ABSTRACT

Studies concentrating on the relationship between firm growth and performance have been conducted for decades. The common belief in society seems to be that high growth will eventually lead to financial success. Three recent studies (Brännback et al, 2009; Davidsson et al 2009, and Steffens et al, 2009) suggest the opposite; that it is the high profitability firms that are by far most likely to eventually end up in a high-growth and high-profitability position. With these results in mind we chose to take an individual level approach, and conducted 23 interviews with venture capitalists, public investors, policy makers, entrepreneurs and industry experts to understand how they look at the relationship between growth and profitability. Results concur with earlier quantitative studies, and show a clear variance in the individuals’ perceptions in which one is the prerequisite for the other.

INTRODUCTION

Research on firm growth and performance has been of major interest in entrepreneurship for decades. Despite this attention, results on the relationship between firm growth and performance remains highly fragmented and inconclusive (Shepherd & Wiklund, 2009; Davidsson et al, 2009, Steffens et al, 2009, Brännback et al, 2009). Numerous authors have indicated that part of these differences in results can be explained by methodological differences, the use of indicators with low correlation, and issues with how these indicators are calculated (Capon et al, 1990; Delmar, 1997; Delmar, Davidson, & Gartner, 2003; Davidsson & Wiklund, 2000; Weinzimmer et al, 1998; Shepherd & Wiklund, 1998; Kiviluoto et al, 2009b). Thus the comparison of various research results becomes difficult, if not impossible. In addition, there is always the issue of biases present in any study. For example, in studies where growth has been considered an indication of firm success researchers often study only successful firms (Penrose, 1959; Dess et al, 1997; Wiklund, 1999; Delmar, et al. 2003). Another issue impacting empirical research is the ease of access to certain data sets (samples of convenience) that has tended to guide researchers’ choice of research designs and questions (Dunn & Bradstreet data, 10K reports). For example, a recent review (Kiviluoto et al, 2009b) found that most studies, even in entrepreneurship research, are on publicly traded companies. This does not mean that performance data on small, privately held firms is not be available. Such data is available, but requires extra effort from the researcher to acquire it (Carsrud, Brännback & Renko, 2008). Moreover, most studies on growth are conducted on rather large firms employing over 100 persons and over seven years of age. Yet we know that less than three percent of firms manage to ever grow beyond 100 persons (Aldrich, 1999). Moreover, small firms – employing less than 10 people represent 97.5% of all firms be it the US, Finland or Sweden. Consequently, it is justified to ask: what do we really know about small firms’ growth and performance?
While we tend to be careful with how we measure and attempt to follow the principles of objective research, social sciences always has to tackle the issue of the presence of subjective perceptions and a whole range of biases. Social scientists, including entrepreneurship researchers can be accused for having a tendency to get that for which they are looking (Shaver, 2005; Brännback, et al. 2009) thus the truth is in the eyes of the beholder (or one’s research bias). Entrepreneurship research often spans multiple levels of analysis, which are strongly interrelated (Davidsson & Wiklund, 2000). For example, individuals take initiatives in organizational contexts that can be either be in firms or industries. Ever since Birch (1987) there is a strong belief among policy makers that these individual initiatives have significant effects on national economies. Studies of firm growth and performance are one such area where the obvious unit of analysis ought to be on the firm level. However, the effects of growth and performance are often evaluated on firm, industry, or even national level.

Given the inconclusive research results on the relationship between growth and profitability despite having been conducted for decades, this paper takes a different approach. Most studies are of quantitative nature focusing on the ‘how many’. This paper focuses on the how. Building on Davidson, et al (2009) and Brännback, et al. (2009) the current study examines how individuals reason (or think) about the relationship between growth and profitability (Pratt, 2009). That is, how do individuals perceive, build, and justify their arguments about the relationship of growth and performance? How stable are these arguments,? If they change why and how do these arguments change? Thus, in this paper, we position ourselves at the individual level. That is, the perception of individuals and how they understand and conceptualize firm growth and performance. The logic here is that an individual, be they entrepreneur, venture capitalist, or policy maker, has to first form a personal understanding of the relationship between firm growth and performance before this can be translated into a firm’s strategy or a governmental policy. Once that has taken place he (or she) will use that perception (Douglas, 2009) as basis for decision making with consequences on the firm level – or any higher level.

