., Hözl, W., Johanson, D. and Nightingale, P. (2014a), 'High-growth firms: introduction to the special section', *Industrial and Corporate Change*, Vol. 23 No.1, pp. 91-112
- Coad, A., Daunfeldt, S.-O., Hözl, W., Johanson, D. and Wennberg, K. (2014b), 'Whom do high-growth firms hire?', *Industrial and Corporate Change*, Vol. 23 No. 1, pp. 293-327
- Covin, J.G. & Slevin, D.P. (1990), 'New venture strategic posture, structure, and performance: An industry life cycle analysis', *Journal of Business Venturing*, Vol. 5 No. 2, pp. 123-135
- Daunfeldt, S.-O. and Halvarsson, D. (2014), 'Are high-growth firms one hit wonders? Evidence from Sweden', *Small Business Economics*, Vol. 44 No. 2, pp. 361-383

- Daunfeldt, S.-O. and Halvarsson, D. (2015), 'Using the Eurostat-OECD definition on high-growth firms: a cautionary note', *Journal of Entrepreneurship and Public Policy*, Vol. 4 No. 1, pp. 50-56
- Daunfeldt, S.O.; Elert, N. and Johansson, D. (2013), 'The economic contribution of high-growth firms: Do policy implications depend on the choice of growth indicator?', *International Journal of Industry Competition and Trade*, Vol. 13 No. 1, pp. 1-29
- Davidsson, P. and Delmar, F. (2006), 'High-Growth Firms and Their Contribution to Employment: The Case of Sweden' in Davidsson, P., Delmar, F. and Wiklund, J. (Eds.), *Entrepreneurship and the Growth of Firm*, Cheltenham, UK and Northampton, MA: Edward Elgar
- Davila, A.; Foster, G. and Jia, N. (2010), 'Building sustainable high growth startup companies: management systems as an accelerator', *California Management Review*, Vol. 52 No. 3, pp. 79-105
- Demir, R.; Wennberg, K. and McKelvie, A., 'The strategic management of high-growth firms: a review and theoretical conceptualization', *Long Range Planning*, Vol. 50 No. 4, pp. 431-456
- Dobbs, M. and Hamilton, R.T. (2007), 'Small business growth: recent evidence and new directions', *International Journal of Entrepreneurial Behavior & Research*, Vol. 13 No. 5, pp. 296-322
- Du, J. and Temouri, Y. (2015), 'High-growth firms and productivity : evidence from the United Kingdom', Vol. 44 No.1, pp. 123-143
- Eisenhardt, K.M. and Schoonhoven, C. (1990), 'Organizational growth: linking founding team, strategy, environment, and growth among U.S. semiconductor ventures, 1978-1988', *Administrative Science Quarterly*, Vol. 35 No.3, pp. 504-529
- Eurostat – OECD (2007), *Manual on Business Demography Statistics*, European Communities/OECD, December 2007
- Foss, N.J. (1993), 'Theories of the firm: contractual and competence perspectives', *Journal of Evolutionary Economics*, Vol. 3 No. 2, pp. 127-144.
- Furlan, A.; Grandinetti, R. and Paggiaro, A. (2014), 'Unveiling the growth process: entrepreneurial growth and the use of external resources', *International Journal of Entrepreneurial Behavior & Research*, Vol. 20 No. 1, pp. 20-41
- Garnsey, E., Stam E. and Hefferman, P. (2006), 'New Firm Growth: Exploring Processes and Paths', *Industry and Innovation*, Vol.13 No. 1, pp. 1-20
- Gibrat, R. (1931), *Les inégalités économique*, Paris, Recueil Sirey
- Gomez-Mejia, L.R., Balkin, D.B. and Cardy, R.L. (2004), *Managing Human Resources*, Prentice-Hall, Upper Saddle River, New Jersey, USA
- Greiner, L.E. (1972), 'Evolution and revolution as organizations grow', *Harvard Business Review*, May-June, pp. 37-46
- Grossi, D., Royakkers, L. and Dignum, F. (2007), 'Organizational structure and responsibility: an analysis in a dynamic logic of organized collective agency', *Artificial Intelligence and Law*, Vol. 15 No. 2, pp. 223-249

