Exploring the antecedents of effectiveness and efficiency

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ABSTRACT

Our knowledge of determinants of effectiveness and efficiency of firms continues to expand. However, this knowledge remains quite fragmented and non-cumulative in the service industry. Herein, this study explores the effect of entrepreneurial and financial orientations as two key contributors to performance in the service industry. Data for this study were collected from 182 hotels in Switzerland to examine the effect of a financial strategic orientation and an entrepreneurial strategic orientation on two widely-used standards of business performance – effectiveness and efficiency. We hypothesized that these effects would be more pronounced under certain dynamic environment conditions. Findings provide new insights about the merits of building bridges between the entrepreneurial orientation and financial orientation. Within the context of existing research on strategic management, we discuss the implications of our findings for hotel managers and address the study's limitations and future research directions.

Keywords: *Financial Orientation, Entrepreneurial Orientation, Effectiveness, Efficiency*

INTRODUCTION

Strategic management scholars have given intensive attention to exploring the sources of performance variations among organizations (O'Cass and Ngo, 2007). In the context of performance, within the strategic management domain, strategic planning has emphasized maximization of shareholder wealth with the goal of building effectiveness and efficiency (Soteriades, 2012; Tajeddini, 2011a). Since the role of strategic management is to protect and enhance shareholder wealth, strategic decision-making has centered around determining what

courses of actions are best at achieving the primary strategic goal of financial return (Turner & Spencer, 1997). Management's plans, decisions, and actions are often aimed at benefiting other stakeholders, sometimes at the expenses of stockholders, to produce alternative forms of business success (e.g., customer loyalty, satisfaction, staff retention, market share). However, these other strategic goals tend to be secondary to financial performance goals given management's ultimate responsibility to increase stockholders' wealth (Turner & Spencer, 1997).

Financial orientation is a strategic management approach to decision-making with emphasis on financial performance measured in terms of profitability, and "bottom-line" performance in the short term. The basic thrust of a financially-oriented strategy is to focus on financial ratios and other measures (Masterson & Pickton, 2004) to reduce costs, and to provide an adequate return on the stockholders' equity (Beatty, 1988). Thus, firms are "seeking ways to minimize overhead costs, to eliminate intermediate production steps, to reduce transaction and other 'friction' costs, and to optimize business processes across functional and organizational boundaries" (Treacy & Wiersma, 1993, p. 85).

An alternative approach to strategic decision-making, referred to in the strategic management literature as entrepreneurial orientation, emphasizes goals and performance measures that are long-term and "strategically" driven rather than financially driven (Lumpkin & Dess, 1996; Dess, Lumpkin & Covin, 1997). A firm with an entrepreneurial orientation (EO)"…engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch…" (Miller, 1983: 771). The ability to sustain competitive advantage in the long term depends upon whether competitors can emulate or overcome this advantage and deliver something of value to the marketplace (Ahmed and Rafiq, 1992).

Over the years a wealth of research suggests that various orientations imperative aimed at successfully enhancing business performance in the manufacturing industries (Tajeddini, 2010). However, in recent years, we witness the economies of developed countries substantially shifting from production to services dominated (Palmer, 2001). Despite the fact that services are among the fastest growing sector in emerging, transitional, and developed countries (Tajeddini, 2011b), and service sector has become an extremely large part of the modern economy (Oldenboom & Abratt, 2000), empirical work related to service organizations is still quite scarce particularly in entrepreneurship research (Kraus, 2013; Rigtering, Kraus, Jensen, & Eggers, 2014). Building on previous strategic management studies, we propose that neither an entrepreneurial orientation nor a financial orientation alone is sufficient to achieve superior performance under varied market conditions. In this study, we examine the effect of strategic orientation (financial versus entrepreneurial) on hotel business performance in terms of "effectiveness" and "efficiency". To gain greater insights, we also investigate the role of environmental characteristics in moderating the relationship between strategic orientation and performance. We address specifically to what extent hotels are able to strike a balance between a financial orientation and an entrepreneurial orientation to achieve superior performance and what environmental factors moderate the effect of strategic orientation on performance. Using data from 182 hotels in Switzerland, we apply various statistical techniques to assess the impact of strategic orientation on effectiveness and efficiency.

BACKGROUND

Entrepreneurial orientation

Entrepreneurship is regarded as a context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities. Lumpkin and Dess (1996) conceptualized "entrepreneurial strategy-making" as an *entrepreneurial orientation* which refers to an organizational decision-making proclivity supporting entrepreneurial activities. As distinctive type of strategic orientation, entrepreneurial orientation captures the organizational processes, methods, and styles that firms use to develop and implement their strategic decisions (Li & Li, 2009).

A number of management scholars have attempted to define the construct of *entrepreneurial orientation* and explore its application to strategy-making and business performance. In companies where an entrepreneurial orientation dominates, the strategic leaders and the culture together generate a strong impetus to innovate, take risks, and aggressively pursue new venture opportunities (Dess & Lumpkin 2005). Risk-averse firms will follow a slow, incremental process, whereas risk-taking firms will move rapidly to acquire and assimilate as much new external knowledge as possible to exploit previously unnoticed opportunities (Sapienza, De Clercq, & Sandberg, 2005). Such firms usually develop values and norms that favor innovation, proactiveness, and risk-taking (Sapienza et al., 2005).

In many high tech industries, competition is constant, fierce and characterized by only temporary advantage, fueled by the ease with which rivals can imitate and distribute new products and services (McAfee & Brynjolfsson, 2007). Such environmental conditions place intense demands on organizations to actively interpret opportunities and threats when making key strategic decisions (Dess *et al*., 1997). Previous studies have investigated antecedents affecting entrepreneurial orientation. The existing literature has examined determinants on such

antecedents as top management team conflict (Li & Li, 2009), economic systems (Roberts & Zhou, 2000) and environmental factors (Dess *et al*., 1997)

Entrepreneurial orientation and business performance

Entrepreneurial orientation is regarded as a critical organizational process that contributes to firm survival and performance (e.g., Dimitratos & Plakoyiannaki, 2003; Hitt *et al*., 2001). It entails aspects of new entry and especially how new entry is undertaken (Lumpkin & Dess, 1996). A distinguishing feature of an entrepreneurial orientation is the combining of existing resources in new ways to develop and commercialize new products, move into new markets, and/or service new customers (Hitt *et al*., 2001).