Thus, we elaborate on previous studies (Brännback et al, 2009; Davidsson et al 2009, and Steffens et al, 2009). We are attempting to determine what individual this firms should pursue first: growth or profitability, in order to have the highest probability of ultimately reaching the goal of high growth and high profitability (Steffens et al, 2009; Davidsson et al., 2009; Brännback et al, 2009). The studies by Steffens et al (2009) and Davidsson et al (2009) were conducted over multiple industries in two countries, whereas the study by Brännback et al (2009) was conducted within one sector – Life Sciences and located in a single context - one country. While these three studies used different methods of analysis, and they all used financial data but different financial indicators. Results were conclusive and consistent despite these differences. While results were conclusive they were to some degree controversial. Results clearly show that profitability is a prerequisite for growth and ultimate financial success. This is contrary to what has almost become accepted common wisdom within entrepreneurship.

Using these results as a basis and a ‘blue print’ of reality, we set out to conduct a qualitative study – in-depth interviews with venture capitalists, public investors, policy makers, entrepreneurs and industry experts. The aim of these interviews was to investigate the perceptions of the relationship between growth and profitability of these persons. We were particularly interesting in how they justified their arguments and opinions. Hence rather than merely replicating the three studies in yet another context with potentially larger data sets, we opted for a qualitative approach to possibly explore aspects we need to pay attention to in a future comprehensive survey. Thus, we followed Glaser and Strauss’s (1967) point (in Tan et al (2009, p. 245): “…inductive research based on the analysis of qualitative data is critical to the creation of theories that credibly account for systematic variation in distinctive contexts.” In other words, what are we missing about the phenomena of growth and profitability when research results are so inconclusive after so many years of research?
PREVIOUS RESEARCH

An overwhelming majority of the traditional assumptions in entrepreneurship research seems to believe that growth is a precursor for profitability. Some have even argued that growth is the same as entrepreneurship (Davidsson et al, 2002). However, research results range from strong positive to weak negative to no relationship (Shuman & Seeger, 1986; Hart, 1992; Gartner, 1997; Baum & Wally, 2003; Markman & Gartner, 2002; Davidsson et al, 2008). Considerable variation with respect to the choice of growth indicators, calculation of growth measures, measurement periods, and whether objective or subjective measures have been used exists, rendering comparisons between growth studies difficult, if not impossible (Delmar, 1997). Moreover, variations with respect to choice of profitability measures are also considerable. At times there as been a near absence of any discussion of what should be appropriate measurement. The difficulty is amplified by the fact that growth and performance are closely linked and they are sometimes used as ‘synonyms’, i.e. surrogates for each other (Birley & Westhead, 1990; Kiviluoto et al, 2009b).

A vast majority of studies published in top journals apply quantitative research methods investigating which factors impact growth or firm performance or both (Kiviluoto et al, 2009a). These also include measuring the strength of the impact. Interestingly, there is an obvious lack of studies focusing on privately held start-up firms and studies focusing on high technology high growth firms (Kiviluoto et al, 2009a) something noted in Carsrud, et al, 2008 in their analysis of the study of strategy in small and medium size biotechnology firms. This is somewhat surprising as the public press and a large amount of bestselling management “how to” books have been published for the two decades (e.g. Collins, 2001, Christensen & Raynor, 2003; Kim & Mauborgne, 2005). However, upon closer scrutiny these books are really reports on large firm like Amazon.com, Dell, HP, Amgen, etc. that can be considered outliers. While all firms start small, none of these popular press books adequately covers the start-up periods. When they do exist it is primarily be found in biographies of the founders, which are retrospective views of history with all their biases.

Finally, as public policy makers in most countries have sought to actively promote high growth high technology firms it is surprising that there are so few studies. Common to these publications and public policy makers however, is a strong belief in growth as precursor to profitability, that all growth is good, that high growth will ultimately lead to a financial and entrepreneurial success. Sustainability of that success seems to ignored. Nevertheless, the constant repetition of this as fact, does not necessarily mean it is true.

