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**GROWING PROFITABLE OR GROWING FROM PROFITS:
PUTTING THE HORSE IN FRONT OF THE CART?**

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GROWING PROFITABLE OR GROWING FROM PROFITS: PUTTING THE HORSE IN FRONT OF THE CART?

EXECUTIVE SUMMARY

Top lists and praise of the economy's fastest growing firms abound in business media around the world. Similarly, in academic research there has been a tendency to equate firm growth with business success. This tendency appears to be particularly pronounced in – but not confined to – entrepreneurship research.

In this study we critically examine this tendency to portray firm growth as more or less universally favorable. While several theories suggest that growth drives profitability we first show that the available empirical evidence does not support the existence of a general, positive relationship between growth and profitability. Using the theoretical lens of the Resource-Based View (RBV) we then argue that *sound* growth *usually* starts with achieving sufficient levels of profitability. In summary, our theoretical argument is as follows: In a population of SMEs, superior profitability is likely to be indicative of having built a resource-based competitive advantage. Building such a valuable and hard-to-copy advantage may at first constrain growth. However, the underlying advantage itself and the financial resources generated through high profitability make it possible for firms in this situation to now achieve sound and sustainable growth—which may require building a series of temporary advantages—without having to sacrifice profitability. By contrast, when firms go for high growth starting from low profitability it often indicates lack of competitive advantage and hence that the growth must be achieved in head-to-head competition with equally attractive alternatives, which would make profitability deteriorate rather than improve. In addition, these low-profitability firms are unlikely to be able to finance strategies towards building valuable and difficult-to-imitate advantages while

growing. Hence their growth would neither be sustainable nor lead to improved profitability. Based on these RBV arguments, we hold that although exceptions exist it is in most situations advantageous to let profitability (and the competitive advantage it reflects) be the horse that pulls the growth cart, rather than the other way around. Consequently, we develop two hypotheses about growth-profit configurations over time.

Hypothesis 1: Firms that show high profitability at low growth are more likely to reach a state of high growth and high profitability in subsequent periods than are firms that first show high growth at low profitability.

Hypothesis 2: Firms that show high growth at low profitability are more likely to reach a state of low growth and low profitability in subsequent periods than are firms that first show high profitability at low growth.

We test these hypotheses using two longitudinal data sets of small and medium-sized enterprises (SMEs) from Sweden and Australia. The results clearly support these hypotheses both for 1-year transitions and over the longest time span the data sets cover. The results also show a high degree of robustness across cross alternative bivariate and multivariate testing techniques as well as across sub-categories by firm age, firm size and industry. All in all, the results suggest that “profitability first” rather than “growth first” is the preferable strategy for achieving high overall firm performance.

For *academics* these results suggest that positive theory should not portray SME growth in its own right as “success” and that normative theory should attempt to better specify how and under which conditions firm growth contributes to outcomes that enhance company value. Further, empirical research aiming at explaining firm success ought not to rely solely on growth as the outcome variable. For business *practitioners* the results suggest they would often benefit from focusing on attaining

high profitability before pursuing high growth. For those situations where growth may be considered necessary for attaining high profitability, we suggest that managers develop precise ideas about how growth can enhance the future profitability of their particular firm, rather than relying on growth automatically improving profitability. With respect to external *investors* the results suggest they should often resist the temptation to encourage rapid growth before securing a sound level of profitability. Finally, for *policy makers* the results imply that policies should be developed that encourage firms to achieve the goal of being profitable rather than adopting policies that urge firms to grow as the primary goal. As firms that demonstrate high profitability often become growing firms that still enjoy above-average profits, policies that help firms become more profitable will also lead to more growth.

As with any empirical research this study is subject to certain limitations. Since our study did not include direct measures of the firms' resources it is possible that mechanisms other than the RBV-based ones used to develop our hypotheses may – at least in part – explain our results. However, given the strength and robustness of our findings we maintain that this research provides sound reasons to caution against both an uncritical view of 'growth' as a measure of 'success' and pursuing high growth before the firm has attained a sufficient level of profitability. Future research should test the generalizability of our results to longer time spans and other contexts. Future studies should also try to assess the resource-based mechanism in a more direct manner. This is a complicated matter that probably requires customized, longitudinal survey studies of relatively homogenous samples of firms.

ABSTRACT

Firm growth is almost universally portrayed as a good thing, and is commonly used as a measure of success. Applying resource-based reasoning, we argue that growth is often not a sign of sound development. Specifically, we hypothesize that firms which grow without first securing high levels of profitability tend to be less successful in subsequent periods compared to firms that first secure high profitability at low growth. Empirical tests using two large, longitudinal data sets confirm that the profitable low growth firms are more likely to reach the desirable state of high growth *and* high profitability. In addition, they have a decreased risk of ending up performing poorly on both performance dimensions compared with firms starting from a high growth, low profitability configuration. The results suggest that academics, managers, investors and policy-makers may benefit by adopting a more nuanced view of firm growth that explicitly incorporates its intricate relationship with profitability.

INTRODUCTION

Few things could be easier than growing the sales revenue of a firm. All one would have to do is to buy or produce the business's products or services at going market rates and sell them for significantly less. With the exception of a few, special cases, demand would soar and the firm would experience tremendous sales growth. However, this growth would obviously not reflect effective value creation and appropriation by the firm, and hence be neither profitable nor sustainable.

Despite this obvious fact, researchers, practitioners and policy-makers alike place a great deal of emphasis on firm growth *per se* as an indication of business success. Although the notion that growth can be harmful is not new (Ramezani et al., 2002:65; Markman and Gartner, 2002), adverse growth is usually treated as a relatively rare exception. In business media around the world, top lists and praise of the economy's fastest growing firms are ubiquitous (Nicholls-Nixon, 2005). Policy programs designed to stimulate and assist the growth of individual firms are commonplace, presumably in the hope that this will result in increasing employment and tax revenue (Storey, 1994). Teaching cases and textbooks devote much space to the problem of how to achieve expansion for the firm (e.g., Hisrich et al., 2005; Wickham, 2004; Winn, 2004). Further, academics frequently use firm growth uncritically as an operationalization of business success; especially in entrepreneurship research (see Davidsson, Steffens and Fitzsimmons, 2007). Some researchers go so far as to make growth "the very essence of entrepreneurship" (Sexton and Smilor, 1997:97) or include growth more or less as part of the definition of entrepreneurship (Stevenson and Jarillo, 1990:21, 25).