- Guiette, A. and Vandenbempt, K. (2013), 'Exploring team mental model dynamics during strategic change implementation in professional service organizations. A sensemaking perspective', *European Management Journal*, Vol. 31 No. 2, pp. 728-744
- Gully, S.M., Payne, S.C., Koles, K.L. and Whiteman, J.K. (2002), "The impact of error training and individual differences on training outcomes: an attribute-treatment interaction perspective", *Journal of Applied Psychology*, Vol. 87 No. 1, pp. 143-155
- Halfhill, T.R. and Nielsen, T.M. (2007), 'Quantifying the 'softer side' of management education: an example using teamwork competencies', *Journal of Management Education*, Vol. 31 No. 3, pp. 64-80
- Hambrick, D.C. and Crozier, L.M. (1985), 'Stumblers and stars in the management of rapid growth', *Journal of Business Venturing*, Vol. 1 No. 1, pp. 31-45
- Hambrick, D.C. and Mason, P.A. (1984), 'Upper echelons: the organization as a reflection of its top manager', *Academy of Management Review*, Vol. 9 No. 2, pp. 193-206
- Henderson, A.; Raynor, M. and Ahmed, M. (2012), 'How long must a firm be great to rule out change? Benchmarking sustained superior performance without being fooled by randomness', *Strategic Management Journal*, Vol. 33 No. 4, pp. 387-406
- Holman, D., Pavlica, K. and Thorpe, R. (1997), 'Rethinking Kolb's theory of experiential learning: the contribution of social constructionism and activity theory', *Management Learning*, Vol. 28 No. 2, pp. 135-149
- Hözl, W. (2014), 'Persistence, survival and growth: a closer look at 20 years of fast-growing firms in Austria', *Industrial and Corporate Change*, Vol. 12 No. 1, pp. 1-38
- Hoy, F. and Hellriegel, D. (1982), 'The Killman and Herden model of organizational effectiveness criteria for small business managers', *Academy of Management Journal*, Vol. 25 No. 2, pp. 308-322
- Kachra, A. and Schnietz, K. (2008), 'The capstone strategy course: what might real integration look like?', *Journal of Management Education*, Vol. 32 No. 3, pp. 467-508
- Kor, Y. and Mahoney, J.T. (2004), 'Edith Penrose's (1959) Contributions to the Resource-based View of Strategic Management', *Journal of Management Studies*, Vol. 41 No. 1, pp. 183-191
- Lepak, D. and Snell, S. (1999), 'The human resource architecture: toward a theory of human capital allocation and development', *Academy of Management Review*, Vol. 24 No. 1, pp. 31-48
- Lichtenstein, G.A. and Lyons, T.S. (2001), 'The entrepreneurial development system: transforming business talent and community economies', *Economic Development Quarterly*, Vol. 15 No. 3, pp. 3-20
- Littunen, H. and Tohmo, T. (2003), 'The high-growth in new metal-based manufacturing and business service firms in Finland', *Small Business Economics*, Vol. 21 No. 2, pp. 187-200
- Littunen, H. and Virtanen, M. (2009), 'Differentiating factors of venture growth: from statics to dynamics', *International Journal of Entrepreneurial Behavior & Research*, Vol. 15 No. 6, pp. 535-554
- Mason, C. and Brown, R. (2013), 'Creating good public policy to support high-growth firms', *Small Business Economics*, Vol. 40 No. 2, pp. 211-225