Brännback et al (2009) showed that there are considerable differences in the cognitive patterns between different decision makers with respect to how they perceive the relationship between growth and profitability. This confirms the view that the mind maps of entrepreneurs and non-entrepreneurs are quite different (Carsrud, et al, 2009; Brännback & Carsrud, 2009) In a quasi-experiment involving three groups; students, technology entrepreneurs and managers in a large firm. Participants were assigned a task asking them to explicate the relationship between three growth strategies and how these were dependent on products and critical success factors. The strategies were: no growth, 20 % annual market share growth over a period of five years regardless of profitability, and 20% annual profit growth over a period of five years. Results revealed clear differences in cognitive maps. The managers and the technology entrepreneurs were apparently better in envisioning the growth strategies as if they had already been accomplished. Students had problems in distinguishing between “no growth” and “annual profit growth” strategy and they could not at all distinguish between market share growth and annual profit growth strategies. They showed clear problems with conceptualizing the factors generating revenues and what generated profits. In a seminar after the experiment held with the managers this issue was subject to a lengthy discussion. It occurred that although the managers had been able to distinguish between the strategies this rationale does not reflect the reality of the managers’ reasoning. We were told that when launching a product, annual profit growth is not the target – although admitting it ought to be so. The actual target is market share growth (regardless of profit target).

Contrasting the findings from the studies by Markman & Gartner (2002), Davidsson et al (2009) Steffens et al (2009), and Brännback et al (2009) against the study by Carsrud et al (2009) analysing the cognitive patterns of different decision makers, suggests, that different decision makers, may have different underlying goals, which ultimately guide their heuristics, judgements, opinions, and decisions.
The notion of goal directed behavior explicitly acknowledges that the outcome may be affected by actions of others or circumstances beyond one’s control (Bagozzi & Warshaw, 1990, Lawson, 1997, Bay & Daniel, 2003, Brännback et al, 2007).

THE STUDY

In order to understand, how different stakeholders understand the relationship between growth and profitability, semi-structured interviews were conducted earlier in 2009. The respondents were chosen based on their known experience in the high-technology industry. In addition, snowball sampling was used whenever a respondent recommended another person with considerable experience in the field. All respondents were contacted by phone, followed by an e-mail stating the purpose of the study. All respondents, except one, contacted by phone were willing to participate in the study, and the one refusing recommended another person in the same organization with better knowledge of high-tech industries.

In the beginning five test interviews were conducted with different stakeholder groups: one venture capitalist, one industry expert, two policy makers and one general expert in the industry. These interviews were made with two or three people conducting the interview, and after each time, the questions were revised and improved. After these interviews, an additional 17 interviews were conducted with venture capitalists, public investors and industry experts. The language of the interview was Finnish in 22 interviews, and Swedish in one. The transcriber and coder speak fluently these languages, so it did not create a bias. All interviews were recorded, and later transcribed and coded with QSR NVivo 8 software.

The interviews were semi-structured and the questions were divided into four sections: respondent background, industry characteristics, growth and profitability, planning and finance. In total, 33 questions were asked and the interviews lasted 54 minutes on average. (Please refer to the Appendix for a translated version of interview manual). 19 of the interviews were conducted at the office of the respondent, while three were conducted at the university and one in a cafeteria. The interview length was decided in advance to be an hour and hence, some questions were needed to be dropped out in certain interviews.

RESULTS

In the following sections the answers of the respondents will be interpreted. Note that only parts that are relevant to this study will be presented and discussed. Table 1 shows a summary of the findings.

Background

As table 1 illustrates the education and experience of the respondents are fairly impressive. All of the respondents have a University degree, many have even two. Engineering and business are the most common fields of education, while a few have a doctoral degree in medicine or biochemistry, which is common for biotechnology businesses. Out of the four entrepreneurs, three have a doctoral degree, supporting the fact that often firms in biotechnology are founded by researchers. Quite surprisingly does less than half of the venture capitalists’ have a degree in finance, but instead their current positions have been achieved with relevant work experience.
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Growth and profitability
After some general questions about the industry the respondents were asked whether they see a relationship between growth and profitability and if yes, what kind. Eight of the respondents thought that growth is a prerequisite for profitability, while also eight considered profitability being a perquisite for growth. This really highlights the confusion of the believed relationship between these two performance variables.

Those respondent that saw growth as a prerequisite for profitability, referred to the possibility of economies of scale, which would further lead to increased profitability. From the investors’ point of view, growth could be seen as the only tool to improve the value of the firm, and therefore growth could be seen as a necessity. The venture capitalists only thinking about exit opportunities, which would define success for them, saw that growth would make the firm more attractive for new venture capitalists. Being a firm with high profitability would mean that external finance would necessarily not be required by the firm.