While we agree with Davidsson, Delmar and Wiklund (2002) that venture growth is an important topic for entrepreneurship research, we also agree with

Alvarez and Barney (2004) that value creation (they use the term ‘rent generation’) and appropriation are the central tasks of entrepreneurial firms. As we emphasized with our opening ‘high growth recipe’, growth is not direct evidence of effective value creation and appropriation. It is therefore an important task for entrepreneurship research to investigate the relationship between growth and profitability.

Through the theoretical lens of the Resource-Based View (RBV) we argue in this article that *sound* growth *usually* starts with achieving sufficient levels of profitability, i.e., that profitability is the ‘horse’ that should pull the growth ‘cart’ rather than the other way round. We also argue that firms which embark on a growth trajectory starting from low levels of profitability *usually* do not achieve high profitability as a result of their growth. Instead, as their growth is unlikely to be sustainable (Ramezani, et al., 2002) they run an increased risk of becoming low performers on both dimensions. We test these hypotheses using two longitudinal data sets of small and medium enterprises (SMEs) from Sweden and Australia.

Although we use RBV logic to develop our hypotheses and interpret our results, it is important to point out that this study does not include direct measures of the firms’ resources and hence we do not regard it a strong test of or contribution to resource-based theory (Arend, 2006). Our contribution concerns the understanding of the phenomenon of firm growth relative to how it has previously been conceived in the entrepreneurship literature. We employ a theory-driven *configuration* view of the interrelationship between profitability and growth. Rather than trying to explain as much of the variation in firms’ growth or profitability as possible, we focus squarely on the following two questions. First, which firms are more likely to reach the preferred state of high growth combined with high profitability – is it high-growth firms with low initial profitability or high-profitability firms with low initial growth?

Second, firms with which of these two original performance configurations are more likely to end up at the negative end of the performance spectrum, i.e., having low profitability and low growth?

In the following section we will briefly examine the theoretical arguments for firms becoming more profitable as a result of their growth. We then review the empirical literature to demonstrate the lack of general support for this notion. This is followed by the development of our RBV-based case for focusing on profitability before going for growth, which leads to two hypotheses that we test empirically. In the Method section we describe our samples and measures as well as our approach to the challenging problem of analyzing growth-profitability configurations over time. After presenting our results we discuss their implications. We suggest a research agenda for future studies, thereby also addressing the limitations of our study.

DOES GROWTH MAKE FIRMS PROFITABLE?

The assumption that sales growth is positively associated with profitability appears in a variety of literatures pertaining to *scale economies* (Besanko et al., 2004; Gupta, 1981), *experience effects* (Stern and Stalk, 1998), *first mover advantages* (FMAs) (Lieberman and Montgomery, 1988) and *network externalities* (Katz and Shapiro, 1985). These theories suggest growth will drive profitability either through the lowering of costs or by establishing a stronger market position. However, there is little empirical support for a strong and general growth-profitability relationship. For example, research in industrial economics have shown that scale economies are not much of a barrier to entry; that surviving new entrants operate for long times at sizes far smaller than the industry average; that *minimum efficient scale* is typically reached at a rather small size; that very limited cost advantages are usually gained beyond that

minimum, and even that it is possible to operate significantly below it without severe cost disadvantage (Geroski, 1995; Hill, 1988; Siegfried and Evans, 1994).

In studies reporting association between growth and profitability measures the correlations range from relatively substantial positive (Cox et al., 2002; Chandler and Jansen, 1992; Mendelson, 2000), to those that are weakly positive yet statistically significant (Baum and Wally, 2003; Cho and Pucic, 2005; Kim et al, 2004; Peng, 2004), to those finding no statistically or practically significant relationship (Roper, 1999; Sexton et al., 2000; both based on very sizable samples), to those showing a significant negative relationship (Markman and Gartner, 2002; Reid, 1995). The most comprehensive assessment of the issue is a meta-analysis by Capon et al. (1990). A close examination of their results reveals that a significant positive association between growth and financial performance is only found in across-industry studies. In within-industry studies, the effect is very small in magnitude and statistically non-significant (Capon et al., 1990:1154; Table 5). Thus, the results do not establish that firms that grow more than their direct competitors consequently become more profitable. Rather, the findings suggest that firms in growing industries benefit from the higher growth- *and* profit rates of their industries; a theme well-known also from Product Life Cycle theory (Day, 1981). Similarly, studies of the relationship between market share or market share growth on the one hand, and profitability on the other, suggest that any positive relationship may be either industry-specific or spurious (Brush et al., 2000).

In summary, the empirical evidence on the relationship between firm growth and profitability is inconclusive. Despite the theoretical arguments there is little evidence of a general tendency for firms to become more profitable as a result of their growth. This indicates that although the two dimensions of performance sometimes

move together there are frequent other instances when the growth-profitability relationship is neutral or negative.

THE RESOURCE-BASED VIEW AND PROFITABLE GROWTH

The Resource-based view (RBV) is in its historical origin very closely connected to the core topic of our study, *profitable growth*. Penrose (1959) focused her entire study on firm growth. Similarly, Wernerfelt's (1984) seminal paper explicitly addresses the profitability of different routes to growth. Hence, it is with considerable justification that Kor and Mahoney (2004:190) claim that profitable growth is one of the "cornerstones of a resource-based view of strategic management."

Thus, we hold that RBV is a natural starting point in considering small firm growth and profitability. We use the label 'RBV' in a rather broad sense. We include in this notion extensions such as 'dynamic capabilities' (Teece et al., 1997), the 'knowledge-based view' (Kogut and Zander, 1992) or any other theoretical argument for efficiency-based, intra-industry performance advantages deriving from resource heterogeneity (Peteraf and Barney, 2003) whether or not the original contributors position their work as contributions to, critique of, or unrelated to original RBV formulations. Consistent with RBV, our focus is on growth and profitability comparisons of firms within industries (Peteraf and Barney, 2003).

The RBV attributes superior firm performance to competitive advantage. Barney (1991) presents the now-familiar argument that the sustainability of the advantage is contingent on the extent to which the firm's resources or resource bundles are *valuable, rare, hard-to-copy* and *non-substitutable* (VRHN). In a later, equally well-known reformulation the desirable resource qualities are specified as

valuable, rare, inimitable, and organized (VRIO) (Barney, 1997). The ‘O’ in the latter formulation can be regarded an increased emphasis on the importance of having an effective *business model* in place – including an effective *revenue model* – thus assuring both value creation and value appropriation by the focal firm (Alvarez and Barney, 2004; Amit and Zott, 2001).

