Int Entrep Manag J (2012) 8:355–372
DOI 10.1007/s11365-011-0179-y

Corporate entrepreneurship in Switzerland: evidence from a case study of Swiss watch manufacturers

Kayhan Tajeddini · Stephen L. Mueller

Published online: 22 March 2011

Abstract The purpose of this study is to examine the extent to which Swiss companies engage in corporate entrepreneurship. To that end, a case study was undertaken to better understand how corporate entrepreneurship is practiced in the watch-making industry. Using a stratified sampling method, 18 corporate-level managers of Swiss watch manufacturers were interviewed over a 5-month period to determine their perception of their firm's entrepreneurial orientation in terms of proactiveness, risk taking, innovativeness, competitive aggressiveness, and autonomy. Findings were mixed. As anticipated, given the conservative nature of Swiss culture and tradition, the executives reflected corporate values that inhibit proactiveness, risk-taking, and competitive aggressiveness. On the positive side, these executives espoused values that support a corporate culture of innovativeness and autonomy reflecting a resurgence of innovativeness in an otherwise mature industry.

Keywords Corporate entrepreneurship · Entrepreneurial orientation · Qualitative research · Case study · Swiss watch industry

Introduction

Beginning with Schumpeter (1949), a consensus among scholars has emerged which holds that entrepreneurship is a key determinant of firm, regional, and national economic performance (Gupta et al. 2004; Herbig et al. 1994) providing millions of

K. Tajeddini (✉)
Department of Business Administration, School of Economics and Management, Lund University, Lund, Sweden
e-mail: Kayhan@tajeddini.ch

K. Tajeddini
School of Management, Ritsumeikan Asia Pacific University, Beppu, Japan

S. L. Mueller
Northern Kentucky University, Haile/US Bank College of Business, Highland Heights, KY 41009, USA
e-mail: muellers1@nku.edu

job opportunities, offering a variety of consumer goods and services, and increasing national prosperity and competitiveness in general (Zahra 1999).

Entrepreneurship research has identified two main sources of entrepreneurial activity. The first source is associated with individuals who exploit a previously unnoticed opportunity (Pavlovich and Corner 2006) and become the central actor in the creation of new ventures (Tajeddini and Mueller 2009). The second source of entrepreneurial activity is associated with renewal of existing large companies. Commonly referred to as *corporate entrepreneurship*, it is the company and not the individual who is the central actor (Beer et al. 1990). Corporate entrepreneurial activities include the creation of a new business within established firms to improve organizational profitability and enhance a firm's competitive position (Barringer and Bluedorn 1999; Miller 1983; Zahra 1991) or the strategic renewal of existing business (Sathe 1989; Zahra 1991).

Entrepreneurship has been studied extensively in a variety of transitional and developing countries under different social and cultural settings (Pang 1999; Roland 2004; Taylor 1987). However, excepting the work of Tajeddini and Mueller (2009), there has been no systematic study of entrepreneurship in Western Europe generally and the continental non-English speaking countries such as Switzerland in particular.

While Swiss watch manufacturers have a longstanding reputation for precision, reliability, and design, they have not always led the industry in innovation (Tajeddini and Trueman 2008). Nicolas G. Hayek, entrepreneur and acclaimed "savior" of the Swiss watch industry, believes that a lack of entrepreneurs with courage, imagination, and vision plunged the Swiss watch industry into a crisis in the early 1980s (Eckert 2005).

Our knowledge of corporate entrepreneurship has been gained primarily through a traditional hypothetico-deductive approach using mail questionnaires, surveys or brief interviews in U.S. settings. To better understand the nuances of entrepreneurship in a non-U.S. setting requires case study research based on qualitative methods. Even though a quantitative approach is good at providing data to establish credibility in the field, it is weak at revealing the story behind the numbers (Milliken 2001; Cooper and Evans 2006).