“Yes, it is like that, like that, very often profitability comes through growth, growth in volume (VC3).”
“Yes of course. If we define profitability as return on investment, so without growth we cannot achieve, that I can tell (PI4)”

Those that saw profitability as a prerequisite, argued for the necessity to have enough capital to be able to invest in future growth, referring to self-financed growth in opposite to externally-financed growth. Higher profitability could also be seen as an opportunity to grow through acquisition. Profitability was also seen as the best proof of a working business model, and once it is achieved, growth would be much easier to attain.

“If you haven’t got profitability, nor do you have the resources to achieve growth for that matter (F)”
“Growth is achieved through profitability (VC1)”

Those that did not provide a clear relationship between the two, pointed out the importance of achieving both, instead of choosing one over another.

“Growth cannot be an intrinsic value, and if, if profitability is what we just defined, it is challenging. For a small growing firm, it is the biggest challenge, to grow profitably, because it is easier to only do one of them instead of trying to achieve both...if you only want to increase sales by sacrificing profitability, the firm will not succeed. And the other way round, if you only try to achieve profitability, the firm will not grow anywhere (PI5)”

Then it was asked what the respondent would prioritize, growth or profitability. When the question was asked like this, out of 23 answers, six would prioritize growth, while 13 would prioritize profitability. One preferred both, and the remaining three where unsure and referred to the context of the firm. Similar reasoning for the decision where given in this question; there are the ones that see the necessity to grow in the early stages, both from the investors point of view as from the entrepreneurs point of view.

“in an early stage like this, it has to be growth (EN2)”
“Well, we of course have growth as our first goal, because we have such early stage investments, so these companies must be able to show they have the ability to grow. The profitability demand comes later on (VC5)”

Growth and size was also related to credibility; a small firm would not be credible enough in the eyes of other stakeholders

“In an early stage you ought to get your things running, to grow into a level so that you are credible (EN4)”

The respondents that would prioritize profitability pointed out the risks of growth and often talked about the timeframes.

“Profitability, of course. Because at the end, growth is not the intrinsic value, profitability is. We have seen hell of a lot of growth companies, that have suffocated in their own greed and impossibility, but when you make sure to grow profitably, then you are going into the right direction (PI2)”
Also in this question it became evident, that even if profitability could be seen as the final goal, the tool to achieving it, was still growth.

"Well of course I need to say profitability, but it’s not like, growth is still the prerequisite for it, so they are not exclusionary things (PI4).”

It was interesting to realize that growth and profitability can both be seen as targets, or then as tools for achieving a target. As the increased incomes brought by growth, would improve cash flows and later enhance profitability shows how growth can be seen as a tool and profitability as a goal. On the other hand, by first prioritizing profitability, and hence use it as a tool for increasing the financial resources, would help in achieving long-term growth. On the other hand it should be remembered that growth is hardly a goal per se, but instead what is believed to be achieved by it, is what pushes firms to pursuit it.

Later on in the interview it was asked whether it was possible to enhance profitability in the long-run by growth. Here we were interested in finding out whether growth was seen as a tool for improving performance. All 18 respondents agreed that this was possible, many being very convinced about it. Some respondents thought that it is risky, and this was where firms may easily fail, but with higher risks the firm could also attain higher returns.

"It is possible in the long-term, but it has to be strategically well made, because the Finnish companies’ biggest vices are that they totally underestimate the challenges of growth, in particular international growth (PI2).”

Even here the scale economies were found to be a common base for the argument. This was the case, both for the software industry as for the biotech industry.

“Yes, well, if we think so the software industry is exactly about this in the end. When you have no marginal costs, in theory in production, the bigger you are, the more profitable you are also (EX)”

Even in this question the value increase from the investors’ point of view came up, highlighting the growth and value increase relationship from the venture capitalists standpoint.