The RBV does not deny the existence of other sources of superior performance such as scale economies, FMAs, or behaviors like anti-competitive collusion; strategic ploys, and efforts to blunt competition (Peteraf and Barney, 2003). However, if based on scale *per se* a cost advantage is unlikely to be sustainable by Barney’s (1991; 1997) criteria. Further, within a population of SMEs only a small proportion of firms would be recent entrants in emerging industries where FMAs are a major issue. When present, it is argued that FMAs become sources of sustained competitive advantage only when they are based on VRHN resources (Barney, 1991:105; cf. Wernerfelt, 1984:173). As regards ‘strategic’ behaviors that are not value-creating we hold that their successful pursuit is unlikely in a population of SMEs where each firm has very limited market power. Hence, we argue that in the context of SMEs, RBV provides a plausible explanation for why some firms show above-average profitability. With its focus on within-industry differences among firms competing in the same product markets RBV may actually be more applicable to SMEs than to large corporations (cf. Davidsson and Wiklund, 2000; Peteraf and Barney, 2003).

Therefore, our theoretical argument starts from the fundamental RBV-based premise that resource heterogeneity which has been successfully transformed into product market offerings with superior economic value is a major source of within-industry profitability differences for SMEs. Hence, without trying to explain the

‘how’ questions – a silence RBV has been criticized for (Barney and Arian, 2001; Priem and Butler, 2001; Sirmon et al., 2007) – we accept the original RBV assumptions that resource heterogeneity exists (Barney, 1991) and that it is (often but not deterministically) transformed into product advantages (Wernerfelt, 1984) that create value to customers (Sirmon et al., 2007). However, we also consider the criticism that the original RBV employs a static view of competitive advantage (Priem and Butler, 2001) and embrace later developments suggesting it may be more realistic that firms need to develop a series of temporary advantages through valuable and hard-to-copy strategic moves in order to reach and maintain superior performance (Morrow et al., 2007; Sirmon et al., 2007; Zahra et al., 2006).

What implications does this have for firm growth? To facilitate our thinking, we sketch growth-profitability configurations in a simple 2x2 matrix (see Figure 1) where firms are positioned as either above or below their industry average on each dimension. This gives us four cases, which we label *Star* (high on both), *Profit* (high profitability/low growth), *Growth* (high growth/low profitability) and *Poor* (low on both). For the moment we can disregard the *Middle* category, which is created for empirical reasons in order to consider only substantive deviations from the average on either profitability or growth.

INSERT FIGURE 1 ABOUT HERE!

By the logic of RBV, firms should pursue growth opportunities that match their resource advantages. This would allow them to grow profitably, which is the essence of value creation (Sirmon et al., 2007). If they pursue other opportunities growth may destroy rather than create value (Kogut and Zander, 1992). Conversely, if

they refrain from growth opportunities that match their resource advantages they may enjoy high levels of profitability based on a sub-optimally small volume of business, thus under utilizing opportunities for value creation and appropriation. Hence, from the perspective of RBV firms should strive to maximize *profitable growth*. Profitable growth in our scheme is reflected in the performance demonstrated by firms in the high growth, high profitability (*Star*) category in Figure 1.

In an interpretation relying on RBV *Star* firms have been able to establish a resource-based advantage to create superior value for customers (Peteraf and Barney, 2003; Sirmon et al., 2007). They are successfully exploiting this advantage through profitable growth. If maximization of value creation and –appropriation is the goal, achieving *Star* status is what firms in the other performance categories should be striving for.

Therefore, we now turn to the probability that firms in the *Profit* (high profitability/low growth) and *Growth* (high growth/low profitability) categories, respectively, can successfully make the transition to the desirable *Star* category. As regards *Profit* firms, by resource-based logic their above-average profitability suggests they have attained the ability to both create and appropriate value above the industry average. Developing this advantage may take its toll in terms of growth. For example, the study by Mishina et al. (2004) suggests that a product expansion logic – which Morrow et al. (2007) portray as exemplifying valuable and hard-to-copy strategic action – is negatively related to sales growth in the short term. Yet, Morrow et al. (2007) demonstrate that such strategies are positively associated with value creation as reflected in investors' expectations; a result consistent with Cho and Pucic's (2005) observation that profitability has a much stronger influence on company value than has growth.

This is presumably because first developing a resource based advantage and translating it to superior market offerings at low growth sets the seed for sound, profitable growth in the future. Thus, we argue that *Profit* firms are in a good position to now expand while retaining their high profitability and thus transition to the *Star* category. Relative to low-profitability firms, the *Profit* firms are in a better position in at least two resource-related ways to make that transition. First, they have the underlying competitive advantage that enabled them to achieve above-average profitability. Unless the market potential for the current products is already exhausted these firms are likely to be able to grow organically through market penetration – the dominant form of SME growth, see Davidsson et al. (2006) – without the profitability-reducing tactics of price cutting and/or heavy advertising that would be needed to gain market share from firms with equal offerings (Peteraf and Barney, 2003). Second, the profitability of these firms creates greater cash flows and associated lower cost of the financial capital needed to enable growth (Marris, 1967; Scott and Pascoe, 1986). The cost-of-capital advantage holds for a comparison of retained earnings to external capital but likely extends to the cost of external capital itself, as a more profitable firm is likely to get external loans and equity on better terms than a less profitable firm with less financial slack (Bourgeois, 1981).

By contrast, we maintain that *Growth* firms (high growth and low profitability) are relatively unlikely to be able to exploit their growth to build resource advantages and subsequently attain superior profitability. We have noted above that there is no strong empirical support for firms gaining profitability advantages as a result of their growth. *Growth* firms' low level of profitability indicates that they are less likely than *Profit* firms to have established resource advantages that have been transformed into superior value creation for customers. Hence, assuming growth by

organic market penetration, their expansion may require price cuts or costly marketing efforts to win over customers facing several equally appealing offerings (Peteraf and Barney, 2003). As regards product expansion, Mishina et al.'s (2004) findings make it appear unlikely that small firms would be able to grow at above-average rates based on such a strategy, not least because small firms are commonly constrained to basing their growth on internal finance (Carpenter and Petersen, 2002). If that constraint can be overcome, Mishina et al.'s (2004) results in combination with those obtained by Morrow et al. (2007) imply that infusion of external capital may help firms develop valuable and hard-to-copy strategies to create value through sales growth. However, if the development of a resource advantage is attempted concurrently with above-average expansion the firm is likely to face time-compression diseconomies, as discussed by Dierickx and Cool (1989). This may well be part of the reason why other research has found that while access to financial capital may facilitate growth it usually does it at the expense of profitability rather than helping the firm to achieve above-average profitability through growth (Florin et al., 2003).