- Maxwell, J. (1992), 'Understanding and validity in qualitative research', *Harvard Educational Research*, Vol. 62 No. 3, pp. 279-301
- Michalisin, M.D., Karau, S.J. and Tangpong, C. (2004), 'Top management team cohesion and superior industry returns', *Group and Organization Management*, Vol. 29 No. 1, pp.125-140
- Mintzberg, H. (1990), 'Structure in 5's: a synthesis of the research on organization design', *Management Science*, Vol. 26 No. 4, pp. 322-341
- Mintzberg, H., Raisinghani, D. and Theoret, A. (1976), 'The structure of 'unstructured' decision processes', *Administrative Science Quarterly*, Vol. 21 No. 2, pp. 246-275
- Mintzberg, H. and Waters, J.A. (1982), 'Tracking strategy in an entrepreneurial firm', *Academy of Management Journal*, Vol. 23 No. 3, pp. 465-499
- Moreno, F. and Coad, A. (2015), 'High-growth firms: stylized facts and conflicting results' in Corbett, A.C. & Katz, J.A. (eds.), *Entrepreneurial growth: individual, firm and region (advances in entrepreneurship, firm emergence and growth*, Vol. 17), Emerald Group Publishing Limited., pp. 187-230
- Mostovicz, E.I., Kakabadse, N.K. and Kakabadse, A.P. (2009), "A dynamic theory of leadership development", *Leadership and Organizational Development Journal*, Vol. 30 No. 6, pp. 563-576
- Myers, M.D. (2008), *Qualitative Research in Business and Management*, Sage Publications Limited, London
- Nicholls-Nixon, C.L. (2005), 'Rapid growth and high performance: the entrepreneur's 'impossible dream'?', *The Academy of Management Executive*, Vol. 19 No. 1, pp. 77-89
- O'Gorman, C. (2001), 'The sustainability of growth in small- and medium-sized enterprises', *International Journal of Entrepreneurial Behavior & Research*, Vol. 7 No. 2, pp. 60-75
- Parente, D., Stephan, J. and Brown, R. (2012), 'Facilitating the acquisition of strategic skills: the role of traditional and soft managerial skills', *Management Research Review*, Vol. 35 No. 2, pp. 1004-1028
- Parker, S., Storey, D. and Van Witteloostuijn, A. (2010), 'What happens to gazelles? The importance of dynamic management strategy' *Small Business Economics*, Vol. 35 No. 3, pp. 203-222
- Patton, D. (2005), 'A quantitative content analysis of the characteristics of rapid-growth firms and their founders', *International Journal of Entrepreneurial Behavior & Research*, Vol. 11 (6), pp. 436-138
- Penrose, E. (1959), *The Theory of the Growth of the Firm*, New York, Oxford University Press Inc.
- Phelps, R., R. Adams and Bessant, J. (2007), 'Life cycle of growing organizations: a review with implications for knowledge and learning', *International Journal of Management Reviews* , Vol. 9 No. 1, pp. 1-30
- Rajan, R. and Zingales, L. (2001), 'The firm as a dedicated hierarchy: a theory of the origins and growth of the firm', *The Quarterly Journal of Economics*, Vol. 116 No. 3, pp. 805-851
- Rapert, M.I., Velliquette, A. and Garretson, J.A. (2002), 'The strategic implementation process: evoking strategic consensus through communication', *Journal of Business Research*, Vol. 55 No. 2, pp. 301-310