“Most commonly it is like this. Of course there are sometimes cases where the value is based on something else, e.g. if you develop some technology that has more value to the company it is sold to. Then there is no profitability until the company is sold (VC6)"

Measuring performance

In an early stage of the interview the respondents were asked what they thought as the most suitable measure for a start-up SME in high-technology. None of the respondents could give a clear answer, none referring to pure sales growth which is most commonly used by academics, but instead various qualitative and quantitative methods were suggested. What was very clear that each respondent defined performance through their organizations lens; where the public investor saw employment growth and welfare as performance the venture capitalist thought that increased employment should never be seen as a performance measure, but instead looked at growth potential and value increase. Performance was often related to targets and goals, and good performance was to be able to show how these targets were met, preferably with minimal costs. It was also common to relate performance to the product life-cycle, where qualitative measures such as survival, meeting set plans, cash flow management, ability to raise finance, resources and capabilities would be suitable in the early stages, while traditional accounting based measures would come into question once the company is properly established.

Public investors tended to prefer qualitative measures and other softer measures, when venture capitalists had a tendency to look at value increase through achieved growth and future growth potential.

When directly asking how growth is measured, a total of 17 mentioned sales growth as the first alternative. Apart from that other growth measures such as increased number of customers, value, profitability, patents, and employees. Some of the respondents felt very strongly about regarding employment growth as a performance measure, due to the idea that it only increases fixed costs and
may create more slack resources; something that would most certainly be the doom of a start-up firm. When the same question was asked about profitability measures, traditional measures such as ebit, return on investment, and results were mentioned.

While sales growth is most commonly considered a performance measure and performance being equal to success (Kiviluoto et al, 2009b), one of the questions asked whether growth is a good measure of success. None of the respondents gave the answer as a firm yes, but instead various elements were taken into the discussion. Most commonly solely growth was not a measure of success, but instead other measures should be used in parallel, such as profitability.

“Profitable growth yes, but non-profitable growth, no. There we are taken into the problematic that if you sell your products with loss, and after growth you still sell it with loss, it makes no sense at all (PI1).”

Many mentioned that growth should not be seen as intrinsic; often indirectly referring to that this in many circumstances is the case.

“growth is one measures of success, but a successful firm growth profitably, but growth is not an intrinsic value (P12).”

Looking through a broader lens and considering the surrounding reasons to growth, was far more important than growth per se. At the same time growth could be seen as a measure, whether this was a target that was planned for in an earlier stage.

“You cannot only measure one thing in an analysis, here you also need to look at profitability and the prerequisite for profitable growth. These should happen in parallel, you cannot only look at one thing; you need to understand what the growth or non-profitability depends on. You need to have it under control all the time (PI4)”

The issue of size and credibility became evident in these answers also. That was seen as a major growth driver that big companies are idealized, while that term is hardly ever used to describe a small firm.

Growth and profitability matrix
In the studies by Brännback et al (2009), Davidsson et al (2009) and Steffens et al (2009), a growth and profitability matrix (GPM) was created in order to demonstrate firms’ movements over a certain time period. A matrix based on this studies was created and was shown to the respondents in order to understand how they reason about the firms movements in this particular figure (figure 1).

Figure 1. Growth and profitability matrix (GPM)
One question that was of special interest to us, was to hear what the respondents thought that a firm's start-up process should look like, and especially in what way a firm is most likely to achieve the star position. Of total 17 responses, 7 thought that the firm should move in the sequence poor-growth-star. The reasoning for these arguments were that the two that became evident already in earlier phases of the interview. This strategy was pursued firstly because growth would eventually lead to profitability, or then because that is what the venture capital model was seen to be built on.

"the poor firm will more naturally strive for growth, and through that growth a steady cash flow, which will create the foundations for profitability (VC5)

"Well it is more likely to go through growth, because that is what our venture capital model builds on, that first you grow you business and after that the operations start to become profitable (PI3)."

A slightly larger number of respondents, a total of ten, preferred the start-up sequence poor-profit-star. Reasons for why this sequence was preferred was because of the higher risks of the growth positions, and because a state of higher profitability would give the firm more time to think of its future directions.

"But it is like that, that the low profitability positions, are positions of death. From there you find it difficult to get anywhere. On the other hand, if you have good profitability, but low growth, you can afford to think what to do next (PI4)."