All in all, our analysis suggests that while *Profit* firms are in a good position to achieve high growth without significant loss of profitability, *Growth* firms are not particularly likely to become more profitable as a result of their growth. On top of their apparent lack of a resource-based, superior market offering our reasoning suggests they also suffer from a cost-of-capital disadvantage compared with *Profit* firms. This suggests the following hypothesis:

H1: Firms that show high profitability at low growth (Profit firms) are more likely to reach a state of high growth and high profitability (become Star firms) in

subsequent periods than are firms that first show high growth at low profitability (Growth firms).

Firms that are unable to reach *Star* status would at least want to avoid ending up in the *Poor* category, i.e., to perform below average on both dimensions in Figure 1. In order to avoid such development, *Growth* and *Profit* firms need to sustain above-average performance on one dimension; most likely the one on which they currently have high performance. We now turn to the probability that these two categories can avoid transition to the undesirable *Poor* category.

We have argued above that *Growth* firms are not particularly likely to become profitable as a result of their growth. If they lack resource-based competitive advantage – as our RBV arguments suggest many firms in this category do – the expansion would be gained in costly, head-to-head competition that, if anything, puts an additional downward pressure on profitability. The combination of high growth and low profitability puts the firm under financial strain that makes it difficult (and perhaps not desirable) for the firm to sustain its growth (Churchill and Mullins, 2001). Consequently the firm would slide into the *Poor* category. Infusion of external capital could make it possible to sustain the growth. However, when the firm does not show a promising development of profitability as result of earlier growth, external investors will become reluctant to plow money into further volume expansion. In all, *Growth* firms appear to face a relatively high risk of not being able to sustain their growth and instead at considerable risk of relapsing to the low growth and low profitability (*Poor*) category. The well established fact that the serial correlation of firm growth over time tends to be low (Coad, 2006) suggests this is a common phenomenon.

We have noted already that recent developments of RBV suggest that long term sustainability of a given advantage is unlikely. Consequently, *Profit* firms face the risk of transitioning to *Poor* because competitive advantage underlying their earlier high profit performance has eroded. However, they are in this regard no worse off than *Growth* firms, which we assume usually lack distinguishable, resource-based advantages. Further, because of the financial resources their earlier high profitability has provided them with, *Profit* firms are in a better position than *Growth* firms to invest in the development of the series or valuable and hard-to-copy strategic moves that may be required for sustained advantage (Morrow et al., 2007; Sirmon et al., 2007; Zahra et al., 2006) and hence high profitability. This seems particularly likely when the resources are not concurrently demanded for the financing of high growth. In all, compared to *Growth* firms, those in the *Profit* category appear to have better chances to avoid degenerating into showing low performance on both dimensions in subsequent periods. Hence our second hypothesis:

H2: Firms that show high growth at low profitability (Growth firms) are more likely to reach a state of low growth and low profitability (become Poor firms) in subsequent periods than are firms that first show high profitability at low growth (Profit firms).

In Figure 1 the hypotheses are represented graphically with thicker arrows denoting the transition our hypotheses suggest is relatively more likely. Note that our hypotheses are strictly probabilistic. We are thus not suggesting any route to high, combined growth/profit performance is inherently impossible. Some *Growth* firms may well be pursuing a sound strategy of maximizing value creation and

appropriation over time by temporarily foregoing profits (Cowling, 2004; Florin et al., 2003). However, the popular assumption that this is the *norm* is the very notion that we challenge in this research. We hold that in a population of SMEs, only a very small proportion of cases are subject to true, potential performance advantages based on scale, market share, FMA or network externalities that are unrelated to RBV-type resource advantages and which require expansion at the expense of profitability in order to be realized.

METHOD

Data Sources

We use two separate data sources to examine our research questions. The data were originally collected by government statistical agencies in Australia and Sweden, over different four year periods. Both data sets contain a random sample of SMEs across many industries, though they stratify the population differently. In particular, the Australian sample contains a much larger number of firms in the smallest size class.

The Australian data is sourced from the Business Longitudinal Survey (BLS) conducted by the Australian Bureau of Statistics (ABS) over the period 1995 to 1998¹. The sampling frame was all businesses on the ABS business register employing fewer than 200 employees, excluding primary industries other than mining, government enterprises, utilities and public services. A panel of 5,031 businesses was established in the 1994-95 financial year. Each subsequent year, the panel consists of those businesses remaining alive, supplemented by a sample of new businesses added to the ABS business register in that year. Completed responses were collected from between

¹ Refers to financial years ending in July of nominated year.

84% and 90% of the panel for the surveys in 1995-96 to 1997-98. We use all cases that have complete data in any two subsequent years, or have complete data in the first year and cease business during the second. As a result, between 3,488 and 3,717 businesses are included in any one analysis.

The Swedish data originates from a longitudinal survey study undertaken in the years 1997-2000. The sample was drawn from Statistics Sweden's complete records of private limited liability companies with 10-250 employees, excluding agriculture, forestry and fishing as well as government enterprises, utilities and public services. The sampling frame was stratified as follows: two size groups of 10-49 and 50-250 employees; four industry sectors of manufacturing, retail/wholesale, professional services and other services; and the three corporate governance categories independent firms; member of company group of less than 250 employees, and member of company group larger than 250 employees. From each of the 24 strata 110 firms were randomly selected, except where the sub-population was less than that number, resulting in a sample of 2,455 firms.

