

The implications of customer and entrepreneurial orientations for SME growth

1 Introduction

Research has long recognized entrepreneurial small-to-medium sized enterprises (SMEs) as a major engine of economic growth (Henderson and Weiler, 2010). Understanding the factors behind growth has a broad economic and policy relevance, especially because growth-oriented enterprises are an important source of job creation and revenue generation in market economies (Parker, 2004; Valliere, 2006). Nevertheless, the growth of SMEs is still one of the unsolved puzzles in management and business research (Davidsson et al., 2005; Clarysse et al., 2011). In order to overcome existing *liabilities of smallness* or *newness* (e.g., Aldrich and Auster, 1986; Brüderl and Schüßler, 1990), and to be able to compete successfully in the market, firms need to grow at least to some extent (Garnsey, 1998). Accordingly, firm growth has become the major indicator for overall business success within entrepreneurship research (Carton and Hofer, 2006).

Firm growth can be influenced by business orientations such as customer orientation (CO) and entrepreneurial orientation (EO). However, research on EO and CO provides confusing results to some extent. Although there is a general understanding that these constructs are somehow related to increasing firm success, empirical studies have assumed different relationships among them, have measured them differently, and thus have obtained a battery of different results (Atuahene-Gima and Ko, 2001; Baker and Sinkula, 2009; Barrett and Weinstein, 1998; Becherer and Maurer, 1997; Bhuian et al., 2005; Hult and Ketchen, 2001; Li et al., 2008; Liu et al., 2002; Luo et al. 2005; Matsuno et al., 2002; Miles and Arnold, 1991; Slater and Narver, 1998, 2000; Tzokas et al., 2001).

In addition, it remains unknown to what extent EO and CO represent distinct business philosophies, or whether these constructs contain negative redundancies. Also, it is not clear if these constructs necessarily lead to SME growth or how the different orientations can be balanced within one firm. One might assume that scoring high on all orientations should contribute to the highest growth potential, but this may not be the case. Extant literature suggests a likely trade-off between being highly innovative and particularly

customer oriented at the same time, for example, in which the advantages of entrepreneurship to a firm might be constrained if the firm is too closely tied to its customers and markets (Berthon et al., 2004; Bhuian et al., 2005). On the other hand, Green et al. (2008) find that EO has to be balanced with strategic reactivity, a corrective mechanism which balances the possible negative outcomes of entrepreneurial behaviors by better grounding its endeavors in the strategic and market realities faced by the firm. Bhuian et al. (2005) argue that firms should be “just entrepreneurial enough” and otherwise more customer oriented on the basis that firms are sufficiently risk averse to need to collect information on customers to qualify and translate their proactive entrepreneurial initiatives into outcomes that are desired by markets. But, Atuahene-Gima and Ko (2001) draw on the principles of proactive market orientation to argue that firms need high levels of EO and a keen CO to achieve the highest adaptability and corresponding capability to manage environmental hostility when innovating into markets. In contrast Matsuno et al. (2002) report that EO can harm firm performance without the presence of CO in spite of Christensen’s (1997) *innovator’s dilemma* that well-managed firms often fail because of their preoccupation with customers as opposed to creating discontinuous change. This implies that CO might be as valuable to a firm as being EO. Taken together it is apparent that a need to study these orientations simultaneously is necessary if firm growth is to be better understood.

Addressing this problem requires an investigation of the determinants of the strength of EO and CO as an important first step. Building better theoretical and conceptual understanding of the relationship between CO and EO can help shed light on how and why both orientations might or might not contribute to SME growth. This study argues that these different business orientations are impacted on by the availability of financial resources and environmental dynamics, and that networking capabilities serve as a mediator between EO and growth.

This paper contributes to the ongoing scholarly conversation on the value of different orientations to firms and takes the view that the conversation on CO and EO has mis-specified business performance in seeking to understand their performance consequences. By looking at firm growth, relevant to the longer-term performance of a firm, EO might drive growth because of its emphasis on innovation to renew the firm’s growth trajectory

whereas CO might stifle growth owing to its myopic focus (e.g., Christensen and Bower, 1996). Thus, this study addresses calls in the business and entrepreneurship literatures to more fully understand how SMEs can capture value from their customer and entrepreneurial orientations.

2 Theoretical Framework

2.1 Customer Orientation

According to Slater and Narver (1998) and Narver et al. (2004), CO is a responsive construct that is reactive in nature. The overriding focus is on identifying customers' expressed needs to develop products and services (Deshpande et al., 1993; Drucker, 1954; Narver et al., 2004; Slater and Narver, 1998). Customer-oriented businesses focus on understanding the expressed desires of their customers in their served markets and on developing products and services that satisfy those desires (Slater and Narver, 1998). In this regard CO differs from the related construct of market orientation (MO), which does not only capture immediate, expressed customer demands but also latent, unarticulated customer needs. MO thereby focuses on two dimensions: *responsiveness* and *proactiveness* (Kohli and Jaworski, 1990; Narver and Slater, 1990; Atuahene-Gima et al., 2005).

The performance impact of CO is rather short-term because firms that act on only a CO (which means they rely solely on customers' expressed needs to develop their products) risk creating no new insights into value-adding opportunities for the customer and thereby creating little or no customer dependence and foundation for customer loyalty (Atuahene-Gima and Ko, 2001; Narver et al., 2004). Hamel and Prahalad (1994) call this the "tyranny of the served market" in which managers see the world only through the eyes of their current customers. Thus, the long-term growth impact of a 'pure' CO is likely to be minimal. According to Christensen (1997) and Christensen and Bower (1996), this is particularly true in dynamic market environments where pure CO is a dangerous strategy that might lead to company failure. Being customer-led can be a useful strategy in stable environments, "[h]owever, being customer-led in a dynamic environment will rarely lead to a position of competitive advantage since it provides insufficient stimulus for the significant innovation that discontinuous change requires" (Slater and Narver, 1998,

p.1005). In principle at least, CO is appropriate to drive a firm's business performance because the customer becomes central to the efforts of the organization. In theory, such attention to customers ought to increase firm performance because the firm's customer base will increasingly be better served. However, this puts firm growth at risk as the firm stagnates into concentrating solely on what customers can articulate to the firm. Thus:

H1: The more customer oriented a firm is, the less it will grow.

2.2 Entrepreneurial Orientation

Over the past decade, increasing attention has been paid to the concept of *entrepreneurship* (Low and MacMillan, 1988; Covin et al., 2006). Although there is no accepted generic definition for the term itself (Ucbasaran et al., 2001; Landström, 2009), essentially it refers to individual opportunistic activity that creates value and bears risk, and is strongly associated with innovation (Sexton and Kasarda, 1992). Entrepreneurship at a firm level stems from the entrepreneurial venture's orientation towards identifying market opportunities that competitors have not yet recognized or that are under-exploited, and creating a unique set of resources to exploit them (Davidsson et al., 2002; Hitt et al., 2002). 'EO' has its origin in strategy literature, and has been used to refer to the strategic management style of firms having 'entrepreneurial' tendencies (Becherer and Maurer, 1997; Lumpkin and Dess, 1996, 2001).

Entrepreneurship and EO respectively are seen as drivers of firm growth. Several authors have investigated the impact of EO on firm performance and have found that EO is a construct that is associated with firm success, particularly in the long-run (e.g., Becherer and Maurer, 1997; Lumpkin and Dess, 1996; Shepherd and Wiklund, 2005; Wiklund, 1999), though this relationship is not entirely unambiguous (Hughes and Morgan, 2007), largely because the conversion of EO into firm growth remains something of an enigma (Lumpkin and Dess, 1996).