High levels of performance achieved by firms with an entrepreneurial culture are the result of their ability to learn and to focus on markets (Hult, Snow & Kandemir, 2003) which at the same time possessing flexible, non-bureaucratic structural attributes (Jogaratnam & Tse, 2006). When a firm decides to enter a market, beat the competition, and outperform its rivals, it formulates its strategy based on a strong offensive posture directed at overcoming competitor advantages (Tajeddini & Mueller, 2009; 2012).

Research shows that the firm's entrepreneurial orientation is positively related to performance (Zahra & Covin 1995; Wiklund & Shepherd, 2005), although the findings are not direct (e.g. Slater & Narver 2000). Some scholars suggest that the relationship between entrepreneurial orientation and performance is context-dependent (Dess, Lumpkin, & Covin, 1997; Lumpkin & Dess, 1996). Ireland, Hitt, Camp, and Sexton (2001) observe entrepreneurship as a context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities.

Since entrepreneurial orientation promotes the recognition of opportunities for innovations and encourages the search for new methods in innovative activities, we propose that entrepreneurial orientation contributes positively to the hotel's performance in terms of effectiveness and efficiency. Thus, we hypothesize:

H1: *An entrepreneurial orientation leads to higher levels of effectiveness and efficiency.*

Financial orientation and business performance

Many companies today are neither product- nor customer-oriented, but instead rely on management of their financial assets (Doyle & Stern, 2006). They see the task of management as generating the amount of cash that can be produced from a given base (Doyle & Stern, 2006). In normative management, the basic values and attitudes ascribed to a financial orientation are monetary performance and pay-off thinking. In this regard, at the business unit level, goals are liquidity, profit, return on investment, and financial independence. At the corporate level, financial orientation is exemplified by investment and disinvestment strategies in managing a portfolio of business units (Fritz, 1996).

Fritz (1996) notes financial orientation seems closely related to production and cost orientation, thus resulting in one common leadership dimension. However, such an orientation may cause firms to encounter special problems in the formulation of their strategies to improve overall business performance. For example, Rust, Moorman, and Dickson (2002) find that an attentional emphasis on external constituents, such as customers (which they refer to as "*revenue emphasis*") leads to superior performance. However, attentional emphasis on efficiency considerations of internal operations (which they refer to as "*cost emphasis*") is associated with less favorable performance. Also, Peters and Waterman (1982) suggest that poorer performing companies seem to live by the numbers (sales, profits, or costs). But increasingly, firms are

recognizing the benefits of moving away from short-term, narrow objectives towards a more strategic, integrated and holistic management approach (Welford & Gouldson, 1993).

In almost all industries, an entrepreneurial approach to strategy making faces a combination of temporal, technical, and market uncertainty and will not necessary end up with a desirable or successful result. It is necessary and prudent to emphasize financial aspects (i.e., a value priority for achieving profit, increasing sales, and/or minimizing costs), since these are the basic variables of a firm's mission. However, in some companies, one or more of these financial aspects seem to dominate and override all other important values (i.e., profit over people) (Beatty, 1988). More specifically, this orientation strategy may have an impact on entrepreneurial strategies in particular due to deficiencies arising from their limited resources and range of technological competencies (Tidd, Bessant & Pavitt, 1997). For example, Sorescu and Spanjol (2008) note that many executives hold an unwavering belief in innovation as a strategic imperative, counting on innovation to spur growth and yield positive financial returns. However, profitable innovation remains an elusive goal.

In contrast, Freel (2000) found that financial considerations may be an issue with regard to innovation success, but they are unlikely to be pivotal. For example, executives who have chosen to focus on quantity find themselves lamenting their decision: "*There's actually an innovation glut, the real shortage is profits*" (Schrage, 2000, p. 225). Larsen and Lewis (2006) categorized financial factors as barriers to innovation. Miller and Friesen (1982) argue that most major innovations are too costly to be undertaken by organizations that are short of financial capital. They found that financial resources, along with structural, technocratic resources were a determinant of innovation. Therefore, we hypothesize that attentional emphasis on financial orientation leads to high levels of effectiveness and efficiency in the hotel industry.

H2: *Financial orientation leads to high levels of effectiveness and efficiency*.

The Moderating Role of Environmental Dynamism

Structural contingency theory suggests that there is not one optimal strategy for all organizations and posits that organizations in uncertain environments will exhibit different structures and processes of capability to adapt their management abilities to the changing contingencies in the environment (Collis, 1994). Building on this general tenet, the most desirable choice of strategy variables alters according to contingency factors (Donaldson, 1996), and the value of a resource depends on the context within which it is deployed (Lawrence & Lorsch, 1967). Consequently, we expect environmental dynamism to suppress the positive relationship between entrepreneurial orientation and effectiveness and efficiency. Entrepreneurial orientation reflects a predisposition to spot and strategically plug gaps between what the market desires and what the mark currently offers (Hult, Ketchen & Nichols, 2002). Under low levels of dynamism, these gaps are relatively consistent and slow developing, suggesting that entrepreneurial orientation can be effectively targeted at filling the gaps. When dynamism is high, however, the market's desires shift rapidly and unpredictably, leading the gaps that entrepreneurial orientation seeks to fill to be fluid and nebulous (Hult, Ketchen & Arrfelt, 2007). Thus we hypothesize that:

H3: *Environmental dynamism strengthens the positive relationship between entrepreneurial orientation and effectiveness and efficiency.*

Speed of environmental change, changes in customer preferences, a shift in a firm's technological capabilities, diffusion and technical change, and/or new competitors may lead to high dynamism in the environment (Simerly & Li, 2002; Tajeddini & Trueman, in press). Building upon resource based theory (Barney, 1991), Atuahene-Gima, Li, De Luca (2006) contend that environmental variables may pose different threats and opportunities for firms in implementing strategies. For example, Gray (1986) states that while the best strategic plan starts

from an environmental analysis and then works in the unit's ability to respond, budgeting usually proceeds by making incremental adjustments to the previous year's internal departmental budgets.