This study seeks to fill a gap in our understanding of corporate entrepreneurship in a non-U.S. setting by exploring the values and aspirations of top executives in the Swiss watch industry. This study contributes to research on corporate entrepreneurship in several ways. First, we review the empirical literature to establish a theoretical framework for defining and analyzing corporate entrepreneurship. Second, we establish an accurate, systematic record of corporate leaders' knowledge, experience, and vision related to corporate strategy and innovation. Finally, we utilize the case study method to synthesize findings across various aspects of corporate entrepreneurship.

Corporate entrepreneurship

Corporate entrepreneurship refers to a process of renewal activities that enhance a firm's ability to compete and take risks (Miller 1983; Sathe 1989; Zahra et al. 2000). Renewal activities are initiated by top management and include redefinition of the business concept, reorganization, and the introduction of system-wide changes for innovation (Ferreira 2001, 2002).

Burgelman (1984: 154) defines corporate entrepreneurship as a process of "extending the firm's domain of competence and corresponding opportunity set through internally generated new resource combinations". New resource combinations reflect the effort to extend an organization's competitive advantage through internally generated innovations that significantly alter the balance of competition within an industry or create entirely new industries (Ferreira 2001, 2002).

Corporate entrepreneurship has typically been characterized as a multidimensional construct involving the firm's actions relating to innovativeness, risk-taking, and proactiveness (Covin and Slevin 1989; Dickson 1992; Jones and Butler 1992; Miller 1983; Morris and Paul 1987; Slater and Narver 2000; Smart and Conant 1994). Within a strategic management framework, Miller (1983) defined an *entrepreneurial firm* 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". In contrast, "…a non-entrepreneurial firm is one that innovates very little, is highly risk averse, and imitates the moves of competitors instead of leading the way…" (Miller 1983: 771).

Building on the work of Miller (1983) and Covin and Slevin (1989), Lumpkin and Dess (1996) introduced the concept of *entrepreneurial orientation*. Entrepreneurial orientation is a firm-level attribute that represents a frame of mind and a perspective about entrepreneurship and innovation reflected in a firm's ongoing processes and corporate culture. In companies where *entrepreneurial orientation* is strong, the strategic leaders and the culture together generate a strong impetus to innovate, take risks, and aggressively pursue new venture opportunities (Dess and Lumpkin 2005). Lumpkin and Dess proposed that entrepreneurial orientation has five dimensions: (1) autonomy; (2) risk-taking; (3) proactiveness; (4) competitive aggressiveness; and (5) innovativeness. While a particular firm's attributes may vary along each dimension, entrepreneurial orientation (and therefore pursuit of corporate entrepreneurship) is considered strong when (taken collectively) these five dimensions permeate the decision-making styles and practices of a firm's management team (Dess and Lumpkin 2005).

We utilize the entrepreneurial orientation framework with its five dimensions proposed by Lumpkin and Dess (1996) to assess the extent to which Swiss watch manufacturers engage in corporate entrepreneurship. A description of each dimension follows.

Proactiveness

Proactiveness involves taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets (Lumpkin and Dess 1996). It entails the attitude and capabilities that allow implementation and control of the new products, services, or processes ahead of competitors (Morris and Paul 1987). This dimension emphasizes first-mover advantage (Lieberman and Montgomery 1988) and a posture of anticipating and acting on future wants and needs in the marketplace (Lumpkin and Dess 1996). Proactiveness consists of an aggressive stance toward competition, focusing on the aggressive implementation and tenacity of tactics to achieve the company's objectives (Knight 1997).

Proactiveness implies a forward-looking, opportunity-seeking perspective and a "propensity for action" characteristic of a market leader that acts in anticipation of future demand or other trends that indicate emerging opportunities (Venkatraman 1989; Chen and Hambrick 1995; Martin and Lumpkin 2003).