Miller (1983) established one of the first operationalizations of the EO concept, defining an EO-oriented company as "one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch" (p.771). Covin and Slevin (1986, 1988) converted Miller's three

dimensions of *proactiveness*, *innovativeness*, and *risk-taking* into measurable scales. Most researchers agree that EO is a combination of these three dimensions (Wiklund, 1999), and the majority of studies (e.g. Covin and Slevin, 1989; Kemelgor, 2002; Wiklund and Shepherd, 2005; Zahra and Garvis, 2000) follow the three-dimensional model proposed by Miller (1983).

Schumpeter (1942) was one of the first to point out the importance of *innovativeness* in the entrepreneurial process. He called the radical innovation process “creative destruction”, a process that occurs when the introduction of new products or services disrupt the current market and cause a shift of resources. According to Lumpkin and Dess (1996), “[i]nnovativeness reflects a firm’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes” (p.142).

Risk-taking is often used to describe the uncertainty that results from entrepreneurial behavior (Lumpkin and Dess, 1996; Low and MacMillan, 1988). As opposed to an employee, the entrepreneur takes higher risks which might eventually lead to higher rewards (Brockhaus, 1980). Entrepreneurial behavior involves investing a significant proportion of resources into a project with a high probability of failure. So an important trait that entrepreneur managers must embody is a strong ability to determine the right path for their businesses in the face of uncertainty (Ricketts, 2006). The focus here lies on moderated and calculated risk-taking instead of extreme and uncontrolled risky endeavors (Morris et al., 2008).

Proactiveness means acting in anticipation of future problems, needs, and changes. Proactiveness refers to efforts to take initiative, anticipating and enacting new opportunities, and creating or participating in emerging markets (Entrialgo et al., 2000). A firm can create a competitive advantage by anticipating future demand changes (Lumpkin and Dess, 1996), or even by shaping the environment. This means that by not merely passively observing environmental pressures (cf., CO), firms can influence their own surroundings (Buss, 1987). With Miller (1983) in mind, a proactive company is one that “is first to come up with ‘proactive’ innovations” (p.771). Proactiveness thereby includes the tendency to be the first to market with new products or services. A proactive company is often the initiator of actions or events that the competition must then react to, leading the

way in products and services. Taking the initiative through participating in up-and-coming markets, for example, plays a critical role in entrepreneurship (Lumpkin and Dess, 1996), making proactiveness a central dimension of EO. Thus:

H2: The more entrepreneurial oriented a firm is, the more it will grow.

3 Antecedents of Entrepreneurial and Customer Orientation

The availability of financial resources, changes in the technological environment, and a firm's capability at networking can significantly influence a firm's CO and EO behaviors, and firm growth. Thus, incorporating these dimensions into a holistic model of firm growth should provide a more detailed picture of how business orientations impact SME performance.

Financial resources support EO strategies (Delmar et al., 2003; Sciascia et al., 2006). If a firm has only a small amount of financial resources, less money can be invested in R&D, thereby reducing the level of innovation. Risk-taking will decrease because firms generally invest in risky projects when access to capital is greater. Similarly, the proactiveness needed to take the profits earned from products that are currently maturing and making money and use it to develop and market new products will be affected by a lack of finance as fewer market exploration activities will be possible. Such re-investment is more difficult when lower levels of slack financial resources exist in the firm (Shepherd and Wiklund, 2005; Katila and Shane, 2005). In contrast, however, the less financial resources that are available, the more a firm has to care about generating short-term revenues to fuel its operations (Garnsey, 1998; Garnsey and Heffernan, 2005). Here, firms can earn immediate revenues by being customer oriented (Bhidé, 2000). Thus, the less financial resources that are available, the more CO a firm is likely to exhibit (Macedo and Pinho, 2006). Despite these indirect effects on firm performance, several authors have found a direct and positive link between financial resources and success, positing that the greater the financial resources that are available to a firm, the greater the opportunities to grow the firm (Eisenmann, 2006; Levratto, 1996; Shepherd and Wiklund, 2005; Wiklund, 1999). Thus, the following hypotheses are put forward:

H3: The more financial resources that are available, the more EO a firm will exhibit.

H4: The less financial resources that are available, the more CO a firm will exhibit.

H5: The more financial resources that are available, the more a firm will grow.

Several authors have reported that behaving in an EO manner is recommended in *dynamic environments* and in *turbulent markets* that are impacted on by ongoing change in technological developments (Katila and Shane, 2005; Lumpkin and Dess, 1996; Miles et al., 2000; Miller et al., 1988; Wiklund and Shepherd, 2005). So, the more turbulent the environment, the more a firm should exhibit EO as a response to it. However, other studies report that the entrepreneurship–performance relationship is mediated by the organizational context (Covin and Slevin, 1988; Covin and Slevin, 1990; Dess et al., 1997; Lumpkin and Dess, 1996; Zahra, 1993). One such context is a firm’s *network relationships*. The relationship between EO and organizational performance is likely to be influenced by a firm’s networking capabilities (Walter, et al., 2006). On the one hand, the proactiveness dimension of EO increases a firm’s propensity to start and engage in networks as a means to source knowledge and resources. Concomitantly then, the more business relationships a firm employs, the more it can learn from its partners and the progressively easier it becomes to use external resources (Hughes and Perrons, 2011). In turn, it would be expected that the firm would encounter greater opportunities to enable growth and experience greater success as a consequence of it (e.g., Birley, 1985; Hughes et al., 2007).

Based on these arguments, the following hypotheses are put forward:

H6: The more turbulent the technical environment, the more EO a firm will behave.

H7: The more EO a firm behaves, the more it will engage in networking.

H8: The more a firm engages in networking, the more it will grow.

Figure 1 summarizes these 8 hypotheses.

INSERT FIGURE 1 HERE

4 Methodology

Data was generated through a questionnaire which was translated into an online survey (Qualtrics, Inc.). The online questionnaire was emailed to 10,000 randomly selected SMEs in Austria in late 2010. The contact data was drawn from the *Herold Business Data*

database, which lists almost all companies in Austria. As the survey was geared towards German-speaking business executives, the entire questionnaire was subjected to double-blind translation to improve the validity and reliability of the measuring instruments (Brislin, 1980). After one reminder email we received 660 responses, which lead to a response rate of 6.6%. Only one reminder was sent due to strict data privacy laws in Austria preventing us from implementing a wave of further reminders, in contrast to the recommendations of the Dillman (2000) protocol. Nevertheless, this response rate can be considered as quite good for an online survey in an SME context and compare favourably with extant studies using such a methodology (Ilieva *et al.*, 2002; Bonometti and Tuang, 2006; Newby *et al.*, 2003).

In comparing our respondent firms with those of the overall population of Austrian SMEs, the number of family firms as well as the number of service firms within as well as typical firm size (see table 1), exhibit considerable similarity. Within our sample of Austrian enterprises, 78.1% of respondent firms are family firms. This represents a sign for the very high reliability of our sample considering that the representation of family firms within the overall number of firms in Austria is commonly stated as being 80% by scholars (e.g. Neubauer 1992), renowned research institutes such as KMU Forschung Austria (2009) and the Austrian Federal Ministry of Economy, Family and Youth (Frank *et al.*, 2011). Moreover, not less than 99.6% of all enterprises in Austria are SMEs (Statistik Austria, 2004), and thus our sample is widely generalizable to the overall population of firms in this country. Indeed, it is common across Europe for SMEs to account for greater than 99% of all firms in member states. Therefore we are confident that this sample exhibits external validity and can generate generalizability results towards the overall population of Austrian firms.