Rather than representing items from the survey, the growth and profitability data we use are likewise data from Statistics Sweden's records. These data were originally collected as part of the statutory reporting required of businesses in Sweden, and were appended to the survey data set. Growth and profitability data was requested from Statistics Sweden only for firms that participated in at least the first survey round and for whom phone contact information could be obtained in 2000. This reduces the sample to 1,917 cases. Missing data on growth and/or profitability in Statistics Sweden's files in addition to eliminating firms that merged or reorganized as part of a parent company further reduced the analyzable sample for this study to 1,482

firms. As a result, our analysis of Swedish firms includes uses a minimum of 1,470 businesses in any one analysis.

Measures

Sales growth was preferred over employment growth based on emerging consensus in the literature that for most purposes sales is the more relevant growth indicator (Davidsson and Wiklund, 2000; Delmar, 1997; Hoy et al., 1992; Weinzimmer et al., 1998). The specific formula used was the change in sales from Year 1 to Year N as a percentage of the sales in Year 1. For the Australian data, sales growth could be calculated in the first year (1995). For the Swedish data only current year sales are reported. Hence, growth can only be calculated from the second year (1998).

In line with Arend's (2006: 410) recommendation we used return on assets (ROA) as our measure of profitability. Slightly different measures were used due to data availability. For the Australian sample, data on pre-tax ROA was available, calculated as the net profit (operating profit or loss before tax and extraordinary items) as a percentage of total assets in each year. After tax ROA was available for the Swedish sample.

Since our theoretical foundation, RBV, is concerned with performance relative to competitors (Peteraf and Barney, 2003), both growth and profitability were calculated relative to other firms in the industry. Specifically, we divided by the industry median rather than the mean to reduce the impact of outliers.

Primary Analysis

Our research is concerned with the dual growth-profitability performance of firms over time. While the analysis problem entails aspects reminiscent of lagged- and interaction effects in regression analysis (e.g., Cowling, 2004), this approach is not appropriate for our problem of predicting a multivariate outcome. Instead, we adopt a simple, intuitively appealing schema that allows us to follow a firm's trajectory in a two-dimensional growth-profitability performance space. We classify firms into five performance groups in any time period as shown in Figure 1. Firms are first separated into a 4x4 classification based on the two performance dimensions; sales growth and profitability. Specifically, firms are classified into quartiles for both sales growth and profitability. Both measures were calculated relative to other firms in their industry. They were then divided into the following five performance groups as displayed in Figure 1 above²:

- *Poor*: low performance on both dimensions (below median on both and lowest quartile on at least one). This is the final state for hypothesis H2.
- *Middle*: mid performance (2nd or 3rd quartile) on both dimensions. This category is included to reduce the risk that miniscule movements have a large effect on results.
- *Growth*: high growth performance, but low profit performance (above median on the former and below on the latter, but not qualifying as *Middle*). This is the initial state presumed to lead to poorer outcomes for H1 and H2.

² We also used several other methods of categorising firms to ensure our results were not an artefact of the categorisation schema. We categorised firms into four groups (no middle category), each group representing a quarter of Figure 1. We also repeated the analysis for quartiles defined over the entire population, rather than relative to industry. For each categorisation schema, the substantive results presented in the paper were supported.

- *Profit*: high profit performance, but low growth performance (above median on the former and below on the latter, but not qualifying as *Middle*). This is the initial state presumed to lead to better outcomes in hypotheses H1 and H2.
- *Star*: high performance on both dimensions (above median on both and highest quartile on at least one). This is the final state for hypothesis H1.

Our interest is in how firms move in this growth-profit performance space over time. Similar to Markov chain analysis used in population dynamics we use state transition matrices as the starting point of our analysis. That is, for each performance group in one year, we calculate the proportion that moved to each group (or ceased business). As displayed in Figure 1, we are interested in comparing *Growth* to *Star* transitions with transitions from *Profit* to *Star* (H1). We are also interested in comparing *Growth* to *Poor* with *Profit* to *Poor* (H2). We test the differences between these specific transition proportions using standard z-tests.

In the transition matrices we also include transitions to ‘Exit’ as a separate category. This is an ambiguous category including not only financial failures but also voluntary closures and lucrative outright sales of firms to new owners (Gimeno et al., 1997; Headd, 2003). Consequently Exit should not be merged with the *Poor* category or be interpreted as a pure failure category. Also, this category is not directly comparable for Australia and Sweden as many of the Swedish exiting firms are not included in the available sample³. In addition to the separate analyses of the Australian and Swedish samples we will also examine the robustness of our findings

³ Differences are due to several factors. The Swedish sample does not include firms with less than ten employees (the size category most likely to exit). Further, the richer survey data allowed firms who continued trading but changed registration number (and would otherwise have been considered to have exited) to be included and those who have not exited but trading abnormally (in process of liquidation, merger or reorganization) to be excluded.

by sub-categories based on industry, firm size, and firm age within each country. Thus we control for each of these variables one at a time.

We perform our growth and profitability calculations based on annual data. The theory on which our hypotheses are based does not suggest the ideal time period for which the transitions should be tested. Hence, we test our hypotheses over both a short time horizon (1-year transitions) and longest time horizon permitted by our data (three-year two-year transitions for Australia and Sweden respectively).

Supplementary Analysis

We did not use logistic regression as our primary method since the purpose of our research is not to predict which firms become *Star* or *Poor* but rather to compare whether *Profit* or *Growth* firms are more likely to end up in the *Star* or *Poor* categories. However, we supplement our primary analysis with a logistic regression approach to examine multivariate effects. In addition, since our analyses are based on variations in performance over time, we separately assess the possible influence of regression to the mean (r-t-m) effects (Allen, et al., 1979) effects.

There is a risk that the longest time period we use for our main analysis is still on the short side if there is a strong tendency for ‘investments in growth’ to lower concurrent profitability while paying off in the long run. We therefore provide supplementary analysis using the survey-based part of the Swedish study. These data that can address the same issues over longer time periods, both as regards the time period over which the initial and end states are assessed, and the spacing between them.

RESULTS

Analysis of Entire Samples

The 1-year transition matrices as well a complete transition matrix over the longest available period in each country are reported in Tables A1a-A1b in the Appendix. In these analyses we have aggregated all the 1-year transitions provided by the data (three transitions for Australia and two for Sweden). These tables show that although a tendency to remain in one's category of origin is a major source of deviation from randomness, there are also many other deviations from statistical expectation in the tables that are of a large absolute magnitude. In what category a particular firm is found in a particular year is clearly not random. The results indicate strong path dependence. As should be expected, this dependence is stronger for shorter-term transitions.