Previous studies show that environmental dynamism plays an important role in new venture creation (Aldrich, 2000) and is positively related with the risk-taking dimension of entrepreneurial orientation (Luo, 1999). Oktemgil and Greenley (1996) argue that firms may strategically react in response to environmental turbulence or uncertainty. In a qualitative study, Kohli and Jaworski (1990) found that competitive intensity, market turbulence (changes in customer profiles or demands), technological turbulence (technology changes or opportunities) and market growth act as potential moderating influences on the market orientation-performance relationship. However, Slater and Narver (1994) found limited support for the competitive environment as a moderator in the market orientation-performance relationship. Thus, we hypothesize:

H4: *Environmental dynamism enhances the relationship between financial orientation and effectiveness and efficiency.*

METHODS

To test these hypotheses, we conducted a field study using mailed questionnaires to collect our data in a cross-sectional design. This approach was chosen because it allows us to evaluate organizational processes in the settings where the researcher has minimal intrusion (McGrath, 1982). Burgelman (1983) suggests that determining organizational orientations requires gauging the resource allocations that support these activities. However, we were not able to access secondary source data which provided sufficient details to accurately estimate constructs pertaining to different strategic orientations and to reflect the theoretical concepts we are employing. In addition, previous studies (see Covin & Slevin, 1989; Naman & Slevin, 1993)

provide some well-developed, valid and reliable scales for the constructs in the study. Prior research indicates perceptual measures have high correlation with objective measures and facilitate comparisons among firms in different industries (Zahra, 1993, Zahra & Covin, 1993). Thus, we use perceptual measures for the constructs of the study.

Sample and Data Collection

Prior to data collection in 2013, a draft questionnaire was prepared using well-established scales and plus new items drawn from the relevant literature. The sample frame was created by combining a list of 1'100 hotels in Switzerland. This list was purchased from a leading market research/databank company. A pretest of the survey instrument was conducted in order to evaluate new questionnaire items developed for the study. This pretest provided an exploratory analysis to aid in operationalizing constructs that needed further development, such as financial orientation and effectiveness and efficiency, for which a widely recognized set of survey items is not currently available. Hotel general managers and owners were the target group of our study because of their knowledge and experience. We pretested our scale items with five academics and eight general and hotel managers. Subsequently, we performed a pilot study with 30 hotel managers to assess the research design's quality. In this regard, the respondents were asked to evaluate the contents and meaningfulness of each item. Based on the results of this pilot study, some small changes were made, mainly to the instructions to respondents and the need to keep the responses anonymous to secure study participation. We deleted the 30 hotel managers whom we contacted for pre-testing from the master list. We then used the remaining executives (a total of 1'070 hotels) for data collection. In addition, we followed Huber and Power's (1985) and Dillman's (1978) guidelines on how to get quality data from key informants. Dillman's approach is based on a series of specifically timed mailings including an initial mailing along with a cover

letter, a postcard reminder along with a fresh questionnaire sent out two weeks after the initial mailing, and three weeks after the original mail-out, a letter and replacement questionnaire sent to all non-respondents. In some cases, a final attempt is made four weeks after the original mailing. 38 questionnaires were non-deliverable. We obtained 182 usable questionnaires with an effective response rate of 17.6%. We made a series of 30 phone calls to respondents and conducted additional mail surveys to assure key informant quality. The questionnaires were completed by hotel managers. Most respondents were three-star hotels (28.6%). Of the respondents, 48.9% were owners, 38.5% general managers and 12.6% were middle-level managers. Of the 182 respondents, 14.9% were in their positions less than 10 years, 21.9% -10 but less than 15 years, 27.5% -15 but less than 20 years, 21.9% -20 but less than 25 years, and 13.8% more than 25 years. The first 45 respondents (approximately 25%) were compared with the last 45 respondents on independent variables. The results of the independent samples *t* tests showed no significant differences between these two groups with all *p* values being greater than .05, leading us to conclude that the probability of a non-response bias was minimal.

We received more responses from one-, two- and three-star hotels as opposed to the four- and five-star hotels. Since the sample size varies in the number of respondents, it is important for control purposes that the different extension of the samples does not affect the results (Nilsson, 2007). We followed the Tajeddini (2011b)'s suggestion to control the differences in respondent demographics between the samples from different rate of hotels. In so doing, cases from four- and five-star hotel managers (Group A) were randomly selected to resemble the one-, two- and three-star hotel samples (Group B) in terms of the respondent's position and experience. Thereafter, two multiple regression analyses with the same dependent and independent variables as the other analyses were performed. The results of the multiple regression analyses showed

almost the same result as determined from the entire sample. Therefore, it may be concluded that the different sample sizes do not affect the results.

Measures

Entrepreneurial orientation (EO) was measured using the original nine-item EO scale proposed by Covin and Slevin (1989). This measure was based on previous scale development by Khandwalla (1977), Miller and Friesen (1982), and Miller (1983) whose conceptualization of EO included three components of strategic posture: innovation, proactiveness, and risk-taking. Previous researchers operationally defined entrepreneurial orientation as an aggregate measure of three dimensions (Covin & Slevin, 1988; Naman & Slevin, 1993). These comprise the willingness to pursue risky opportunities, taking the chance to fail and taking other business related risks, the willingness to be proactive when competing with other firms, and the willingness to favor change by developing new and unique products, services or processes and embrace innovation in order to obtain competitive advantage (Ferreira & Azevedo, 2008).