INSERT TABLE 1 HERE

Existing scales were used to capture CO and EO and were verified by breaking them down to their underlying dimensions and later reemerging them with the aid of factor analysis. CO

was operationalized as the firm's responsiveness to customers and EO was operationalized in terms of its three chief components, namely, proactiveness, innovativeness, and risk-taking. All scale items were scored using a Likert-type scale with response options from 1 ("do not agree") to 5 ("strongly agree"), with higher scores indicating higher levels of the construct in question. Some items were reverse coded.

Scale items that assess the intention to satisfy immediate customer wishes and to monitor competitors were identified as *responsiveness* measures, which included responsiveness to customers and responsiveness to competitors. *Proactiveness* measures were mainly derived from EO scales and are considered items that demonstrate the intention to identify latent, undefined market needs and the willingness to look for and act upon opportunities. *Innovativeness* items either explicitly asked about innovations and efforts to stimulate the innovativeness of an organization or asked about efforts to enhance creativity within an organization. *Risk-taking* items inquire about the perception and handling of uncertainty or ask explicitly for risk-handling efforts within a firm. Table 2 lists the sources of these measures.

INSERT TABLE 2 HERE

The development of the scale items representing the four dimensions was handled in two steps: First, redundant items were deleted. Several authors created scales by copying or modifying existing scales and scale items. Therefore, some of these items were redundant and therefore had to be excluded. Second, because our study focused on SMEs, we excluded those items that focused only on large firms. For example, the very first EO scales (Miller, 1983; Covin & Slevin, 1989) were all geared towards large firms. Although EO scales have generally been proven to be applicable to smaller firms, further purification was deemed prudent. Thus, all scale items that are mainly appropriate for large firms have been excluded from our item list (see Sciascia et al., 2006, for a similar approach). In the questionnaire sent to participants, all four dimensions were captured by a total of 77 scale items.

The dimensions and their underlying scale items were investigated by factor analysis. We sought to demonstrate that the underlying scale items actually load onto the four dimensions of responsiveness (to customers and to competitors), and proactiveness, innovativeness, and risk-taking, and that these dimensions themselves constitute the two constructs of CO and EO respectively. Factor analysis was used to identify factor loadings and to reduce the total number of underlying items.

We included scales in the questionnaire to measure *resource availability* (Atuahene-Gima et al., 2005), *technological changes* (Narver et al., 2004; Atuahene-Gima et al., 2005), *networking* (Hills and Hultman, 2006), and *firm growth* (Chen et al., 2007). Growth was measured by *revenue growth* and *employment growth* because both have proven to be most reliable in capturing the expansion of firms, and are the two most used indicators of success in entrepreneurship research (Carton and Hofer, 2006; Davidsson et al., 2009). All of these scales were validated measures sourced from existing studies.

5 Results

Exploratory factor analyses (EFA) were performed to determine relevant factor structures. We used SPSS (v.16.0 for Mac OSX), adopting the maximum likelihood method with varimax rotation. The EFA yielded four factors relevant to EO and CO: *proactiveness* (EO), *innovativeness* (EO), *risk-taking* (EO), and *responsiveness* (to customers and to competitors; CO). We then reduced the number of scale items by retaining items with the highest factor loadings (above .40 based on the rotated solution) for each factor and with no substantial cross-loadings (Costello and Osborne, 2005). These items and their factor loadings are reported in the Appendix. Following item reduction, we performed another EFA, yielding a two-factor structure based on the scree plot criterion: (a) EO, upon which loaded items for proactiveness, innovativeness, and risk-taking, accounting for 24% of the variance explained (Eigenvalue = 6.55; 14 items; Cronbach alpha [α] = .89); and (b) CO, upon which loaded items for responsiveness towards customers and responsiveness towards competitors, accounting for 20% of the variance explained (Eigenvalue = 5.26; 9 items; α = .85). Through this process, the original 77 items were reduced to 23, representing the final four dimensions of proactiveness, innovativeness, risk-taking, and responsiveness.

Exploratory factor analysis also yielded the following constructs: (a) *resource availability* ($\alpha = .85$); (b) *growth* ($\alpha = .66$); (c) *technological changes* ($\alpha = .83$); and (d) *networking* ($\alpha = .67$).

INSERT TABLE 3 HERE

Structural equation modeling (SEM) using maximum likelihood method on covariance matrices and listwise deletion for missing data was used to test our hypotheses (using AMOS, v.18, PASW Inc.). The latent variables were assessed using the reduced item structures identified in the EFA. Table 3 depicts the measured variables' factor loadings on the latent variables and related inferential statistics. Figure 2 and Table 4 depict the structural model. The model provided a reasonable fit with the data: $\chi^2 (df) = 314.49 (95)$, $p < .001$, CFI = .914, RMSEA = .059 (90% confidence interval = .052, .067). For these goodness-of-fit measures, CFI values above .90 and RMSEA values below .08 indicate a reasonably good-fitting model (Keith, 2006).

INSERT FIGURE 2 HERE

INSERT TABLE 4 HERE

The model shows that the availability of financial resources is indeed negatively related to CO. The more financial resources an SME had, the less CO it reported. Moreover, and as suspected, CO itself was negatively related to growth, EO was positively impacted on by the availability of financial resources, as well as by technological changes in the environment, and EO itself was found to be positively related to firm growth and firm networking. The availability of financial resources was positively and directly related to firm growth. The hypothesized positive relationship between networking and growth was not supported.

In the next step, the model was checked for control variables. Because the study incorporated companies operating in different industries, it was assumed that industry affiliation might impact the results. After running separate models for service versus non-service industries, we found only one significant difference in the parameter estimate for the relationship between networking and growth. For service industries this relationship was negative but non-significant (-.107). For non-service industries it was positive and significant (.271; $p < 0.01$). Further, the model was checked for firm size in terms of employees. Here, the data was split at the median of 5 employees. Two significant differences were found between the parameter estimates for our two sub-samples. For group 1, the estimate for the relationship between resource availability and CO was positive but not significant (.092), whereas for group 2 the estimate was negative and significant (-1.121; $p < 0.01$). Also, the relationship between EO and networking was positive and significant for both groups (.263 and .138 respectively; $p < 0.01$). The relationship between EO and networking only changes in strength, but not in direction, so the primary difference between both groups exists only in terms of the 'resource availability–CO' link. Because our sample included a large percentage of family firms (78.1%) we compared separate models for family versus non-family firms. There were no significant differences between any of the parameter estimates. Finally, the model was checked for a possible response bias by comparing those firms that responded immediately to the invitation email with those that responded after the reminder email. We compared both types of firms in relations to our hypothesized model and found only one significant difference in the parameter estimate for the relationship between EO and networking. However, given that both parameter estimates were positive and significant (.123 and .270 respectively; $p < 0.01$) and all other relationships were non-significant, we can conclude that both sub-models do not show meaningful differences. Thus, we can conclude that the three control variables do not have a meaningful impact on the model, and response bias is not a significant issue affecting the data.

Since the study is based on a single source, we controlled for any artificial covariance among the variables. Therefore we performed a marker variable test that assesses error attributable to common-method bias by estimating and accounting for a common method-related correction (Lindell and Whitney, 2001). A marker variable is a measure that is not

theoretically related to all other variables in our study. We identified ‘time of response’ as our marker. Non-significant correlations were found between this marker variable and all study variables. Thus, we can exclude the presence of common-method-variance.

A further analysis was performed to determine whether scoring simultaneously high on CO and EO increases firm growth. As proposed by Mintzberg (1973) and later by Green et al. (2008), firms exhibiting both reactivity and proactivity are pursuing both efficiency and growth. We first conducted a correlation analysis to capture possible relationships between variables (Table 5).