The transitions relating to our hypotheses are summarized in Table 1. The left half of this table provides very strong support for the hypothesis that *Profit* is more likely than *Growth* to transition to *Star* (H1). In the 1-year transitions the *Profit* firms are two to three times more likely to end up in the *Star* category. Although the tendency is even stronger in the 2-year transition based on Swedish data, the size of the category differences diminishes for the longer transitions in the Australian results. However, the difference is still substantial – an ‘over representation’ by 62% (16.5/10.2) – and statistically significant in the three-year Australian analysis.

Insert table 1 about here!

Strong support is also provided, in the right hand side of the table, that firms in the *Profit* category are less likely than those originally being *Growth* firms to transition to *Poor* (H2). This result comes through relatively stronger in the Australian case, where *Growth* firms are two to three times more likely to end up among the firms that perform below average on both dimensions. Although not as strong, the difference is substantial and statistically significant also in the Swedish data, with a minimum ‘over representation’ of 37% (26.1/19.0) for *Growth* firms making this transition, relative to firms originating in the *Profit* category. Thus, both hypotheses get strong support in the full sample analysis for both countries.

Analysis of Sub-samples

Tables 2a and 2b report the subgroup analyses that we perform in order to explore the robustness of our findings with variation in industry, firm size and firm age. These tests involve smaller sample sizes, and consequently lower power of the statistical tests, with average cell sizes ranging from 12 to 84⁴. Hence, differences of the same magnitude as reported for the full samples will not be associated with the same levels of statistical significance.

Insert tables 2a and 2b about here!

Table 2a demonstrates that H1 is supported across all sub-categories tested. Out of the 52 contrasts that could be made, 51 are in the expected direction and 41 are statistically significant (at $p = 0.05$ or better). The support is somewhat weak for the Retail industry, where the only reverse difference is found (for Australia in the three-

⁴ Sample size of entire sample / 5 sub-groups / 25 cells (5x5 transition matrix). 1-year results aggregate multiple years to increase sample of transitions.

year analysis) and where the Swedish results include Wholesale businesses as well. Similarly, Table 2b indicates that H2 holds up across sub-samples. Out of 52 contrasts, 51 are again in the expected direction and 30 reach statistical significance (at $p = 0.05$ or better). While the Retail industry again achieves only one statistically significant result out of four the reason seems to be lacking power; the estimated magnitude of the percentage difference is substantial in all four analyses. The one result that runs in the opposite direction concerns 1-year transitions for the 2-5 year old firms in the Swedish. In isolation this result would seem to indicate possible FMA effects. However, overall there is no obvious, general pattern across firm age groups so the reversal for the 2-5 year category in Sweden appears to be an idiosyncratic occurrence.

Within the boundaries of our empirical investigations, the effects hypothesized in both H1 and H2 appear to be robust. Across a range of industries, firm sizes and firm ages, firms that first achieve above average profitability at low growth (*Profit*) are more likely to achieve the desirable state of high growth/high profitability (*Star*) than are firms that first go for above average growth at low levels of profitability (*Growth*). Conversely, the latter category of firm is more likely than the former to transition to the low growth/low profitability category (*Poor*).

Additional Observations

Table 1 can also be read as showing that *Growth* firms are two to three times more likely to transition to *Poor* than to *Star*. We note that if our results were entirely driven by costly ‘investments in growth’ that will eventually pay off we would expect to see this ratio diminish for longer transitions. Our results do not show any tendency in this direction. A further inspection of tables A1a-b reveals that no other category is

as likely as the *Growth* firms to end up in the *Poor* group, apart from the firms that were already in the latter category. Conversely, no other group is as likely as the *Profit* firms to end up as *Stars*, except those that were *Stars* already in the first period. Moreover, not only the *Profit* firms but also those in the *Middle* category ‘outperform’ the *Growth* firms in every analysis as judged by a higher frequency of transitions to *Star* and a lower frequency of transitions to *Poor*.

All in all, these additional observations suggest a quite strong superiority for ‘profitability first’ over ‘growth first’ as a strategy to achieve high overall firm performance. This conclusion would be moderated if there were a strong tendency for *Growth* firms to transition to *Profit*, indicating that the firm now enjoys above average profits based on a larger volume of business. Tables A1a-b show that such transitions are unusual and about equally likely for firms originating in the *Poor* or *Middle* categories. Hence, there is no support in this data for the general soundness of the idea of ‘growing profitable’.

Supplementary Analysis

Our supplementary analyses using multiple logistic regressions uniformly support the results and conclusions reported above. As an example, for the one year Australian transition 1995-96 to *Star* group, the dummy variable for *Profit* coefficient, B, was 0.93, significant at > 0.001 . *Profit* firms were estimated as 2.6 times more likely than *Growth* firms ($\exp B$) to become *Star*. In all analyses our hypotheses were supported at 0.01 level or better. The control variables showed little evidence of significance.

We tested regression-to-the-mean effects by taking multiple measurements to reduce random error as suggested by Barnett (2004; *cf.* Yudkin and Stratton, 1996). Specifically, we averaged each firm’s growth and profitability in years 1 and 2 to

establish the initial performance groups, and similarly average years 3 and 4 to determine final groups. The resulting transition percentages and patterns were extremely close to the one year transitions. The average difference in the transition matrix percentages was only 1.6%, and our hypotheses remained strongly supported. Hence we are confident that our findings are not substantially confounded by r-t-m effects.

To provide further confidence in our results over longer time periods we conducted supplementary analyses using survey-based measures of net profitability and sales growth relative to other firms in the industry over the last three years, reported in both 1997 and 2000 in the Swedish data. These were self-reported on a five point scale: much worse, worse, equal, better and much better. These data allow us to perform similar analyses referring to an initial growth-profitability configuration calculated over three years as related to a subsequent growth-profitability configuration calculated over the following, non-overlapping three-year period. These analyses also support our hypotheses (H1 and H2). This additional analysis demonstrates that the most important aspects of our results hold up for longer periods and for both self-report and accounting based performance measures.

DISCUSSION

Our results suggest that high profitability, low growth firms are more likely to become high profitability, high growth firms compared with firms that start from a position of high growth and low profitability. Firms that grow at low levels of profitability are not very likely to achieve high profitability as a result of their expansion. Instead, these firms are considerably more likely to transition to the sub-sample of firms that is below average on both growth and profitability. That is, our results suggest that attempting to ‘grow profitable’ is a dubious strategy that often

backfires. The scope of our empirical examination is restricted to small and medium sized firms and we do not aspire to generalize beyond that context. As we have pointed out repeatedly there may also be special cases within that general context where our main results do not apply.