This EO scale has been adopted in numerous previous studies in the hospitality industry (see Tajeddini, 2011b, 2014) and has exhibited high levels of reliability and validity in prior research (e.g., Harms, Reschke, Kraus, & Fink, 2010; Lumpkin & Dess, 2001). In the present study, this multidimensional variable reflects top hotel management's behavior in taking strategic decisions and operating management philosophies. The first three items of this scale assess the firm's tendency toward innovation (α=.73); the second three items assess the firm's proactive orientation (α=.85); the third three items assess the firm's risk-taking propensity (α=.79) (Covin & Slevin, 1989).

Financial orientation was measured using common financial ratios related to profitability and productivity. Financial orientation is characterized as a short-term orientation with a one year time horizon. This scale is seen in terms of annual performance in profit, return-on-

investment, return-on-sales and return-on-assets, net profit margin, labor productivity, sales growth and market share. We measured financial orientation (α=.86) with five items. Respondents indicated the degree to which financial values (annual performance, sales growth, cost reduction, net profit margin and ROI) were important and priorities to the firm as goals of corporate decisions using a seven-point Likert scale from 1 = 'Strongly disagree', '5 = neither disagree nor agree' to '7= totally agree'.

Environmental dynamism indicates the perceived frequency of change (e.g., technology, and customer preferences, and competitive action) and turnover in the marketing forces of the external and task environment (Sohi, 1996). Environmental dynamism was measured using two sub-constructs: technology dynamism and market dynamism. Four items of technology dynamism are: the dynamism in technology, magnitude of change, perceived speed, and the variety of new product introductions afforded by the changing technology in the industry. Market dynamism was measured with three items adapted from Jaworski and Kohli (1993) and four items from Miller and Friesen (1982). These items asked respondents to indicate the speed of change associated to customer demand and preferences, entrance of new customers into the industry, frequency of marketplace changes and the rate of obsolescence of products and services (α=.79). These scales have been utilized in prior studies and have shown high levels of reliability and validity (Atuahene-Gima, Li, & De Luca, 2006). The assumption was that respondents would perceive that industry conditions posed opportunities and threats to an innovation project. In response, they would attend to conditions in the entire industry to ensure successful project execution (Atuahene-Gima et al., 2006; Miller 1983; Lumpkin & Dess, 2001).

Business performance

Past research shows that scholars have used two different methods to analyze the association between organizational variables and firm outcome. The first approach underlies collecting hard statistical data and factual figures of performance such as profit, sales, etc. This approach which is based on absolute measures or values of performance either by asking respondents or via secondary sources is called "*objective concept*" (Cronin & Page, 1988; Harris, 2001). The second approach is called a *subjective* approach based upon respondents (e.g., managing director) subjective responses to questions assessing the respective firm's performance relative to that of their competitors (see for example, Appiah-Adu & Ranchhod, 1998; Tajeddini, 2010).

Since subjective measurement is susceptible to respondent bias (Henard & Szymanski, 2001), this approach may over- or under- state the true association between an antecedent and economic performance (Chen, Damanpour & Reilly, 2010). For that reason, objective measures of performance are preferable to subjective measures (Harris, 2001; Ruekert, 1992). However, objective measures are difficult to gather due to firms' unwillingness to divulge financial data information or the lack of interest and time on the part of managers (Haugland, Myrtveit & Nygaard, 2007). It is also difficult to compare the objective measures across companies because of different accounting conventions (Ottum & Moore, 1997) and to obtain high reliable secondary sources from organizations.

Despite these challenges, previous scholars have reported a strong correlation between objective measures and subjective responses (Dawes, 1999; Jaworski & Kohli, 1993). Furthermore, some scholars (e.g., Hooley et al., 1999; Gonzalez-Benito & Gonzalez-Benito, 2005) argue that the subjective approach facilitates the measurement of complex dimensions of performance, such as brand equity or customer satisfaction on the one hand and also facilitates

cross-sectional analysis through sectors and markets because performance can be quantified in comparison to objectives or competitors. For this study, two subjective dimensions were used to evaluate hotel performance: effectiveness and efficiency (Tajeddini, 2011a). Hotel effectiveness was measured in terms of profit growth achievement, sales growth achievement and market share growth achievement, while hotel efficiency was measured in terms of profitability achievement, return-on-investments (ROI) achievement, return-on-sales (ROS), and return-on-assets (ROA) achievement (Auh & Menguc, 2005; Tajeddini, Elg & Trueman, 2013). Each outcome item is phrased so that respondents evaluated these aspects of business performance over the last 3 years relative to their business unit's primary competitors' (1—much worse than my competitors; 7—much better than my competitors). This scale reflects the extent to which a hotel practices as a result of the level of exposure to business philosophy (Tajeddini & Trueman, 2008a,b). In line with Matsuno, Mentzer, and Özsomer (2002), Tajeddini (2010) argues that objective (i.e., certifiable by a third-party) relative performance measures were virtually impossible to obtain at the business unit level, and also subjective measures have been shown to be correlated to objective measures of performance. By using factor analysis, two distinct factors: '*hotel effectiveness*' and '*hotel efficiency*' were found to have eigenvalues greater than unity (see Table 1). After Exploratory Factor Analysis (EFA), a confirmatory factor analysis was used to validate the scales (χ_2=41.18, df=14, NFI=.97, TLI=.97, GFI=.96, CFI=.98, IFI=.98) with adequate validity and reliability for effectiveness (α=.85) and efficiency (α=.92) showing appropriate measures for small independent retailers. The CR and AVE of effectiveness (CR=.87 and AVE=76%) and efficiency (CR=.84 and AVE=68%) were examined and the results show that have exceeded their threshold levels. All item loadings ranging from 0.73 to 0.96 are significant at the 5% significance level, indicating convergent validity.

Table 1 here

Control variables

We utilize control variables to separate the effect of other factors which underpin the level of hotel creation activities and might influence a hotel's performance. For this study we include hotel type, hotel size, hotel ownership and hotel age (see Tajeddini, 2011b). Hotel type is a dummy variable such that 1 indicates a hotel above three stars and 0 represents one below three stars. Hotel age was measured by the number of years the hotel had been in operation. We used the logarithm of the number of employees as an indicator of hotel size. Hotel ownership was included as a dummy variable to control for potential variations between foreign chain (coded as 1) and domestic hotels (coded as 0).