INSERT TABLE 5 HERE

Risk, proactivity, and innovativeness were all correlated with each other (as would be expected, e.g., Lumpkin and Dess, 1996), but together as EO, do not show any significant correlation with CO. CO is positively related to proactivity and negatively connected with risk. Both findings fit: To be proactive a firm has to base its decisions at least somehow on its target group. Further, the more a firm listens to its customers and the more it focuses on its competitors, the less risk it normally takes.

Although the correlation matrix indicates no significant link between CO and EO, it does not show if both constructs together lead to higher firm performance or not. To answer this question, we followed an approach suggested by Green et al. (2008). We performed an analysis by splitting our dataset into four cells based on the firms’ EO and CO scores. We used median splits on both variables and determined mean performance levels for each cell. We used our growth measures of sales growth and employee growth as performance indicators. The results can be found in Table 6.

INSERT TABLE 6 HERE

The results show that the cells showing the highest growth rate are those with high EO. The highest growth is achieved by scoring high on EO but low on CO. Scoring high on both dimensions still leads to SME growth but not as effective as the former combination.

6 Discussion and Conclusions

6.1 Scholarly Relevance

Understanding the effects of decisions made by management in selecting business orientations for their firms is crucial and highly relevant to management theory and practice because such strategic decisions have the potential to influence the performance frontier of the firm. However, our chief concern that the ongoing scholarly conversation on the value of different business orientations to SMEs, and the ongoing conversation on CO and EO therein, have mis-specified business performance to the extent that it might mask unforeseen dangers appears to bear out in our analysis. By looking at firm growth, relevant to the longer-term performance of a firm, EO drives growth because of its emphasis on innovation to renew the firm's growth trajectory but CO stifles growth owing to its myopic focus. Thus, this study addresses calls in the business, entrepreneurship and general management literatures to more fully understand how SMEs can capture value and generate returns to business performance from their customer and entrepreneurial orientations.

Our analysis shows that CO, interpreted as a purely responsive construct, cannot be considered a strategy that leads to sustainable firm growth. If an SME desires growth, EO is needed to fuel these growth aspirations. These observations are further supported by our results indicating that scoring high on EO and low on CO leads to the most growth. In spite of these findings however, our study shows that SMEs tend to respond to a scarcity of financial resources with more CO and less EO, which then leads to less or even negative growth. This is an intriguing finding as it offers a very different contribution to the conversation on proactive entrepreneurially oriented management versus reactive customer oriented management that has taken place in marketing and product innovation management literatures for many years (Atuahene-Gima et al., 2005). This negative link between resource availability and responsive behaviors is particularly present among firms with more than 5 employees and translates directly to the concept of bootstrapping (Bhidé,

2000). The less financial resources a firm possesses the more it relies on generating immediate revenues, which are then used to finance the organization. Thus, the less financial resources a firm controls, the more it has to pay attention to immediate customer needs and customer actions to avoid failing. In tough economic environments growth may not necessarily be an important firm outcome relative to stability and market maintenance traditionally afforded by CO. But when taken together, these results do suggest that to drive firm growth, the firm will need to deploy a strategy centered on EO or else risk stagnation. It is positive to note that from the results, firms need not abandon CO but can deploy it simultaneously with EO to achieve a better rate of growth. These results therefore suggest that it is perhaps dangerous to consider firm performance solely in financial terms to understand the implications of adopting different business orientations, and when attempting to legitimize a particular orientation within the firm. It is ironic for example that Matsuno et al. (2002) reported negative consequences to firm financial performance from being entrepreneurially oriented without a CO yet herein we report any such effect is the inverse of this if the performance lens is firm growth.

Our results suggest that the highest growth rates for SMEs can be achieved if high EO is paired with low CO, and not with high CO. An explanation for this might be found in theories of resource slack and theories of ambidexterity (e.g., March, 1991; Auh and Menguc, 2005; Raisch and Birkinshaw, 2008; Voss et al., 2008). It can be difficult for an SME owing to a scarcity of slack resources—to achieve and maintain a high emphasis on both EO and CO at the same time because doing so requires the firm to bridge between exploring new opportunities with speculative innovation developments while exploiting present product-services to sustain the firm. Being very responsive towards customers and at the same time highly proactive and innovative can require firms to confront some unsolvable resource challenges. A similar logic has been put forward in the marketing literature but has concentrated on the market interface as an explanation over and above resources as to why CO (market reaction) and EO (market creation) are contradictory orientations that might cause quite different performance consequences (e.g., Atuahene-Gima and Ko, 2001; Bhuian et al., 2005). Instead of continuously showing high levels of EO and CO, it rather might be the case that switching from EO to CO and back and balancing EO with CO are particularly successful growth strategies (Slevin & Covin, 1990;

Morris & Kuratko, 2002; Green et al., 2008). However, this possibility of firms oscillating through different phases of EO and CO is not testable within our dataset and therefore remains a point of contention for future research. Thus, our research contributes to calls in the management literature to better understand the consequences of market-facing orientations such as EO and CO (Atuahene-Gima et al., 2005; Bhuian et al., 2005), it also contributes to calls by entrepreneurship scholars to better understand antecedents driving, shaping, and undermining efforts to achieve firm growth (Clarysse et al., 2011).

In our study we were not able to find a significant and positive link between networking and firm growth. Interestingly, we did find a positive and significant relationship among our sub-sample of non-service firms, albeit no relationship between networking and growth in service firms. Thus, service firms seem to cause the non-significant link in our full sample. Although we have to interpret this finding with caution, there are indicators that show that in certain situations networking might have a higher impact for small manufacturing firms than for small service companies. In this regard, Nijssen et al. (2006) point out that innovation activities, in particular in terms of R&D investments, tend to be more complex for manufacturing companies than for service firms. This, in turn, demands a closer collaboration among manufacturing firms, especially among small, resource constraint manufacturers. More research is needed to investigate this issue.

6.2 Managerial Relevance

Sustainable firm growth seems impossible without an EO. However, this does not mean that CO is not of any value for SMEs. Being non-entrepreneurially oriented does not mean that a firm is automatically customer oriented. So, it is not only about implementing CO or EO since there is still the third option: implementing neither. If developing an EO is exceptionally hard for an SME (owing to its resource consumption) the focus should still be on CO. Focusing on customers and competitors and responding adequately to their needs remains an important strategy as well as literature shows in can influence business performance when the lens is not firm growth. However, our results do lay bare that firm growth relies on EO far in excess of CO.

Our study showed that EO requires the existence of financial resources. If insufficient financial resources are available, a firm tends to exhibit CO but suffers a negative growth impact as a result. SMEs in a situation of resource scarcity might look to adopt CO to generate funding for the organization so that it might then shift towards EO, but with the appreciation that it can have a negative growth impact in the near term. So, if the resource situation dictates that a firm has to be CO, we recommend doing so. Firms that successfully develop a CO have the potential to collect enough resources that eventually can be used to blend in more EO which can then power growth. In this regard, saving up financial resources in times of economic prosperity would enable SMEs to maintain its EO in a downturn, thus supporting a competitive advantage. Finally, SMEs have to rethink the amount of resources they invest in networking activities given the lack of support in the study findings. This is particularly true for service firms. The assumption that more networking is better does not seem to hold true for every firm in our sample.

6.3 Limitations and Future Research

Our findings are tempered by limitations. First, the state of the economy might have affected our results despite our efforts to detect environmental turbulence and industry effects. Second, although we used only validated scales and conducted a thorough process of factor analysis to control for items with different factor loadings, we still had to amend scales and use some new ones in our analysis. Given our research focus on SMEs, we eliminated some items of existing scales that applied mainly to large organizations. This was a necessary and methodologically sensible step. However, both the fact that we used a new scale and eliminated some items of existing measures makes it challenging to compare our findings cleanly with previous studies. Third, we did not test our SEM on an independent sample to confirm its utility. Fourth, it would have been interesting to control our analysis not only by firm size but also by firm age in order to see if there are differences between young and small and established firms. Finally, we used an online study to collect our data. While electronic data collection methods are becoming more common, strategies to encourage a greater response rate are lacking compared to other

survey implementation methods. These limitations offer general avenues for future research.