Also here higher profitability was seen as evidence for a working business model. Industry specific factors were also taken into consideration in these questions, when respondents thought that the route to star depends on the industry it is operating in. The traditional routes was seen to be through growth, when profitability was to be preferred in the life-science sector, and others, where product development times are vastly long. One of the pioneers of the Finnish biotech sector, currently an entrepreneur, mentioned that achieving success through growth could be seen as the American model. He thought that this model was common for the firms during the last decade. As this method has proven inefficient and a majority of firms are struggling, businesses have learned from their mistakes, and are now more profitability oriented.

In order to fully understand how the respondent looked at the differences between being a growth firm or being a profit firm, the question was asked, from which position a firm is most likely to end up as a star (both growth and profitability over the industry median). Out of 13 answers, five were certain it would be the growth position, while only 2 chose profit. The remaining five, were not willing to state a preference, but instead highlighted the importance of the firms strategy and goals, the life-cycle, and the underlying reasons for a firm of actually being in one position over another. While growth was found to be more risky it was argued that this was still an evidence of that there is a market demand for the product the firm is selling. On the other hand, firms’ categorized as profit firms, awoke questions of what the reason were for a firm being at that position. This was a position that was paralleled with the entrepreneur as being the major shareholder or to family firms, i.e. for firms were the owners may be more interested in having a steady income or for increasing his/her own personal wealth.

What comes to the actual questions about this matrix, it is worth noting that the vocabulary used in the matrix, may create stronger associations of the category that was actually meant. Even if it was explained that firms are divided according to their growth and profitability in comparison to the industry median, the word growth-firm or a star, may affect their reasoning.

Planning

Based on the extent literature on the planning-performance relationship, a few planning related questions were also asked. First of all the respondents were asked how important it is for firms to plan for what they do. The focus here was on actual planning behavior, not the process of actually producing a business plan. Then it was asked what the respondents think that firms plan for in the first place, whether it is growth or profitability, and how the stage of the life-cycle may affect this. The question about planning importance gave usually strong reactions. Out of 23 respondents, a total of 13 regarded planning as absolutely crucial, a matter of life-or death.

"It is essential, you cannot emphasize it too much (VC4)."
“Well first of all. Unplanned, that is no longer proper business if you do not do it based on planning (EN1).”

The planning process was also seen as a method to create a unified direction within the firm, which is absolutely crucial considering the future success of the firm.

Eight of the respondent saw planning as very important, while the remaining two found it only to be important. Those two that felt the least strongly about business planning related to the danger of being stuck with a certain plan, i.e. that in a fast-changing environment a plan may quickly become obsolete and by following that plan the firm may be going into the wrong direction. They also emphasized the work-load the planning process may create for the top management in a small firm. This referred more to the actual process of writing a business plan when applying for finance.

When it was asked what firms plan for in the first place, a total of 15 out of 23 respondents answered growth. They were very convinced that it is the entrepreneurs that are the ones making up utopian growth plans, without considering the profitability implications nor what is required of the business to meet those plans. The remaining eight respondents were not able to say what businesses plan for in the first place, and talked about case-by-case approaches and the stage of the life-cycle.

In line with these answers were relating relating to the firms’ growth intentions. When the respondents were asked whether companies in general want to grow, the majority thoughts that yes, but once again the context was very important. As some saw that growth is part of the human nature, others saw it purely as a necessity for increasing the value of their investment. From the entrepreneurs point of view, growth was also seen as a tool for increases wealth.

“Companies do want to grow, and that growth is the prerequisite for profitability. And profitability is an element that is closely associated with all business, I have to go by the book, and cite the Companies Act, that requires companies to be profitable (P16)”

The importance of growth for a venture capitalist became evident in this question also, where one of the respondents argued that without growth intentions, there would be no reason to talk to a venture capitalist.

“Well, companies do want to grow and if they don’t, speaking to us is not the right thing to do. But of course, there are, there are differences life-style entrepreneurship and growth-entrepreneurship...once you have found a position that is comfortable, you want to continue having it profitable, perhaps even grow a little, but they are not priorities (P12).”

When discussing growth of micro firms, one should not forget to think that mostly the firm = owner. If the entrepreneur owns the firm, growth intentions are based on that persons goals and aspirations.

“I would say that most do want to grow, growth is natural for a human being. Of course there are exceptions, one could be that if the owner is the inventor who has come up with the idea and the commercialized it, but is not willing to give up his/her ownership of it, but instead want to keep it all in their own hands(P11)”

However in capital intensive industries, where there are other stakeholders with a vested interest in the firm’s performance, additional drivers place a pressure of the firm’s future direction. A conflict of
interest is often created once new investors come into the picture, even if many of the investors emphasized the importance of taking into the consideration the interest of the entrepreneur.