Innovativeness

Innovativeness has been identified as one of the essential enduring characteristics of entrepreneurs and the focal point of entrepreneurship (Baden-Fuller 1995; Covin and Slevin 1991; Thomas and Mueller 2000; Tan 2008). It focuses on the search for creative and meaningful solutions to operational problems and needs (Darling et al. 2007).

At the individual level, innovativeness typically reflects a personal characteristic that is relatively stable and enduring across different contexts (de Jong et al. 2003). An entrepreneur is typically characterized as a creative, driven individual who finds "new combinations of [factors] of production" to develop a new product, corner a new market, or design a new technology (Schumpeter 1934). In other words, successful innovation requires an act of will, not of intellect (Schumpeter 1934). In fact, entrepreneurs exploit market opportunity through technical and/or organizational innovation (Tiessen 1997). Carland et al. (1984: 58) find that as opposed to managers or small owners, entrepreneurs are characterized as "innovative behavior".

In terms of corporate entrepreneurship, the literature reflects a diversity of views and approaches as to what actually constitutes innovative activity (McFadzean et al. 2005). However, different definitions include some common characteristics such as creation of new products or new quality, creation of new methods of production, getting into a new market, creating a new source of supply, or creating a new organization or business structure (Gürol and Atsan 2006). Similarly, Damanpour and Wischnevsky (2006:271) defined innovation as "the development and use of new ideas or behaviors in organizations". A new idea could take the form of a new product or service, method of production (technical innovation), or a new organizational structure or administrative system. But for innovation to occur, the ideas and insights as well as the collaboration of experts and managers from different functional areas is needed to trigger innovation and new product development (Miller 1988).

Competitive aggressiveness

The competitive aggressiveness dimension of entrepreneurial orientation refers to a firm's stance in challenging competitors or improving the firm's position relative to other firms through competitive actions (Lumpkin and Dess 1996; Tan 2008). Competitive aggressiveness entails a combative and forceful approach toward rivals through preemptive actions and aggressive responses to attacks (Lumpkin and Dess 2001: 431). Competitive aggressiveness can have both strategic (e.g. offensive, preemptive, first mover) and tactical (marketing) manifestations (Covin and Covin 1990).

Although proactiveness and competitive aggressiveness each embody bold action-oriented positioning (Cooper and Dunkelberg 1986), Lumpkin and Dess (2001) make a distinction between the two dimensions. While being *proactive* (a response to opportunities) is an appropriate mode for firms in dynamic environments or in growth-stage industries, *competitive aggressiveness* (a response to threats) is an appropriate mode for firms in hostile environments or in mature industries (Lumpkin and Dess 2001; Dess et al. 1997).

Risk taking

Several entrepreneurship scholars have documented "*willingness to assume risk*" as one of more salient attributes of entrepreneurs (Begley and Boyd 1987; Brockhaus 1982; Cunningham and Lischeron 1991; Lumpkin and Dess 1996). Koh (1996) defines a person's risk-taking propensity as his or her orientation towards taking chances in uncertain decision-making contexts.

Unlike more conservative firms, entrepreneurial firms innovate boldly while taking considerable risks in their product-market strategies (Miller and Friesen 1982). Although prior studies find empirical support that entrepreneurial orientation is positively correlated with innovation and new product development (Khan and Manopichetwattana 1989; Rothwell 1992; Zhou et al. 2005), the impact of the propensity to risk-taking as a predictor of successful new ventures is not as clear-cut (Birley 1989; Drucker 1985; Schumpeter 1951).

While all business endeavors involve some degree of risk, it is not meaningful to think in terms of "*absolutely no risk*." The range of risk-taking behavior extends from some nominal level of relatively "safe" risks, such as depositing money in a bank or restocking the shelves, to highly risky actions, such as borrowing heavily, investing in unexplored technologies, or bringing new products to new markets (Lumpkin and Dess 1996).

Autonomy

Autonomy is a key dimension of entrepreneurial orientation and refers to the independent action of an individual or team bringing forth an idea or a vision and carrying it through to completion (Lumpkin and Dess 1996). A work environment with high autonomy means that employees are given individual freedom in scheduling activities and deciding how work should be done. They also have more discretion over where, when, and how things are done (Langfred and Moye 2004).