We strongly believe that our findings are highly generalizable given that our sample of respondents exhibit considerable comparison to the broader distribution of firms in Austria (e.g., 99.6% of all Austrian enterprises are SMEs, approximately 80% of the population are family firms and those in our sample make up 78% of the respondent firms (Frank et al., 2011; KMU Forschung Austria, 2009; Neubauer, 1992; Statistik Austria, 2004). Indeed, this pattern is similar across Europe. We therefore believe that understanding the effects of decisions made by management in selecting business orientations for their firms is crucial and our work contributes highly relevant information to theory and practice as a consequence. Nevertheless, a study that continues to examine these issues across multiple European countries simultaneously would help develop further insights into the relationships put forward in this study, and the findings observed.

The study suggests a further investigation of the relationships between CO and EO is needed. We suggest that future studies further investigate the interplay between CO and EO along broader dimensions of firm performance to better understand the conditions under which CO and EO might prove beneficial or destabilizing to a firm. Such an analysis will likely require at least two issues to be considered. First, antecedents, moderators and mediators surrounding CO and EO need evaluation because at present while we can empirically demonstrate the effects of CO and EO, the conditions and mechanisms underpinning both their establishment and subsequent conversion into firm performance outcomes remains too much of a black box to be satisfactory. Our illustration of different explanations for our returns borne of marketing, management and entrepreneurship traditions are further testament to this problem. Second, we speculated previously that firms might need to switch between CO and EO at different points in time in pursuit of growth. With this in mind, we agree with Clarysse et al. (2011) that current explanations for how growth is achieved over time remain unsatisfactory and incomplete. We suggest that this represents an interesting and valuable research question for scholars.

References

- Aldrich, H. & Auster, E. (1986). Even dwarfs started small: Liabilities of size and age and their strategic implication. *Research in Organizational Behavior*, 8, 65-198.
- Atuahene-Gima, K. & Ko, A. (2001). An Empirical Investigation of the Effect of Market Orientation and Entrepreneurship Orientation Alignment on Product Innovation. *Organization Science*, 12, 54-74.
- Atuahene-Gima, K., Slater, S.F. & Olson, E.M. (2005). The contingent value of responsive and proactive market orientations for new product program performance. *Journal of Product Innovation Management*, 22, 464-482.
- Auh, S. & Menguc, B. (2005). Balancing exploration and exploitation: The moderating role of competitive intensity. *Journal of Business Research*, 58(12), 1652-1661.
- Austria, S. (2008), *Hauptergebnisse der Leistungs- und Strukturstatistik 2007 nach Beschäftigtengrößenklassen*, Statistics Austria, Vienna.
- Baker, W. & Sinkula, J. (2009). The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses. *Journal of Small Business Management*, 47, 443-464.
- Barksdale, H.C. & Darden, B. (1971). Marketers' attitudes toward the marketing concept. *Journal of Marketing*, 35, 29-36.
- Barrett, H. & Weinstein, A. (1998). The Effect of Market Orientation and Organizational Flexibility on Corporate Entrepreneurship. *Entrepreneurship: Theory & Practice*, 23, 57-70.
- Becherer, R. & Maurer, J. (1997). The Moderating Effect of Environmental Variables on the Entrepreneurial and Marketing Orientation of Entrepreneur-led Firms. *Entrepreneurship Theory and Practice*, 22, 47-58.
- Berthon, P. & Hulbert, J. (1999). To Serve or Create? Strategic Orientations toward Customers and Innovation. *California Management Review*, 42, 37-58.
- Berthon, P., Hulbert, J.M. & Pitt, L. (2004). Innovation or customer orientation? An empirical investigation. *European Journal of Marketing*, 38, 1065-1090.
- Bhidé, A. (2000). *The origin and evolution of new business*. Oxford: Oxford University Press.

- Bhuian, S., Menguc, B. & Bell, S. (2005). Just Entrepreneurial Enough: The Moderating Effect of Entrepreneurship on the Relationship between Market Orientation and Performance. *Journal of Business Research*, 58, 9-17.
- Birley, S. (1985). The Role of Networks on the Entrepreneurial Process. *Journal of Business Venturing*, 1, 107-117.
- Bonometti, R.J. and Tuang, J. (2006), "A dynamic technique for conducting online survey-based research", *Competitiveness Review*, Vol. 16, No. 2, pp. 97-105.
- Brislin, R.W. (1980). Translation and content analysis of oral and written materials. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of cross-cultural psychology* (pp. 389-444). Boston: Allyn and Bacon.
- Brockhaus, R.H. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23, 509-520.
- Brüderl, J. & Schüßler, R. (1990). Organizational Mortality: The Liabilities of Newness and Adolescence. *Administrative Science Quarterly*, 35, 530 - 547.
- Buss, D.M. (1987). Selection, evocation, and manipulation. *Journal of Personality and Social Psychology*, 53, 1214-1221.
- Carton, R. B. & Hofer, C. W. (2006). *Measuring Organizational Performance - Metrics for Entrepreneurship and Strategic Management Research*. Cheltenham: Edward Elgar.
- Chen, C.-N., Tzeng, L.-C., Ou, W.-M. & Chang, K.-T. (2007). The Relationship among Social Capital, Entrepreneurial Orientation, Organizational Resources and Entrepreneurial Performance for New Ventures. *Contemporary Management Research*, 3, 213-232.
- Christensen, C. & Bower, J. (1996). Customer power, strategic investment, and the failure of leading firms. *Strategic Management Journal*, 17, 197-218.
- Christensen, C.M. (1997). *The Innovator's Dilemma*. Boston, MA: Harvard Business School Press.
- Clarysse, B., Bruneel, J., & Wright, M. (2011). Explaining growth paths of young technology-based firms: structuring resource portfolios in different competitive environments. *Strategic Entrepreneurship Journal*, 5 (2), 137-157,

- Costello, A. & Osborne, J. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*, 1-9.
- Covin, J. & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 10*, 75-87.
- Covin, J.G., Green, K.M. & Slevin, D.P. (2006). Strategic process effects on the entrepreneurial orientation-sales growth rate relationship. *Entrepreneurship: Theory & Practice, 30*, 57-81.
- Covin, J.G. & Slevin, D.P. (1986). The development and testing of an organization-level entrepreneurship scale. In R. Ronstadt, J. A. Hornaday & K. H. Vesper (Eds.), *Frontiers of Entrepreneurship Research 1986* (pp. 628-639). Wellesly, MA: Babson College.
- Covin, J.G. & Slevin, D.P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies, 25*, 217-234.
- Covin, J.G. & Slevin, D.P. (1990). New Venture Strategic Posture, Structure, and Performance: An Industry Life Cycle Analysis. *Journal of Business Venturing, 5*, 123-135.
- Davidsson, P., Achtenhagen, L. & Naldi, L. (2005). Research on small firm growth: A review. *Proceedings of the European Institute of Small Business, 1*-28.
- Davidsson, P., Delmar, F. & Wiklund, J. (2002). Entrepreneurship as Growth: Growth as Entrepreneurship. In M.A. Hitt, R.D. Ireland, S.M. Camp & D.L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new mindset* (pp. 328-340). Oxford: Blackwell.
- Davidsson, P., Steffens, P. & Fitzsimmons, J. (2009). Growing profitable or growing from profits: Putting the horse in front of the cart? *Journal of Business Venturing, 24*, 388-406.
- Delmar, F., Davidsson, P. & Gartner, W.B. (2003). Arriving at the high-growth firm. *Journal of Business Venturing, 18*, 189-216.
- Deshpande, R. & Farley, J.U. (1998). Measuring market orientation: generalization and synthesis. *Journal of Market-Focused Management, 2*, 213-232.