“No, no they don’t. It doesn’t like belong to, well lets start from that biotech companies, as I mentioned are often founded by researchers, and researchers are in love with their projects and they do not want to give them away and that someone starts to make business with it. That is the first reason. Secondly, it is because there is not enough business knowledge within the firm so they do not know how to grow. Then for some reason, firms do not like venture capitalists, and that they come with a minority share and run over the entrepreneurs (POL2)”

DISCUSSION

With the results in mind of the recent studies showing that profitability is what is actually a prerequisite for growth and ultimately financial success (Brännback et al, 2009; Davidsson et al, 2009; Steffens et al, 2009) we set out to conduct a qualitative study – in-depth interviews with a total of 23 venture capitalists, public investors, policy makers, entrepreneurs and industry experts. The aim of these interviews was to investigate these stakeholders’ perceptions of the relationship between growth and profitability.

Based on the interviews we would like to shed light on five major findings: the unclear relationship between growth and profitability, believed growth intentions, the use of certain performance measures, the stakeholder view when assessing performance, and the owner’s role in setting the direction of the firm.

First of all the relationship between growth and profitability is on an individual level as unclear as it is in academic research. Most commonly it is seen that growth will eventually lead to profitability, in the long-term without any exception, which confirms our assumptions of what could be called the common belief in society. This view is not particularly common to a certain group of people, but instead believer and unbelievers exist among every stakeholder group. Growth is however associated with higher risks, which would explain the reasons for why to pursue for growth; with increased risks should also come increased returns. Growth is also seen as evidence of market pull i.e. that there is a real demand for the product in the market. Those that would opt for profitability in the first place, see it as evidence of a working business model and as a possibility for self-financed growth in the future.

Secondly the believed growth intentions of the firm seem to be far from research that has been made on the subject. Research shows that growth is not at all as likely to happen as generally believed (Autio, 2007; Shane, 2008). According to the extensive dataset by the Global Entrepreneurship Monitor (Autio, 2007) it is found that only 1.7% of nascent and new entrepreneurs are expecting to create more than 100 jobs in five years time, yet they expect to create nearly 50% of the expected jobs. When looking at start-ups, only 7 % of the entrepreneurs expect to create 20 or more jobs and as many as 70 % do not expect to create any jobs at all. Still our respondent were fairly convinced that entrepreneurs do plan for growth in the first place and that they are also very willing to grow. This emphasizes an information asymmetry in the field, and shows that there are plenty of illusions of what stakeholders think of each other, a subject Scott Shane recently wrote a book about (Shane, 2008).

However it is worth noting that these stakeholders may be answering the questions through the organizations lens. Were the venture capitalist may only see the entrepreneurs that want to grow, due to that these entrepreneurs are the ones most likely to contact a venture capitalist, an entrepreneur funded by a venture capitalist may be talking about his/her own company or fellow companies that are in the same situation.

Thirdly we would like to address the use of performance measures. While the academic literature most commonly defines firm performance based solely on sales growth (Ensley, Pearson & Amason, 2002; Davidsson et al, 2009; Kiviluoto et al, 2009b; Shepherd & Wiklund, 2009) this is never the case when asking venture capitalists, public investors, policy makers, entrepreneurs and industry experts. Instead performance was seen to be highly dependent on the stage of the life-cycle. In the early stages qualitative measures such as meeting set plans, firm resources, survival, ability to raise finance, and cash flow management were to be preferred. At a later stage, once the firm is properly established
traditional measures ought to be used. Growth was indeed seen as a good performance measure, but not as the only one. If performance was determined solely by growth, this should be seen as evidence of meeting earlier set plans or as a well justified action. Instead various performance measures should be used simultaneously. One respondent suggested the use of three simultaneous measures, which is line with Devinney et al (2009) who showed, that the pattern of correlations between different performance measures is such that a minimum of three dimensions is necessary just to characterize the fundamental aspects of firm performance.