Construct validation results

We employed confirmatory factor analysis (CFA) using AMOS to test the construct validity of the measures utilized. Post data collection, a purification process was applied to evaluate the reliability of measures in terms of unidimensionality, discriminant validity, and convergent validity. Following Venkatraman, 1989, two sets of statistics were used to verify unidimensionality and convergent validity: (a) the significance of the factor loadings (z-values>± 1.96 and p<0.05), that is the estimated correlation between a particular item and the latent construct it represents and, (b) the overall acceptability of the measurement model in terms of its fit to the data using a χ^2 test and adjunct fit indexes (CFI and Robust CFI), to exceed the cut-off point of 0.90. Table 1 reports results in support of unidimensionality and convergent

validity of the entrepreneurial orientation, financial orientation and performance (effectiveness and efficiency) measures respectively.

The reliability estimates were assessed for several of the multi-item constructs, where an overall score of Cronbach's coefficient alpha for each construct reflected a high level of reliability with a value greater than the suggested cut-off level of 0.7 (Nunnally & Bernstein, 1994). Composite reliabilities[1](CR) were used to assess the degree of consistency between multiple measurements of a construct (Hair, Black, Babin & Anderson, 2005). Average variance extracted[2] (AVE) was used to measure the convergent validity (Anderson & Gerbing, 1988). The CR of financial orientation construct was 0.87, exceeding 0.70, which is the acceptable level suggested by Bagozzi and Yi (1988). The value for average variance extracted of financial orientation construct was 0.57, which also exceeds the threshold level (0.50) suggested by Bagozzi, Yi, and Phillips (1991). All item loadings ranging from 0.68 to 0.81 are significant at the 5% significance level, indicating convergent validity (Bagozzi *et al*., 1991). The CR of entrepreneurial orientation construct entailing of three dimensions was assessed. The CRs of proactiveness (range from 0.73 to 0.74), risk-taking (range from 0.46 to 0.65) and innovativeness (range from 0.57 to 0.68) were 0.76, 0.87, and 0.86 respectively, showing the acceptable level (Bagozzi & Yi, 1988). The value for average variances extracted from the dimensions proactiveness, risk taking and proactiveness were 0.54, 0.58, and 0.66 respectively, which also exceeds the threshold level (0.50) (Bagozzi, Yi, & Phillips, 1991). Likewise, the CRs of effectiveness and efficiency are 0.86 and 0.83 respectively. The value for average variances of effectiveness and efficiency are 0.74 and 0.67 respectively. To test the convergent validity of the scales, we employed two techniques: First,

[1] $CR\eta = \frac{(\Sigma\lambda\gamma i)^2}{(\Sigma\lambda\gamma i)^2+(\Sigma\varepsilon i)^2}$ where CR = composite reliability for scale η; λ_{yi} = standardized loading for scale item γ_i, and ε_i = measurement error for scale item γ_i (FornellandLarcker, 1981).

[2] $AVE = V_\eta = \frac{\Sigma\lambda\gamma i^2}{\Sigma\lambda\gamma i^2+\Sigma\varepsilon i}$ where V_η = average variance extracted for η; λ_{yi} = standardized loading for scale item γ_i, and ε_i = measurement error for scale item γ_i (Anderson andGerbing 1988).

we note that all the estimated coefficients of all the indicators are significant (t>2.0) (Gerbing & Anderson, 1988) and second, all the estimates for composite reliability (CR) are greater than .70, and the AVE are greater than .50 (Bagozzi & Yi, 1988) (Table 1).

Discriminant validity

Following the reliability analysis, we established discriminant validity by two independent methods. First, we measure the square of the intercorrelations between any two constructs and find they are less than the AVE estimates of the same constructs for all pairs (Fornell & Larcker, 1981). We calculated the shared variance between each pair of constructs and verified that it was lower than the variances extracted for the involved constructs (Fornell & Larcker, 1981). Shared variance was calculated as

$$\gamma^2 = 1 - \psi$$

where γ^2= shared variance between constructs, and with the diagonal element of ψindicating the amount of unexplained variance. As shown in Table 2, the average variances extracted were above 50 percent for all constructs. The shared variances between pairs of all possible scale combinations indicated that the average variances extracted were higher than the associated shared variance in all cases (Table 2). Second, we assessed whether the correlation between any two constructs is different from unity (+1 or −1) (i.e., perfect correlation) (Bagozzi, Yi, & Phillips, 1991) and also computes 95% confidence intervals for correlations between any two constructs, using the following formula (Cohen, Cohen, West, & Aiken, 2003):

CI (95%) = $R_z \pm 1.96 \times (SE_z)$,

Where

CI confidence interval (95%),
R_z z transformation of the correlation between any two constructs,
SE_z $1/(n+3)^{1/2}$ and

n sample size

We found the resulting confidence intervals do not include unity (+1 or −1), in support of the discriminant validity between any two constructs. Table 2 provides the means, standard deviations, shared variances, average variance extracted and intercorrelations for the constructs.

Table 2 here

In addition, Variance inflation factors (VIFs) were calculated to examine the likelihood effect of multicollinearity in each model testing. The VIF values associated with the mean-centered predictors ranged from 1.02 to 5.07 (see Table 3), all of which were substantially below the common cutoff threshold of 10 (Hair, Black, Babin, & Anderson, 2010), indicating that multicollinearity was not a problem in this study and it does not affect the weights of the controls or hypothesized variables (Mason & Perreault, 1991).

Common method variance

Because of the Campbell and Fiske (1959) concern about self-reported measures and data for each variable are from a single respondent, a common method bias may occur due to influences such as self-desirability or ambiguity leading to some inflated estimates of hypothesized relationships and misleading interpretations of findings (Podsakoff *et al.,* 2003). Therefore, we employed Harman's one-factor test within a CFA setting (Podsakoff & Organ, 1986). This resulted in six factors with eigenvalues greater than 1.0, which accounted for 61.36 % of the total variance; with Factor 1 representing 21.54 % of this variance. Because a single factor did not emerge, and Factor 1 did not explain most of the variance, a common method bias is unlikely (Podsakoff & Organ, 1986). In addition, a one-factor model was provided to compare with the

measurement model, yielding a χ_2 = 846.27 with 259 degrees of freedom, and indicates that common method variance is not a serious threat.