- Deshpande, R., Farley, J.U. & Webster, F.E. (1993). Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms - a Quadrad Analysis. *Journal of Marketing*, 57, 23-27.
- Dess, G.G., Lumpkin, G.T. & Covin, J.G. (1997). Entrepreneurial strategy making and firm performance: Tests of contingency and configurational models. *Strategic Management Journal*, 18, 677-695.
- Dillman, D.A. (2000). *Mail and Internet Surveys: The Tailored Design Method*, 2nd edition. New York: John Wiley and Sons, Inc.
- Drucker, P.F. (1954). *The Practice of Management*. New York: Harper.
- Eisenmann, T.R. (2006). Internet companies' growth strategies: Determinants of investment intensity and long-term performance. *Strategic Management Journal*, 27, 1183-1204.
- Entrialgo, M., Fernández, E. & Vázquez, C.J. (2000). Linking entrepreneurship and strategic management: evidence from Spanish SMEs. *Technovation*, 20, 427-436.
- Frank, H., Froschauer, U., Korunka, C., Lueger, M., Nosé, L. and Suchy, D. (2011), *Erfolgsfaktoren österreichischer Familienunternehmen - Das Zusammenspiel von Familie und Unternehmen in Entscheidungsprozessen*, Federal Ministry of Economy, Family and Youth, Vienna.
- Garnsey, E. (1998). A theory of the early growth of the firm. *Industrial and Corporate Change*, 7, 523-556.
- Garnsey, E. & Heffernan, P. (2005). Growth setbacks in new firms. *Futures*, 37, 675-697.
- Green, K., Covin, J. & Slevin, D. (2008). Exploring the relationship between strategic reactivity and entrepreneurial orientation: The role of structure-style fit. *Journal of Business Venturing*, 23, 356-383.
- Hamel, G. & Prahalad, C.K. (1994). *Competing for the future*. Boston: Harvard Business School Press.
- Henderson, J. & Weiler, S. (2010). Entrepreneurs and Job Growth: Probing the Boundaries of Time and Space. *Economic Development Quarterly*, 24, 23-32.
- Hills, G.E. & Hultman, C. (2006). Marketing Perspectives. In W. J. Dennis Jr. (Ed.), *NFIB National Small Business Poll* (Vol. 6): NFIB Research Foundation.

- Hitt, M.A., Ireland, R.D., Camp, S.M. & Sexton, D.L. (2002). Strategic entrepreneurship: Integrating entrepreneurial and strategic management perspectives. In M. Hitt, R. Ireland, M. Camp & D. Sexton (Eds.), *Strategic Entrepreneurship: Creating a new mindset* (pp. 1-13). Oxford: Blackwell.
- Hughes, M. & Morgan, R.E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651-661.
- Hughes, M. & Perrons, R. (2011). Shaping and re-shaping social capital in buyer-supplier relationships. *Journal of Business Research*, 64(2), 164-171.
- Hughes, M., Ireland, R.D. & Morgan, R.E. (2007). Stimulating dynamic value: Social capital and business incubation as a pathway to competitive success. *Long Range Planning*, 40(2), 154-177.
- Ilieva, J., Baron, S. and Healey, N.M. (2002), "Online surveys in marketing research: pros and cons", *International Journal of Market Research*, Vol. 44, No. 3, pp. 361-376.
- Katila, R. & Shane, S. (2005). When does lack of resources make new firms innovative? *Academy of Management Journal*, 48, 814-829.
- Keith, T. (2006). *Multiple regression and beyond*: Pearson Education Boston, MA.
- Kemelgor, B.H. (2002). A comparative analysis of corporate entrepreneurial orientation between selected firms in the Netherlands and the USA. *Entrepreneurship & Regional Development*, 14, 67-87.
- Kirca, A.H., Jayachandran, S. & Bearden, W.O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69, 24-41.
- Kohli, A.K. & Jaworski, B.J. (1990). Market Orientation - the Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54, 1-18.
- Kohli, A.K., Jaworski, B.J. & Kumar, A. (1993). Markor - a Measure of Market Orientation. *Journal of Marketing Research*, 30, 467-477.
- Kraus, S. (2012), "The role of entrepreneurial orientation in service firms: empirical evidence from Austria", *Service Industries Journal*, Vol., No. pp.

- Landström, H. (2009). *Pioneers in entrepreneurship and small business research* (2nd edn ed.). New York: Springer.
- Levratto, N. (1996). Small firms finance in France. *Small Business Economics*, 8, 279-295.
- Li, Y., Zhou, Y., Tan, J. & Liu, Y. (2008). Moderating Effects of Entrepreneurial Orientation on Market Orientation-Performance Linkage: Evidence from Chinese Small Firms. *Journal of Small Business Management*, 46, 113-133.
- Lindell, M.K. & Whitney, D.J. (2001). Accounting for common method variance in cross-sectional designs. *Journal of Applied Psychology*, 86, 114-121.
- Liu, S.S., Luo, X. & Shi, Y.-Z. (2002). Integrating customer orientation, corporate entrepreneurship, and learning orientation in organizations-in-transition: an empirical study. *International Journal of Research in Marketing*, 19, 367.
- Low, M.B. & MacMillan, I.C. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, 14, 139-161.
- Lumpkin, G.T. & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21, 135-172.
- Lumpkin, G.T. & Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16, 429-451.
- Luo, X., Zhou, Y. & Liu, S. (2005). Entrepreneurial Firms in the Context of China's Transition Economy: An Integrative Framework and Empirical Examination. *Journal of Business Research*, 58, 277-284.
- Macedo, I.M. & Pinho, J.C. (2006). The relationship between resource dependence and market orientation - The specific case of non-profit organizations. *European Journal of Marketing*, 40, 533-553.
- March, J.G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71-87.
- Matsuno, K., Mentzer, J. & Özsomer, A. (2002). The Effect of Entrepreneurial Proclivity and Market Orientation on Business Performance. *Journal of Marketing*, 66, 18-32.
- Matsuno, K., Mentzer, J. & Rentz, J. (2000). A refinement and validation of the MARKOR scale. *Journal of the Academy of Marketing Science*, 28, 527-539.

- Matsuno, K., Mentzer, J. T. & Rentz, J. O. (2005). A conceptual and empirical comparison of three market orientation scales. *Journal of Business Research*, 58, 1-8.
- McNamara, C.P. (1972). The present status of the marketing concept. *Journal of Marketing*, 36, 50-57.
- Miles, M. & Arnold, D. (1991). The Relationship Between Marketing Orientation and Entrepreneurial Orientation. *Entrepreneurship Theory and Practice*, 15, 49-65.
- Miles, M.P., Covin, J.G. & Heeley, M.B. (2000). The relationship between environmental dynamism and small firm structure, strategy, and performance. *Journal of Marketing Theory and Practice*, 8, 63-78.
- Miller, A., Wilson, B. & Adams, M. (1988). Financial performance patterns of new corporate ventures: An alternative to traditional measures. *Journal of Business Venturing*, 3, 287-300.
- Miller, D. (1983). The Correlates of Entrepreneurship in 3 Types of Firms. *Management Science*, 29, 770-791.
- Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, 16, 44-53.
- Morris, M.H. & Kuratko, D.F. (2002). *Corporate Entrepreneurship*. Dallas, TX, USA: Harcourt Press.
- Morris, M.H., Kuratko, D.F. & Covin, J.G. (2008). *Corporate Entrepreneurship & Innovation* (2nd ed.). Mason, OH, USA: Thomson Higher Education.
- Narver, J.C. & Slater, S.F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54, 20-35.
- Narver, J.C., Slater, S.F. & MacLachlan, D.L. (2004). Responsive and proactive market orientation and new-product success. *Journal of Product Innovation Management*, 21, 334-347.
- Newby, R., Watson, J. and Woodliff, D. (2003), "SME survey methodology: Response rates, data quality, and cost effectiveness ", *Entrepreneurship: Theory & Practice*, Vol. 28, No. 2, pp. 163-172.
- Nijssen, E.J., Hillebrand, B., Vermeulen, P.A.M. & Kemp, R.G.M. (2006). Exploring product and service innovation similarities and differences. *International Journal of Research in Marketing*, 23(3), 241-251.