We argue that the results are consistent with an RBV-based interpretation. Before going for significant growth, firms need to develop some kind of competitive advantage based on the identification and successful exploitation of the uniqueness of their resource bundles. We hold that in a population of SMEs, superior profitability is likely to be indicative of having developed such an advantage. The underlying advantage and the financial resources generated through high profitability make it possible for firms in this situation to subsequently achieve sound and sustainable growth without having to sacrifice profitability. By contrast, empirical evidence from previous research suggests firms do not generally achieve high profitability merely as a result of their growth. When firms pursue high growth starting from low profitability it often indicates the growth must be achieved in head-to-head competition with equally attractive alternatives, which would make profitability deteriorate rather than improve. In addition, these low-profitability firms are unlikely to be able to finance strategies towards building valuable and hard-to-copy advantages while growing. Hence their growth would neither be sustainable nor lead to improved profitability.

The resource-based mechanism underlying the configurative growth-profitability relationships that we have uncovered has been assumed rather than assessed in a more direct manner. We have not directly tested the existence or nature of resource heterogeneity among the firms in our samples; nor have we examined if and how such heterogeneity is transformed into differences in value creation in the

market place. This also means there may be other explanations for our results. In support of a Porterian view of strategy (Porter, 1985) it can be noted that Capon et al.'s (1990) meta-analysis indicates firms can enjoy a high growth/high profitability position by being in the 'right industry'. However, while investors can freely move from industry to industry, firms usually cannot, and this across-industry perspective is not relevant to our within-industry analysis. A within-industry application of the Porterian perspective reveals that our results are consistent with such a view as well: firms have high profitability because of a favorable market position. This strong position, further fueled by the lower cost of financing growth (because of high retained earnings), allow them to grow successfully. To a considerable extent this is the same explanation as what we have offered. As noted by Porter (1991), emphasis on resources or market positions are (at least for within-industry analysis; *our remark*) complementary rather than being each other's substitutes. Porter (1991:108) argues that "resources are only meaningful in the context of performing certain activities to achieve certain competitive advantage." Conversely, the advantage gained by a favorable market position is usually contingent on possession and use of unique resources.

The Porterian perspective emphasizes the environment more than does the RBV but shares its belief in strategic choice. Evolutionary (Aldrich, 1999) and even more so ecological perspectives (Hannan and Freeman, 1997) emphasize the role of the environment even more and have less faith in deliberate strategic action. Applying such perspectives, our results would be explained by firms being partly or totally selected by the environment for certain performance configurations, with limited ability to do much about it. As we have not investigated the strategic intent of our firms our empirical analysis does not allow us to rule out that environmental forces

played a major role in their performance configurations and changes thereof over time.

Importantly, however, we hold that most feasible interpretations of the underlying mechanisms would lead to the same cautioning against SMEs in general seeking growth when starting from a weak profitability position. We have not been able to find or construe a compelling theoretical argument that is consistent with our results as well as the literature we have reviewed and yet arrives at the conclusion that going for growth before ascertaining high levels of profitability is *usually* a sound route to enhanced value creation among SMEs. This gives us confidence in the conclusion that in most situations it is advantageous to let profitability (and the competitive advantage it reflects) be the horse that pulls the growth cart, rather than the other way around.

Implications

Implications for academics. For *positive theory* the primary implication is that it is descriptively wrong to portray SME growth as ‘success’. The exceptions are too frequent to accept this proposition even as an approximation. *Normative theory* should be more precise in specifying how and under which conditions (what type of) firm growth contributes to more terminal outcomes like company value (or stakeholder utility), either directly or via increased profits. For *research design* our results strongly imply caution with the use and interpretation of growth as a measure of firm performance. In the absence of direct measures of company value examining growth and profitability jointly but as separate outcome dimensions appears to be a better practice, allowing more detailed insights and sounder overall interpretation. When non-availability of data forces a heavy reliance on growth as performance indicator,

increasing the time period assessed would be a step in the right direction, as unsound growth is less likely to be sustained. More implications for researchers are integrated in the ‘Research Agenda’ section below.

Implications for practitioners. Our interpretation of the results suggests that rather than being very eager to expand, SME (owner-)managers should be eager to build and identify the uniqueness of their resource endowments and transform them into product/market offerings that enable them to generate sufficient profits. When they have proven an above-average ability to create and appropriate value in the small scale they have the basis for attaining sound, profitable growth that will be easier to manage and less of a threat to the long term well-being of the firm and its owners. Managers who believe that in their particular context growth is necessary to become profitable should develop precise ideas concerning how growth can enhance profitability of their particular firm, rather than relying on a belief that growth more or less automatically improves profitability.

For external investors, our results imply that high growth in a low profitability situation is a warning signal rather than an unambiguous sign of positive development. However, we must caution that our results do not necessarily apply to the much more select group of high-potential firms that VCs invest in. First-mover-advantage (FMA) reasoning suggests radical innovators who create entirely new markets play under different rules to the average SMEs. This said, the lack of proof that size leads to eventual profitability is something that has concerned the very researchers who coined the FMA concept: (Lieberman and Montgomery, 1998:1122). Similarly, in the specific context of disruptive innovation, Christensen and Raynor (2003) have argued forcefully for *patience for growth but impatience for profit*, a notion directly in line with our ‘profits first’ arguments and findings for SMEs more

generally. In combination with our results, this provides sound reason for external investors to put more emphasis on establishing profitability through VRIO resources within their portfolio of firms, and having more patience for the growth that can eventually realize the full value of opportunities developed and pursued by these firms.

For policy-makers the main implication is that rather than pushing firms to grow, policies should be geared toward helping firms become more profitable. Our results demonstrate that firms that show high profitability often become growing firms that still enjoy high profitability. Therefore, if policies can help more firms become highly profitable – arguably an objective better aligned with the small firm owner-managers’ own goals (Sapienza et al., 2003; Wiklund et al., 2003) – the problem of growth will take care of itself.