RESULTS

Previous studies (Hult, Hurley & Knight, 2004; Hult & Ketchen, 2001; Tajeddini, 2010) provide theoretical foundation and empirical justification to create a summated index of entrepreneurial orientation based on the three dimensions of risk taking, innovativeness and proactiveness, with each construct weighted at one-third. Likewise, within the regression testing, environmental dynamism (Hult *et al.,* 2007) and financial orientation were created as a summated index.

We established two separate series of 5 regression models, evaluated the change in the amount of variance explained (ΔR^2) to test the interaction effects (Cohen *et al.,* 2003), and conducted overall and incremental F tests of statistical significance. We entered the control variables into the regression equation in step 1, two predictors in step 2 and 3, three two-way interactions in step 3, 4 and 5. Table 3 shows the results of the regression analyses. As Table 3 shows entrepreneurial orientation (EO) had a positive and significant main effect on effectiveness (β=.70, $p < .001$) and efficiency (β=.48, $p < .001$). These findings partially support Hypothesis 1, corresponds to the findings of some empirical studies (e.g., Tajeddini, 2011a, Tajeddini *et al.,* 2013; Wiklund, 1999) and validates Choi, Lévesque, and Shepherd's (2008) conceptual argument that EO can have positive economic value for firms. These findings reinforce the argument that if hotels depart from established practices and entertain new ideas and experimentation, beat competitors to new market opportunities and are open to risk in exploring new services and markets, they will outperform their competitors (Covin & Slevin,1991; Clercq, Dimov & Thongpapanl, 2010). In addition, as Table 2 shows, financial orientation (FO) had a positive and significant main effect on effectiveness (β=.50, $p < .001$)

and effectiveness (β=.30, p < .001). These findings partially support Hypothesis 2, indicating that financial orientation (FO) leads to high performance by both effectiveness and efficiency.

Table 3 here

Moderating role of environmental dynamism

The tests of Hypothesis 3 indicates that environmental dynamism (ED) moderates the effects of financial orientation on effectiveness (β=.59, p<.001) and efficiency (β=.30, p<.001) supporting H3 (Table 4). The tests of Hypothesis 4 indicates that environmental dynamism (ED) moderates partially entrepreneurial orientation (EO) (β=.22, p=.057) albeit weakly in effectiveness. However, the results also show that environmental dynamism (ED) does not moderate entrepreneurial orientation (EO) and efficiency although one caution is that the results indicating negative weak relationship (β= -.075, ns), rejecting H4 (Table 4). Results suggest that a firm which devotes a great deal of effort on developing an entrepreneurial culture focused on innovativeness, risk taking and proactiveness is likely to gain positive advantages in stable and constant environments, but will fall behind when dynamic environment is strong (cf. Hult *et al.,* 2007).

Table 4 here

Discussion and Conclusions

We set out to address the question of how two very different approaches to strategic decision-making, namely entrepreneurial and financial orientation, affect effectiveness and efficiency in the hotel industry. We hypothesized that these effects would be more pronounced under certain dynamic environment conditions. Despite strong theoretical arguments, the extant

literature has not explicitly tested these hypotheses for the firms operating in services industries. We theorized that entrepreneurial orientation and financial orientation independently are critical for the success of the hotels. The results of our study provide insights about the effects of financial orientation on business performance (effectiveness and efficiency) and more generally, the merits of building bridges between the entrepreneurial orientation and financial orientation.

First, the study shows that an entrepreneurial orientation positively influences performance in terms of both effectiveness and efficiency to build value for the company and its shareholders. In our sample, the results indicate that hotels can influence performance outcomes by prioritizing entrepreneurial activities. This linkage is generally supported by the empirical data where a high level of entrepreneurial orientation is associated with effectiveness as measured by profit growth goal achievement, sales growth goal achievement, market share growth goal achievement; and efficiency as measured by profitability goal achievement, return-on-investment goal achievement, return-on-sales goal achievement and return-on-assets. Our findings also provide useful insights into how the dimensions of entrepreneurial orientation correlate (vary) independently (rather than co-vary) with performance of hotels (Table 3). Similar to Wiklund and Shepherd (2003) who found a strong correlation (r=.34) between entrepreneurial orientation and performance. We also found a strong and positive correlation between each dimension of entrepreneurial orientation and both measures of performance. These findings imply that investment decisions resulting from an entrepreneurial orientation may be beneficial given their positive relationship between entrepreneurial orientation and performance (cf. Wiklund, 1999). In particular, the results indicate that despite an established and structured industrial environment, hotels can achieve both effectiveness and efficiency with an entrepreneurial orientation (cf. Swierczek & Quang, 2004). Moreover, the findings generated

from of the Swiss hotel operation reinforce the possible generalization of the EO–performance relationship in the service firms (cf. Kraus, 2013).

Second, the current study provides useful insights into understanding and measuring the construct of financial orientation as a criterion of hotel performance. Our results were generally supportive of the role financial orientation plays in explaining the effectiveness and efficiency. Contrary to the argument of Hayes and Abernathy (1980) that some companies are short-sighted in their financial orientation and have lower performance as a result, our findings show that financial orientation can positively affect both effectiveness and efficiency. One reason may be that long-term efforts such as building customer relationships, monitoring competition, and/or experimenting with innovations may be sacrificed in favor of investments or actions that can directly impact financial performance each quarter (Selnes, Jaworski & Kohli, 1996). Hotels with a financial orientation can achieve both effectiveness and efficiency. Although managers with the financial orientation approach are less supportive of innovations, willingness to take calculated risks, and accepting of occasional product failures as being a natural part of business, we found that a financial orientation may be a perquisite of both effectiveness and efficiency. Third, with respect to the environmental context, contradictory to our earlier assumption, we found that while financial orientation had insignificant impact on business performance, the interaction of this orientation with dynamic environments has a positive and significant impact on effectiveness and efficiency.