- Robbins, S.P. and Hunsaker, P.L. (2000), *Training in Management Skills*, Prentice-Hall, New Jersey, USA
- Shane, S. and Venkataraman, S. (2000), 'The promise of entrepreneurship as a field of research', *Academy of Management Review*, Vol. 25 No.1 , pp. 217-226
- Smallbone, D.; Leig, R. and North, D. (1995), 'The characteristics and strategies of high growth SMEs', *International Journal of Entrepreneurial Behavior & Research*, Vol. 1 No. 3, pp. 44-62
- Stumpf, S.S. and Mullen, T.P. (1991), 'Developing entrepreneurial skills through the use of behavioral simulation', *Journal of Management Development*, Vol. 10 No. 3, pp. 32-45
- Thomas, G. (2011), *How to do your case study: a guide for students and researchers*, Sage Publications Limited, London
- Van Maanen, J. (1979), 'The fact of fiction in organizational ethnography', *Administrative Science Quarterly*, Vol. 24 No. 3, pp. 539-550
- Varela, O., Burke, M. and Michel, N. (2013), 'The development of managerial skills in MBA programs: a reconsideration of learning goals and assessment procedures', *Journal of Management Development*, Vol. 32 No. 2, pp. 435-452
- Wennberg, K. (2013), 'Managing high-growth firms : a literature review', *Background Paper for OECD LEED Programme Workshop on "Management and Leadership Skills in High-Growth Firms"*, Warsaw. 2013
- Wernerfelt, B. (1984), 'A resource-based view of the firm', *Strategic Management Journal*, Vol. 5 (2), p. 171-180
- Whetten, D.A. and Cameron, K.S. (2007), *Developing Managerial Skills*, 7th edition, Prentice-Hall, New Jersey, USA
- Williard, G.E. and Krueger, D.A. (1992), 'In order to grow, must the founder go: a comparison of performance between founder and non-founder managed high-growth manufacturing firms', *Journal of Business Venturing*, Vol. 7 No. 3, pp. 181-194
- Yau, W.S.L. and Sculli, D. (1990), 'Managerial traits and skills', *Journal of Management Development*, Vol. 9 No. 1, pp. 32-40
- Yin, R.K. (2009), *Case study research: design and methods (4th ed.)*, Sage Publications, Los Angeles

Table 1: overview of the characteristics of the three phases through which high-growth entrepreneurs move (based on Chandler & Janssen, 1992, Greiner, 1972)

<p>Phase 1: The entrepreneur in a 'technical-functional' role</p> <ul style="list-style-type: none">• The business founder performs the functional tasks that eventually will be the tasks at the lowest level of the organization chart (e.g. operating the production line, installation of ICT applications, ...)• The founding entrepreneur possesses the technical expertise and knowledge to perform the functional tasks• The managerial tasks that have to be performed are limited to a minimum as founders are usually technically oriented and disdain management activities• The founder's energy is absorbed by the making and selling of the product <p>Phase 2: The entrepreneur in a 'managerial' role</p> <ul style="list-style-type: none">• The functional tasks which were initially performed by the business founder are handed over to newly hired employees• The founding entrepreneur becomes in charge of groups of people and different departments• The abilities are required to coordinate all of the organization's activities (including the development of budgets and procedures), to communicate the goals to be achieved, to motivate and direct the employees and to evaluate their performance. <p>Phase 3: The entrepreneur in an 'entrepreneurial'/'strategic' role</p> <ul style="list-style-type: none">• The operational managerial tasks are completely handed over to employees in a management position• The founding entrepreneur scans the environment, selects promising opportunities, focuses on new business development and the formulation of the strategy• The abilities are required to recognize and envision taking advantage of opportunity and to generate growth-oriented strategies
--

Table 2: overview of the activity and size of the 28 firms of which the entrepreneur was interviewed

Company	Activity	Number of employees (at the end of the high-growth period)
O1	Catering services	156
O2	Food producer	43
O3	Construction company	45
O4	Construction company	22
O5	Logistics company	84
O6	Plastics manufacturer	23
O7	Safety expert	54
O8	Biogas producer	62
O9	Moisture control expert	62
O10	Crane rental company	44
O11	Window manufacturer	87
O12	Design agency	38
O13	Roller shutter manufacturer	87
O14	ICT-consulting services	27
P1	Financial consulting	141
P2	ICT-service provider	300
P3	Alternative energy systems	76
P4	Cooling installation services	44
P5	Amino acids provider	100
P6	Air conditioning systems	69
P7	Marketing consulting services	65
P8	Communication agency	80
P9	Satellite communication	233
P10	Satellite navigation	65
P11	IT/Engineering -consulting	180
P12	Construction engineering	34
P13	Do-it-yourself retail chain	150
P14	Zinc processing company	39