For large established firms, Lumpkin and Dess (1996) see *autonomy* as an environment where actions taken (and decisions made) by managers and employees are free of stifling organizational constraints. Even though factors such as resource availability, actions by competitive rivals, or internal organizational considerations may change the course of new venture initiatives, they are not sufficient to extinguish the autonomous entrepreneurial processes that lead to new entry. Throughout the process, the organizational player remains free to act independently, to make key decisions, and to proceed (Lumpkin and Dess 1996).

From a marketing perspective, companies that allow greater autonomy to divisions and functional areas are better at collecting and disseminating market intelligence at the company-wide level. Autonomy also improves the responsibility and the skills of mid-level managers since decentralized organizations require a greater number of qualified managers with decision-making authority (Megginson et al. 1989).

History of the Swiss watch industry

Prior to the 1950s, watch-making was a craft that required the skills of a master jewelry maker combined with the expertise of a micro-mechanical engineer. Since Swiss watch makers were expert at assembling separate components of mechanical movement with great care and precision, they grew to dominate the watch industry. In fact, watch-making became a source of national pride, and the "Made in Switzerland" label was a global seal of quality, status, and prestige (Taylor 1993).

In the late 1960s, Switzerland, renowned for its watch-making excellence for over 100 years, dominated the market for watch-making with 65% of the world market share and over 80% of the profits (Barker 1989).

While the Swiss were first to develop an electronic watch in the post-World War II period, a number of factors converged to deteriorate the competitive position of Swiss watch producers (Uttinger and Papera 1965). The result was that their share of the world watch market plummeted from 65% to 18% (Lodato 2006). They also lost 46,000 jobs in the 1970's as consumers shifted from mechanical Swiss watches to electronic watches manufactured in the United States and Japan (Sabaratnam 1996; Serrin 1982).

Hayek, the savior of Swatch, put the blame for plunging the Swiss watch industry into crisis in the early 1980s on management that under-estimated the competition as well as a lack of Swiss entrepreneurs with courage, imagination, and vision (Eckert 2005). Kandampully and Duddy (1999) also believe that Swiss watch manufacturers failed to anticipate major changes and the need to innovate. Swiss manufacturers, convinced of the superiority of their high quality mechanical watches, made no real attempt to exploit this innovation. As a consequence, they lost a large share of their market to Japanese and other Asian competitors in the 1970s (Assink 2006; Sloane 2006).

In the 1990s, Hayek, the inspiration and entrepreneurial spirit behind the Swatch watch company, took dramatic action by merging two of the largest Swiss watch manufacturers (ASUAG and SSIH) to form a new company, Swatch. Swatch took a radically different approach to watch design, creating a low-cost, high-tech, and artistic watch with emotional appeal (Sloane 2006). In the past, Swiss watches had competed against mass produced brands by focusing on tradition and quality. Swatch changed the parameters of competition by making watches that were fun, fashionable, and collectable. The result was that within 5 years, Swatch was the largest watch-maker in the world (Sloane 2006). As Swiss watch makers such as Swatch reoriented the industry towards the future and introduced the highly innovative, low-priced, high-quality quartz watch, the Swiss once again achieved world leadership (Schlegelmilch et al. 2003).

Industry innovation and competitiveness

Recent changes in the Swiss industry's world market position have been investigated in terms of innovativeness (Tajeddini et al. 2006; Tajeddini and Trueman 2008) disruptive technologies (Assink 2006), learning (Tajeddini 2009), industry case study (Uttinger and Papera 1965), industry evolution (Barrett 2000), consumer confusion (Mitchell and Papavassiliou 1997) and technology transfer (Donze 2007).

However, research to date has not explored the dynamics of entrepreneurial orientation in this specific industry.