Additionally, while entrepreneurial orientation had a positive and significant impact on both effectiveness and efficiency, the interaction of this orientation with dynamic environments has little effect on effectiveness and even a negative effect on efficiency. This is in contradiction with previous studies which found entrepreneurial firms perform well in dynamic environments (McDougall, Covin, Robinson, & Herron, 1994).

We speculate that while perhaps being proactive (a response to opportunities) is an appropriate mode for hotels in dynamic environments or in growth-stage industries, competitive aggressiveness (a response to threats) is an appropriate mode for hotels in hostile environments or in mature industries (Lumpkin & Dess, 2001; Dess et al., 1997). Moreover, Zammuto (1988) predicts low performance in stable environments because the slow pace of change in these settings rewards efficiently exploiting extant opportunities, not aggressiveness. This also contradicts the proposition (see Helfat & Peteraf, 2009) that while managers frequently face the challenge of effectively organizing and strategizing in dynamic environments, they are able to create and recombine resources in novel ways.

Practical implications

We have noticed that many economies are becoming increasingly service oriented. Therefore, the practical implications of our results for service organizations deserve some comments. Numerous management theorists have observed that the nature of entrepreneurship as a key determinant of renewal activities enhancing a firm's ability to compete and take risks. From empirical evidence, we found that hotel managers must foster an entrepreneurial spirit and culture if they intend to improve their efficiency and effectiveness. In this regard, managers are advised to stimulate entrepreneurial spirit and thinking among their employees. At the same time, they should not ignore to pay close attention to the short financial return to be able to survive and satisfy the current needs and wants of the organizations. This research also indicates that financial orientation is a key determinant of both efficiency and effectives in the hotel industry. Consequently, hotel managers are encouraged to manage the balance between short financial return and future insights.

Research limitation and the future research section

Our study should be viewed as an important first step in the examination of the role of financial and entrepreneurial orientation on hotel performance and offers several exciting possibilities for future studies. First, it is important to note that readers should be cautious when generalization the results to different cultural contexts. This research stream would benefit from broader empirical support using different cultures and countries. Our research was empirically supported in a specific context of Switzerland. However, the role of dynamism is relevant to many other manufacturing and service firms as well as industries across the globe. Second, a cross-sectional approach was used in this study with subjective measures. Future research should focus on triangulating perceptual measures with other measures such as expert opinion and secondary data as well as using a longitudinal temporal base to assess the impact of the variables examined herein across time. Finally, we assessed performance by effectiveness and efficiency, while there is evidence that performance is a much broader construct that includes extra-role dimensions (Avlonitis & Panagopoulos, 2005). Future studies might use objective measures for firm performance to strengthen the research design. Finally, since financial efficiency might be achieved through effectiveness in the long run, further research may consider replicating this study using a multi-level approach to help establish the validity of theory being put forward in this study.

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Tables 1: Unidimensionality and convergent validity tests

Constructs	*Indicator (parameter)*	*t-value*	*Factor loadings*
Entrepreneurial	***Proactiveness***	*α=0.85, CR= 0.76, AVE=0.54*	
	R&D, technological, leadership, and innovations	4.43	.73
	New lines of products or services	4.80	.71
	Changes in product or service	4.35	.74[a]
	Innovativeness	*α=0.73, CR= 0.87, AVE=0.58*	
	Initiates actions	13.39	.57
	First to introduce new products/services,	10.30	.62

Orientation	Adopt a very competitive, 'undo the-competitors' posture	11.77	.68[a]
	Risk-taking	*α=0.79, CR= 0.86, AVE=0.66*	
	Proclivity for high-risk projects	12.38	.65
	Bold, wide-ranging	9.70	.47
	Aggressive posture	10.29	.46[a]
Model summary statistics: $\chi^2_{(71)}$ = 117.271, χ^2/df=1.652, p-value=0.17, robust CFI = .977, RMSEA = .048, Delta2=.977, RMR=0.020 [a]Loading fixed to 1 for identification purposes.			
Constructs	*Indicator (parameter)*	*t-value*	*Factor loadings*
Financial Orientation	***Financial orientation****: As a goal of corporate decisions:*	*α=0.86, CR= 0.87 AVE=0.57*	
	FO1: Our priority is to enhance our annual performance in profit.	20.01	.68
	FO2: Our priority is to increase our sales growth and return on sales.	23.48	.75
	FO3: Our priority is to reduce our cost.	19.09	.80
	FO4: Our priority is to improve our net profit margin.	17.47	.81
	FO5: Our priority is to improve our return-on-investment.	14.71	.76[a]
Model summary statistics: $\chi^2_{(5)}$ = 17.153, χ^2/df =3.430, p-value=.004, robust CFI = .981, Delta2=.981, [a]Loading fixed to 1 for identification purposes.			
Constructs	*Indicator (parameter)*	*t-value*	*Factor loadings*
Effectiveness	*Effectiveness*	*α=.85, CR=0.86, AVE=0.74*	
	Profit growth goal achievement	11.96	.73
	Sales growth goal achievement	8.64	.83
	Market share growth goal achievement	8.12	.75[a]
Efficiency	*Efficiency*	*α=.92, CR=0.83, AVE= 0.67*	
	Profitability goal achievement	16.35	.96
	Return-on-investment goal achievement	11.50	.88
	Return-on-sales goal achievement	9.97	.86
	Return-on-assets	6.61	.87[a]
Model summary statistics: $\chi^2_{(14)}$ = 41.18, χ^2/df=2.94, p-value=0.00, robust CFI = 0.98, GFI= 0.96, RMSEA = 0.08, Delta2=0.98, RMR=0.02 *[a]Loading fixed to 1 for identification purposes.* *CR=Composite reliabilities* *AVE= average variance extracted*			

Table 2. Means, standard deviations, correlations, and shared variances (n =182)[a]