- Parker, S.C. (2004). *The economics of self-employment and entrepreneurship*. Cambridge: Cambridge University Press.
- Pelham, A.M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of Small Business Management*, 38, 48-67.
- Raisch, S. & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management*, 34(3), 375-409.
- Ricketts, M. (2006). Theories of Entrepreneurship: Historical development and critical assessment. In M. Casson, B. Yeung, A. Basu & N. Wadeson (Eds.), *The Oxford Handbook of Entrepreneurship* (pp. 33-58). Oxford: Oxford University Press.
- Saxe, R. & Weitz, B. (1982). The SOCO scale: a measure of the customer orientation of salespeople. *Journal of Marketing Research*, 19, 343-351.
- Schumpeter, J.A. (1942). *Capitalism, Socialism and Democracy*. New York: Harper & Brothers.
- Sciascia, S., Naldi, L. & Hunter, E. (2006). Market orientation as determinant of entrepreneurship: An empirical investigation on SMEs *Entrepreneurship Management*, 2, 21-38.
- Sexton, D.L. & Kasarda, J.D. (1992). *State of the Art of Entrepreneurship*. PWS-Kent: Boston, MA.
- Shepherd, D.A. & Wiklund, J. (2005). *Entrepreneurial Small Business: A resource-based perspective*. Northampton, MA: Edward Elgar.
- Slater, S. & Narver, J. (2000). The Positive Effect of a Market Orientation on Business Profitability: A Balanced Replication. *Journal of Business Research*, 48, 69-73.
- Slater, S.F. & Narver, J.C. (1998). Customer-led and market-oriented - let's not confuse the two. *Strategic Management Journal*, 19, 1001-1006.
- Slevin, D.P. & Covin, J.G. (1990). Juggling entrepreneurial style and organization structure... How to get your act together. *Sloan Management Review*, 31, 43-53.
- Tzokas, N., Carter, S. & Kyriazopoulos, P. (2001). Marketing and Entrepreneurial Orientation in Small Firms. *Enterprise and Innovation Management Studies*, 2, 19-33.

- Ucbasaran, D., Westhead, P.H. & Wright, M. (2001). The focus of entrepreneurial research: contextual and process issues. *Entrepreneurship Theory and Practice*, 25, 57-80.
- Valliere, D. (2006). Consequences of growth: Shaping entrepreneurial attitudes. *International Journal of Entrepreneurship and Innovation*, 7, 141-148.
- Vitale, R., Giglierano, J. & Miles, M. (2003). An exploratory study of self-administrated quick-audits as a management diagnostic to assess marketing and entrepreneurial orientations in established and startup firms. *Journal of Research in Marketing and Entrepreneurship*, 6, 64-77.
- Voss, G.B., Sirdeshmukh, D. & Voss, Z.G. (2008). The effects of slack resources and environmental threat on product exploration and exploitation. *Academy of Management Journal*, 51(1), 147-164.
- Walter, A., Auer, M. & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, 21, 541-567.
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice*, 24, 37-48.
- Wiklund, J. & Shepherd, D. (2005). Entrepreneurial Orientation and Small Business Performance: A Configuration Approach. *Journal of Business Venturing*, 20, 71-91.
- Zahra, S. (1993). A Conceptual Model of Entrepreneurship as Firm Behavior: A Critique and Extension. *Entrepreneurship: Theory and Practice*, 17.
- Zahra, S.A. & Garvis, D.M. (2000). International Corporate Entrepreneurship And Firm Performance: The Moderating Effect Of International Environmental Hostility. *Journal of Business Venturing*, 15, 469-493.

Table 1. Characteristics of Respondents

	Our sample	Austria
Family Firms (%)	78.1	80.0
Industry affiliation (%)		
Services	69.6	67.1
- Professional, Scientific, Technical Services	(26.5)	
- Information, Communication Services	(17.7)	
- Accommodation, Food Services	(13.0)	
- Wholesale, Retail Trade	(9.3)	
- Financial, Insurance Services	(3.1)	
Construction	7.4	
Transportation	3.5	
Manufacturing	13.0	
Education	1.4	
Agriculture, Forestry, Fishing	0.6	
Other	4.5	

(Sources for the Austrian data: Statistics Austria, 2008; Frank et al., 2011; Kraus, 2012)

Table 2. Sources for Scale Items

Dimension	Sources
Responsiveness	Narver and Slater (1990), Deshpande et al. (1993), Kohli et al. (1993), Deshpande and Farley (1998), Pelham (2000), Narver et al. (2004), Atuahene-Gima et al. (2005)
Proactiveness	Kohli et al. (1993), Matsuno et al. (2000), Narver et al. (2004), Atuahene-Gima et al. (2005), Miller (1983), Covin and Slevin (1989), Matsuno et al. (2002), Vitale et al. (2003), Hughes and Morgan (2007), Li et al. (2008)
Innovativeness	Miller (1983), Covin and Slevin (1989), Matsuno et al. (2002), Vitale et al. (2003), Hughes and Morgan (2007), Li et al. (2008)
Risk-taking	Miller (1983), Covin and Slevin (1989), Matsuno et al. (2002), Vitale et al. (2003), Hughes and Morgan (2007), Li et al. (2008)

Table 3. Measured Variables' Factor Loadings on Latent Variables

Latent Variable	Measured Variable	Estimate	SE	Standardized Estimate	p-value
Resource Availability	Uncommitted Resources	1.000	---	.770	---
	Few Resources	0.993	0.067	.716	<.001
	Obtain Resources	0.997	0.059	.815	<.001
	Substantial Resources	1.018	0.061	.802	<.001
Technological Changes	Changing Rapidly	1.000	---	.693	---
	Opportunities	1.103	0.076	.825	<.001
	New Products	1.190	0.082	.836	<.001
Customer Orientation	Responsiveness to Customers	1.000	---	.87	---
	Responsiveness to Competitors	0.383	0.187	.44	.041
Entrepreneurial Orientation	Risk	1.000	---	.523	---
	Proactiveness	1.295	0.126	.765	<.001
	Innovativeness	1.598	0.153	.913	<.001
Growth	More Employees	1.000	---	.674	---
	Higher Sales	0.978	0.117	.732	<.001
Networking	Industry Friends	1.000	---	.718	---
	Exchanging Information	0.888	0.114	.698	<.001

Table 4. Empirical SEM Results

Effects		Estimate	S.E.	C.R.	P
Resource Availability	→ EO	.707	.140	5.054	***
Tech Changes	→ EO	1.102	.175	6.312	***
Resource Availability	→ CO	-.504	.218	-2.315	**
EO	→ Networking	.179	.026	6.833	***
Resource Availability	→ Growth	.304	.065	4.699	***
CO	→ Growth	-.046	.025	-1.802	*
EO	→ Growth	.116	.033	3.505	***
Networking	→ Growth	.108	.094	1.146	