A Research Agenda

In this section we use Whetten's (1989) well-known discussion of the ‘What? How? Why? Who? Where? and When?’ of theoretical contributions as a device to organize our suggestions regarding how future research can reach further – conceptually and empirically – employing the same general approach that we have used in this paper. Regarding the *What*, our contribution was to focus on the interplay between two dimensions of performance; growth and profitability, rather than trying to maximize explained variance in one of them. According to Whetten (1989) the main consideration regarding what factors to include in a theoretical model is *comprehensiveness vs. parsimony*. Our argument has tended towards the latter, so inclusion of additional factors may be advisable. While empirically hard to obtain, we would advise the explicit inclusion of *company value* in future work, as this is

arguably a more terminal goal than either growth or profitability. Cho and Pucic (2005) illustrate the value of making this extension.

Further, future work might benefit from acknowledging that ‘growth’ is a complex phenomenon (Davidsson et al., 2006). For example, recent work by Lockett, Wiklund and Davidsson (2007) suggests that previous organic growth acts as a constraint while acquisitive growth acts as a catalyst for future organic growth. Similarly, Mishina et al. (2004) find some support for differential hypotheses regarding product- vs. market expansion with regard to the speed of growth. Thus, conceptually and empirically incorporating distinctions by type of growth in these terms may be important.

Refinement of the theoretical and empirical notion of ‘profitability’ may also be an important route for further development. In particular, we suggest future research examine whether – after controlling for the cost-of-capital effect – the effect of having retained earnings is different from the effect of externally infused capital in ways that accord with our hypotheses. If so our RBV-based interpretation would gain currency.

As regards the *How* our contribution was the suggestion and empirical substantiation of a contingent relationship between the two performance dimensions ‘growth’ and ‘profitability’ over time, essentially suggesting that a ‘profit first’ approach is usually superior to a ‘growth first’ strategy. The most important extension we can see here is empirical in the first instance, namely to test our hypotheses over longer periods of time in order to rule out that the main patterns are reversed. The latter result, suggesting that in a majority of cases high growth starting from low profitability represents sound investments in future value creation, would have profound repercussions on our theoretical argument.

A theoretical refinement regarding the nature of the relationships would be to consider the possibility of non-linear effects by speed of growth, as implied by Dierickx & Cool's (1989) notion of 'time compression economies'. Differences in curvature depending on initial performance configuration would then be of particular interest. Our argument under *How* above suggests moderation by type of growth is also likely. For empirical testing this development would require the identification of an analysis technique – preferably allowing also for multivariate modeling including control variables – that is more ideally suited to the task than either of the approaches (transition matrices and logistic regression) that we have applied.

Our contribution in terms of the important *Why* dimension is the provision of a resource-based rationale for the empirical patterns we observe. We have mentioned already that further refinement of this theoretical explanation may include consideration of differential effects by type of growth as well as contingent non-linearity by starting configuration as well as by type and speed of growth. However, the most important development regarding the suggested resource-based mechanism would be to move it to the *What* domain; that is, to explicitly include it in the empirical design. Our study shares with most published research referring to RBV a lack of explicit assessment of key variables (Arend, 2006) and in this regard future studies must aim to reach further.

This is challenging because mere quantification of generic resource stocks clearly does not suffice for adequate testing of RBV-based hypotheses. We agree with Arend (2006) that a promising way forward would be longitudinal survey studies designed specifically for the purpose. A longitudinal design is essential for assessing the dependent variable and establishing whether observed competitive advantages are sustained. A survey approach is the only conceivable way in which the VRIO

qualities of resources could be directly assessed and meaningfully compared. Because of the breadth of the notion of ‘resource’ in RBV and the innumerable ways in which resources can provide advantages on their own or in combination the assessment of resources and their VRIO qualities can never be complete. However, a focus on narrowly defined empirical contexts may make the task somewhat manageable. A narrow empirical context restricts the range of relevant resources to assess and makes it feasible for the investigators to attain deep enough knowledge for developing and applying high-quality measures adapted to the specific context. This would make for a much stronger test of theory than the use of diluted, ‘one-size-fits-all measures’ applied to a heterogeneous population of firms.

Whetten’s (1989) discussion of the *Who*, *Where* and *When* concerns the boundary conditions of the theory. We have argued that our resource-based rationale may be more applicable to SMEs, but empirical testing in a large firm context might suggest it can be generalized also to that domain. Our results showed considerable stability across broad industry groupings; however our theorizing suggests the main results should not hold up in contexts where economies of scale; experience effects; FMAs or network externalities are pronounced. This may vary by country as well as by industry. For example, one might theorize that trading off current profit for growth may have a higher potential payoff in the dynamic context of ‘transition economies’ or where the domestic market is larger and the venture capital industry better developed (such as in the US) compared to the empirical contexts we have investigated.

Further, we have in this paper not discussed or tested the accuracy of our hypotheses under differing business cycle conditions. It is conceivable that the relative soundness of going for ‘profit first’ or ‘growth first’ varies with business

cycle dynamics, especially in combination with consideration of type of growth. For example, Davidsson and Delmar (2000) found that ‘high growth firms’ change the composition of their growth in such a way that acquisitions make up a larger share in downturns while organic growth comes more to the fore in upturns.

In conclusion, as regards the *Who*, *When* and *Where* we would advise that future studies a) develop precise theoretical ideas concerning how the growth-profitability dynamics might vary by context, and b) carefully select empirical settings – industries, countries and time periods – that clearly represent the theoretically defined contextual conditions. To the extent such an approach led to theoretically expected differential results our theoretical understanding would gain refinement and the boundary conditions of our argument would be better defined. To the extent the results are more or less uniform across contexts and in line with the original findings we have presented our theoretical explanation would gain generalisability.

CONCLUSION

Growth is often portrayed as evidence of business success. This tendency is particularly pronounced in the entrepreneurship research literature. Our findings are a strong reason for practitioners and researchers alike to question a universal and uncritical growth ideology. Our results show that firms in the desirable state of high growth/high profitability are much more likely to originate from profitable firms with low growth than from growing firms with low profitability. Firms in the latter category are instead more likely to retreat to a low growth/low profitability state. Hence, seeing profitability as the horse that pulls the growth cart seems in most cases to be a sounder worldview than the opposite. Obviously, not all will be prepared to accept this conclusion based on the theoretical rationales and empirical evidence we have provided. We see our results as an invitation and hopefully an inspiration for

other researchers to verify or challenge them, and to provide additional input into how they should be interpreted.

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