	PR	RT	IN	FO	ED	EFEC	EFCI	AGE	OWN	SIZE	TYPE
Proactiveness (PR)	**.54**	.12	.31	.05	.23	.35	.16				
Risk taking (RT)	.36**	**.66**	.12	.21	.37	.41	.09				
Innovativeness (IN)	.55**	.35**	**.58**	.07	.35	.17	.16				
Financial orientation (FO)	.23**	.46**	.27**	**.57**	.13	.24	.08				
Environmental dynamism (ED)	.47**	.61**	.59**	.36**	**.59**	.31	.11				
Effectiveness (EFEC)	.59**	.64**	.41**	.50**	.56**	**.74**	.09				
Efficiency (EFCI)	.39**	.31**	.40**	.29**	.34**	.31**	**.67**				
Hotel age (AGE)	-.04	-.12	-.07	-.07	-.12	-.09	-.00	---			
Hotel ownership (OWN)	.01	.07	.12	.08	.05	-.00	-.05	.07	---		
Hotel size (SIZE)	-.16*	.07	-.05	.18*	.03	.02	-.02	-.07	-.11	---	
Hotel type (TYPE)	-.17*	-.12	-.01	.03	-.05	-.12	-.09	-.12	-.04	.37**	---
Mean	4.29	4.83	4.73	5.33	4.26	3.86	4.74	45.04	.13	1.96	.54
Standard deviation (SD)	.90	.82	.83	.79	.91	.81	.67	24.09	.33	.54	.49

$*p < .05$, $**p < .01$

[a] The correlations are included in the lower triangle of the matrix.
Shared variances are included in the upper triangle of the matrix.
Average variances extracted are in the middle of the matrix

Table 3. Results of hierarchical moderated regression analysis (Effectiveness and Efficiency as the criterion variable) (n=182)

Predictor variables	Effectiveness (EFEC)		Efficiency (EFCI)		*VIF*	*Findings*
	Three-step hierarchical Regression analysis		Three-step hierarchical Regression analysis			
	β	*t*	*β*	*t*		
Step 1: Control variables						
Hotel age (AGE)	-.10	-1.39	-.01	-.15	1.02	
Hotel Industry (INDUSTRY)	-.04	-.66	.02	.31	1.03	
Hotel ownership (OWN)	.01	.15	-.05	-.69	1.03	
Hotel size (SIZE)	.07	.96	.01	.14	1.17	
Hotel type (TYPE)	-.16	-2.05*	-.10	-1.27	1.16	
R^2	.03		.01			
Model fit	F= 1.25		F=.44			
Adjusted R^2	.00		-.01			
Step 2: Main effects						
Hotel age (AGE)	-.01	-.28	.048	.73	1.04	
Hotel Industry (INDUSTRY)	-.01	-.26	.047	.72	1.03	
Hotel ownership (OWN)	-.05	-.94	-.094	-1.42	1.04	
Hotel size (SIZE)	.07	1.30	.010	.14	1.17	
Hotel type (TYPE)	-.03	-.63	-.015	-.21	1.19	
Entrepreneurial orientation (EO)	.60	13.15***	.484	7.33***	1.05	H1 supported
R^2	.50		.23			
Model fit	F=30.84***		F=9.44***			
Adjusted R^2	.48		.21			
ΔR^2	. 477		.06			
Step 3: Main effects						
Hotel age (AGE)	-.06	-1.05	.01	.14	1.04	
Hotel Industry (INDUSTRY)	-.05	-.78	.02	.31	1.03	
Hotel ownership (OWN)	-.04	-.62	-.08	-1.16	1.04	
Hotel size (SIZE)	-.02	-.42	-.05	-.67	1.17	
Hotel type (TYPE)	-.13	-2.02	-.08	-1.14	1.19	
Financial orientation (FO)	.50	7.87***	.30	4.31***	1.05	H2 supported
R^2	.27		.10			
Model fit	F=11.73***		F=3.50***			
Adjusted R^2	.25		.07			
ΔR^2	-.22					

***p < .01, ***p < .001,*

ΔR^2 means the increase in R^2 from the model to the previous model.

[a]None of the F statistics was significant when compared to the F critical (3,404) value of 8.53 at α = .05.

Table 4. Results of hierarchical moderated regression analysis ((Effectiveness and Efficiency as the criterion variable) (n=182)

Predictor variables	Effectiveness (EFEC)		Efficiency (EFCI)		**VIF**	**Findings**
	Three-step hierarchical Regression analysis		Three-step hierarchical Regression analysis			
	β	*t*	*β*	*t*		
Step 4: Interactions						
Hotel age (AGE)	-.02	-.44	.03	.45	1.04	
Hotel Industry (INDUSTRY)	-.02	-.37	.03	.54	1.03	
Hotel ownership (OWN)	-.05	-.93	-.09	-1.28	1.04	
Hotel size (SIZE)	-.01	-.29	-.04	-.61	1.21	
Hotel type (TYPE)	-.11	-1.96	-.07	-1.03	1.17	
Financial orientation (FO)	.07	.92	.08	.83	2.20	
FO × ED	.59	7.20***	.30	3.05***	2.18	H3 supported
R^2	.43		.145			
Model fit	F=20.24***		F=4.46***			
Adjusted R^2	.41		.11			
ΔR^2						
Step 5: Interactions						
Hotel age (AGE)	-.01	-.19	.04	.71	1.04	
Hotel Industry (INDUSTRY)	-.00	-.09	.04	.67	1.04	
Hotel ownership (OWN)	-.05	-.99	-.09	-1.41	1.04	
Hotel size (SIZE)	.06	1.18	.01	.18	1.17	
Hotel type (TYPE)	-.04	-.86	-.01	-.14	1.21	
Entrepreneurial orientation (EO)	.50	4.32***	.55	3.79***	5.07	
EO × ED	.22	1.91†	-.07	-.51	5.00	H4 rejected
R^2	.51		.23			
Model fit	F=27.35***		F=8.09***			
Adjusted R^2	.49		.20			
ΔR^2						

*†p=.057, ***p < .001,*
ΔR^2 means the increase in R^2 from the model to the previous model.