Table 3: overview of the analysed cases

	Number of employees in 2013 and at the end of the first high-growth period	Number of years that the entrepreneurs is – mainly – active in the ... role			Critical moments
		Technical - functional	Managerial	Strategic	
Firm P1 Founded: 1997 Sector: ICT service industry	2013: 425 employees End of first high-growth period ('01-'04): 55 employees	4 years	4 years	8 years	The diversification in 2005 from consulting services into infrastructural services The acquisition of a competitor in 2013 which led to an increase in size of 120 employees
Firm P2 Founded: 1993 Sector: dietary supplements	2013: 140 employees End of first high-growth period ('02-'05): 46 employees	6 years	6 years	8 years	Change in business model at the end of the 20 th century: from merely trading dietary supplements to the production of dietary supplements The diversification from 'sports food' to 'health food' in 2006
Firm O1 Founded: 1990 Sector: food producer	2013: 42 employees End of first high-growth period ('05-'08): 43 employees	12 years	10 years	1 year	Move to larger production site in 2000 that enabled the offering of a wider product range and increased flexibility in production Deliberate pause in the growth after the high-growth period in 2008: the entrepreneur lost control over state of affairs
Firm O2 Founded: 1998 Sector: moisture control services	2013: 80 employees End of first high-growth period ('05-'08): 62 employees	4 years	10 years	1 year	Adding a business unit ('cavity wall insulation') in 2006 Break after the high-growth period as the organizational structure was not adequately adjusted to the new size of the firm

Table 4: overview of the 'key informants'

Firm	Interviewed 'key informants'
O1	COO - Business Unit manager
O2	COO - CFO
P1	COO - CFO - HR manager
P2	COO - CFO

Table 5: Overview of the data collection rounds

	Interviewees	Goal of the interviews
Round 1	Founding entrepreneurs (4x)	Getting insight in the factors that determined the transition between the identified phases
Round 2	'Key informants' (Myers, 2008) / management team members → CFO (3 x), COO (4x), HR manager (1x), Business Unit manager (1x)	Verify the findings of the first interview round and extend these findings by gathering additional information with people that were close to the entrepreneur during the high-growth period
Round 3	Founding entrepreneurs (4x)	Contrasting the statements that were made by the interviewees from round 2 and discussing the preliminary emerging findings

Table 6: framework of factors that determine the quick transition of high-growth entrepreneurs to the 'strategist'-phase

Dimensions	Theories and theoretical concepts	Themes from interview data
<div style="border: 1px solid black; padding: 5px; width: fit-content;">1. Human capital base</div> <p><i>Firm-level</i></p>	<p>Hiring practices of HGFs: outsiders on the labor market (Coad et al., 2014) versus Resource-based theory of the firms: growing firms need to hire capable individuals with extensive human capital (Penrose, 1959)</p>	<ul style="list-style-type: none"> • High quality, versatile and flexible human resource base: employees with the ability and willingness to evolve to a managerial role • Extensive recruitment policy • Focus on on-the-job training and additional courses to improve the managerial capabilities • Policy of internal promotion: employees with a personal growth trajectory that is in line with the high-growth of the firm <p>(Situation for firms for which entrepreneur is in phase 3)</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content;">2. Organizational structure</div> <p><i>Firm-level</i></p>	<p>'Simple' organizational structure versus a more elaborate structure with characteristics of the 'machine bureaucracy' (Mintzberg, 1980)</p>	<ul style="list-style-type: none"> • Formalized procedures with routine operating tasks, without falling into over-regulation • Reliance on functional grouping of tasks • Use of formal control systems • Remaining flexibility and short decision lines <p>(Situation for firms for which entrepreneur is in phase 3)</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content;">3. Managerial and strategic capabilities</div> <p><i>Entrepreneur-level</i></p>	<p>Acquisition of management skills (soft versus hard skills) and strategic skills that are both malleable attributes (Parente et al., 2012; Varela et al., 2013)</p>	<ul style="list-style-type: none"> • Obtained managerial skills through management development programs • Improved strategic capabilities by membership of peer-to-peer networks and other learning networks <p>(Situation for entrepreneurs who are in phase 3)</p>

Figure 1: Factors that enable a quick transition from the 'manager'-phase to the 'strategist'-phase for high-growth entrepreneurs