Note that *** $p < .01$, ** $p < .05$, and * $p < .10$

Table 5. Correlations between Risk, Proactiveness, Innovativeness, CO, and EO

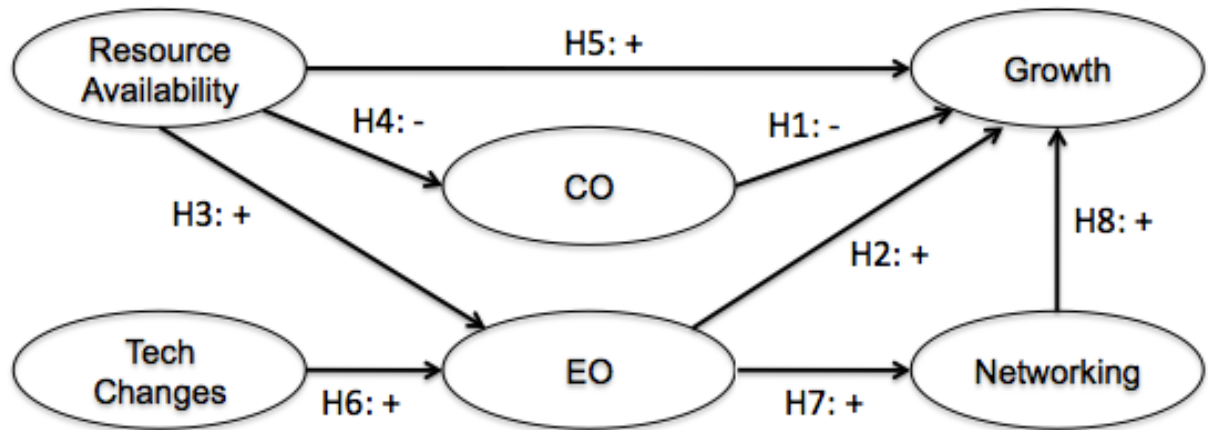
		Risk	Proactiveness	Innovativeness	CO (Responsiveness)	EO
Risk	Pearson Correlation	1	.378**	.483**	-.224**	.770**
	<i>p</i> -value (2-tailed)		<.001	<.001	<.001	<.001
Proactiveness	Pearson Correlation		1	.705**	.159**	.831**
	<i>p</i> -value (2-tailed)			<.001	.001	<.001
Innovativeness	Pearson Correlation			1	.031	.877**
	<i>p</i> -value (2-tailed)				.560	<.001
CO (Responsiveness)	Pearson Correlation				1	-.072
	<i>p</i> -value (2-tailed)					.214
EO	Pearson Correlation					1
	<i>p</i> -value (2-tailed)					

** . Correlation is significant at the 0.01 level (2-tailed).

Table 6. Growth Ranks according to EO and CO

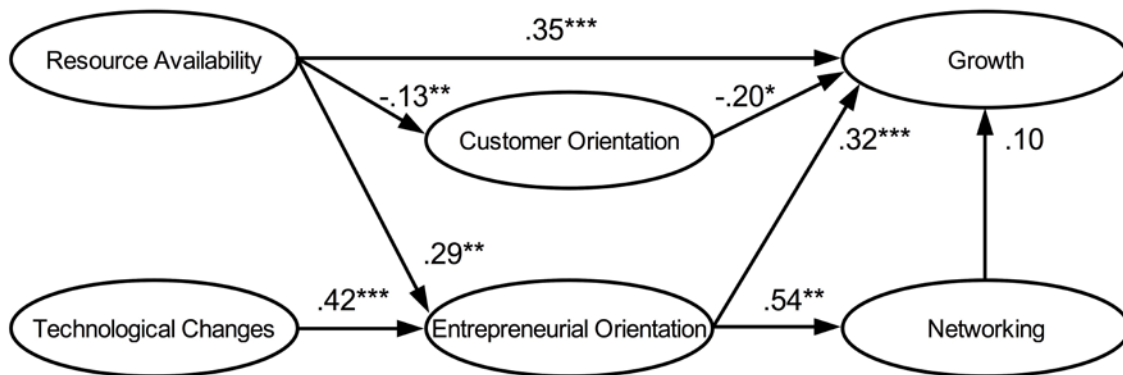
	Sales Growth Rank	Employee Growth Rank
high EO, high CO	2	2
high EO, low CO	1	1
low EO, high CO	3	3
low EO, low CO	4	4

Figure 1. Hypothesized Structural Model



Note: + indicates we anticipated a positive relationship between variables and – indicates we anticipated a negative relationship between variables.

Figure 2. Structural Equation Model with Standardized Coefficients



Note that *** $p < .01$, ** $p < .05$, and * $p < .10$

Appendix. Questionnaire after Item Reduction through Factor Analysis

Customer Orientation (Latent Variable)		Factor Loadings	
<i>Responsiveness (Subscale)</i>		Subscale	Latent Variable
• Our strategy for competitive advantage focuses on our understanding of customers' needs.			.86
• We believe our business exists primarily to serve customers.			.84
• We think we are more customer-focused than our competitors are.			.81
• Our business objectives are driven primarily by customer satisfaction.			.80
• Our firm knows which products competitors offer customers.			.55
• The customer's interest should always come first, even ahead of the interests of the owner(s) or other stakeholders.			.54
• Our firm knows why customers switch to competitors.			.53
• Our firm knows why customers continue buying from competitors.			.52
• Our firm knows whether customers buying from competitors are satisfied.			.48
Entrepreneurial Orientation (Latent Variable)			
<i>Risk-taking (Subscale)</i>			
• We encourage people in our company to take risks with new ideas.	.52		.58
• We value new strategies/plans even if we are not certain that they will always work.	.76		.46

• To make effective changes to our offering, we are willing to accept at least a moderate level of risk of significant losses.	.79	.45
• We engage in risky investments (e.g. new employees, facilities, debt, stock options) to stimulate future growth.	.56	.43
<i>Proactiveness (Subscale)</i>		
• We consistently look for new business opportunities.	.76	.72
• Our marketing efforts try to lead customers, rather than respond to them.	.78	.71
• We work to find new businesses or markets to target.	.72	.70
• We incorporate solutions to unarticulated customer needs in our products and services.	.64	.57
• We continuously try to discover additional needs of our customers of which they are unaware.	.66	.69
<i>Innovativeness (Subscale)</i>		
• We highly value new product lines.	.74	.80
• When it comes to problem solving, we value creative new solutions more than solutions that rely on conventional wisdom.	.73	.74
• We consider ourselves as an innovative company.	.85	.73
• Our business is often the first to market with new products and services.	.72	.65
• Competitors in this market recognize us as leaders in innovation.	.70	.64

Other Scales

Resource availability (Atuahene-Gima et al., 2005)

- This firm has uncommitted resources that can quickly be used to fund new initiatives.
- This firm has few resources available in the short run to fund its initiatives. (reverse scored)
- We are able to obtain resources at short notice to support new strategic initiatives.
- We have substantial resources at the discretion of management for funding strategic initiatives.

Technological changes (Narver et al., 2004; Atuahene-Gima et al., 2005)

- The technology in our industry is changing rapidly.
- Technological changes provide big opportunities in our industry.
- A large number of new product ideas have been made possible through technological breakthroughs in our industry.

Networking (Hills and Hultman, 2006)

- We use our key industry friends and partners extensively to help us develop and market our products and services.
- Most of our marketing decisions are based on exchanging information with those in our personal and professional network.

Success/Growth (Chen et al., 2007)

- Last year we achieved a higher sales growth than our (direct/indirect) competitors.
- Last year we achieved a higher growth on number of employees than our (direct/indirect) competitors.