Fourthly is the matter of performance and various stakeholders. Kiviluoto et al (2009b) emphasized the importance of thinking of the context when determining performance. In our interviews this matter also became very evident. Performance means different things for different stakeholder, where the public investor sees employment growth and welfare as the best performance measure, the entrepreneur is looking at meeting set plans with minimal resources. At the same time the venture capitalist wants to see growth, as this will work as a tool to increase the value of their investment and in making the investment more attractive in case of a future exit, while the life-style entrepreneur or a family firm may only look at increased profitability and hence personal wealth. It became also clear that the respondents looked at these matters through the lenses of their positions or organizations, and hence also affected their answers in other questions.

Finally we would like to emphasize the role of the owner i.e. the stakeholder who is actually turning the wheels and deciding the direction of the firm. This is especially problematic in micro firms, where a certain stakeholder with the largest vested interest, may have by far the most saying in the firms strategy. This brings us again into the matter of different perspectives and performance. While the entrepreneur would perhaps want steady growth and secured profitability, venture capitalists may pursue growth at any cost, as this will increase the value of their investment. How likely these firms are of eventually becoming financial successes is something we have repeated overly in this paper. At the same time most respondents said that it is the entrepreneur that comes up with these hockey stick growth plans, without considering the implications of their actions. This raises the question that how can this be, why and for whom are entrepreneurs setting these plans? The sad truth is that these plans are being made for the investors, both venture capitalists and public investors. While one venture capitalist said that without growth intentions there is no need to talk to them, it is known that public finance is best received by presenting often unreasonable growth plans. So there seem to exist this vicious circle; for the entrepreneur in order to continue with the business he/she need to raise finance, and in order to raise this finance he/she is forced to show growth intentions and growth plans. Once this finance is received firm is pushed to growth in order to increase the value of the firm, in hope of a valuable exit in the near future. At the same this growth will push the firm all the time closer and closer to the edge, until it eventually cannot handle it and falls down, and probably never gets up again. The winners in this game are the investors that have manage to make an exit in time, not the entrepreneur with the failed business nor the policy maker expecting lower unemployment levels.

**APPENDIX**

**Interview questions**

**Personal background**

1. Could you shortly describe your own background (education, job experience, experience from the biotech industry/the industry that is most common to you)?

**Industry characteristics**

2. What do you think that best characterizes the Finnish biotech industry at the moment? What kinds of problems do the firms have, and how does the recession affect them?
3. What does the biotech industry look like in comparison to other Finnish industries?
4. Does biotech firms vary significantly in comparison to firms in other industries? If yes, how and why?
5. What is the best performance measure for a biotech SME, and why?
Growth and profitability

Next we will move on to the actual theme, which is growth and profitability. First of all I will ask you to define certain concepts, and please answer spontaneously what thoughts these questions arise.

6. Define growth and how do you measure growth?
7. Define profitability and how do you measure it?
8. What is profitable growth?
9. Are the same growth and profitability measures usable in different firms/industries?
10. Do you see a relationship between growth and profitability, and is yes, what kind?
11. Which would you prioritize and why?
12. Is it justifiable to sacrifice resources in order to build profitability instead of growth?
13. Is it justifiable to invest in growth if the firm has low profitability?
14. In the long-term, is it possible to improve profitability with growth?
15. Does growth deteriorate profitability?
16. Is growth a good measure of success?
17. How long does it take on average for a biotech firm to become profitable?
18. How many profitable biotech firms are there in Finland, and which are they?
19. How come so few companies manage to grow, and which factors may affect this?
20. Do companies want to grow, and which factors may affect this?
21. Growth and profitability matrix questions (questions not specified, ask all possible movements)

Planning and finance

22. How important is business planning?
23. What do firms plan for in the first place, is it growth or profitability, and does this vary depending on the stage of the lifecycle?
24. Is it difficult for biotech firms to raise finance?
25. How do you find information about potential deal flows?
26. In what way do you evaluate biotech firms?
27. How does the evaluation vary between biotech firms and firms in other industries?
28. What are the finance decisions based on finally, what are the most significant factors?
29. What are your expected returns on investments?
30. How does public finance affect a firm? Do they really benefit the firm?
31. How do you relate to public finance?
32. How do you relate to venture capital investments?
33. What will the Finnish biotech industry look like in five or ten years time?
34. Interest to participate in a survey later on?
35. Is there anything you would like to add to your answers or to the matters we have discussed?

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