Successful innovation occurs when an entrepreneurial firm recognizes a gap between what the market needs and what is offered and successfully direct resources toward filling that need (Slater and Narver 1995). We suspect that Swiss watch manufacturers failed to recognize this gap and consequently lost market share to foreign rivals. Within the context of history, we attempt to better understand the current strategies of Swiss watch makers, what they learned from their past, and their perceptions about the future of the industry.

Case study

To gain a clearer picture of just how prevalent an entrepreneurial orientation is among Swiss watch companies, a series of semi-structured face-to-face interviews was carried out with senior executives and owners of each strategic business unit (SBU). If the CEO or owner was unavailable, the information was collected through a set of interviews with key company referents selected through a non-probability "snowball" approach (Bryman and Bell 2007).

A representative sample of 18 watch manufacturers was selected based on size and geographic distribution across Switzerland. The data were collected through personal interviews over a 5-month period using a purposeful stratified sampling method to overcome problems associated with different size firms' data collection (Cadogan et al. 1999). A summary of informant demographics is shown in Table 1.

Procedure

Data were collected through in-depth interviews which took place on company premises. Each semi-structured interview was informal, starting with general questions about the educational and professional background of the participant and moving on to specific aspects of entrepreneurial orientation.

The interviewees were asked to share their opinions about the necessary elements for an entrepreneurial business venture to succeed, entrepreneurial characteristics of their companies, as well as their view about the past and future of the industry. The questions were aimed at assessing the level of entrepreneurial orientation at each company. Typical questions were: In your strategic decisions, would you tend to focus on investments that have risk? How do you search for opportunities? Do you favor large bold decisions despite the uncertainty of their outcomes? Do you approve new projects on a stage by stage basis rather than blanket approval? In your marketing strategy decisions, do you constantly seek to introduce new brands or new products in the market? Whenever there is ambiguity in government regulation, will you move proactively to take a lead? To what extent do your employees act autonomously in their work?

To formalize the procedure, a six-step process for structuring the interview was used (Lucas 2005). Each interview lasted between 35 and 70 min. All interviews were audio taped and transcribed. Following Lofland and Lofland (1984), the interviews were documented in detail through note-taking, with particular attention to key

Table 1 Descriptive list of the informants

Informant title	Gender	Size of firm	Experience years	Qualification
(1) Senior executive	Male	B	19	MBA
(2) Owner	Male	A	8	BSc
(3) Senior executive	Male	C	23	MBA
(4) Senior executive	Male	C	12	BSc
(5) Senior executive	Male	B	16	MBA
(6) Owner	Female	A	17	BA
(7) Senior executive	Male	B	18	BA
(8) Senior executive	Male	D	22	PhD
(9) Owner	Male	A	14	BSc
(10) Senior executive	Male	A	19	MBA
(11) Owner	Male	A	12	BA
(12) Senior executive	Male	A	16	BA
(13) Senior executive	Male	B	8	MBA
(14) Owner	Male	A	13	BSc
(15) Owner	Male	A	19	BSc
(16) Owner	Male	A	22	BSc
(17) Owner	Male	A	14	BSc
(18) Middle manager	Male	A	18	BSc

A = Fewer than ten full time employees; B = 11–49 full time employees; C = 50–249 full time employees; D = More than 250 full time employees

quotations that illustrate different aspects of entrepreneurial orientation. Notes were immediately transcribed into transcripts for maximum comparability. Both interviewer and the interviewees reviewed the detailed notes which were later cross-checked for accuracy and reliability.

Findings

Proactiveness For decades, watch making has been associated with Switzerland. In fact, the phrase "Swiss watches" or "Swiss" has been synonymous with accuracy of timekeeping and quality (Uttinger and Papera 1965). However, in a few short years, the Japanese exploited quartz technology to produce equal timekeeping accuracy at a fraction of the cost (Hagon 1994).

Hagon attributes the apparent lack of proactiveness in the Swiss watch industry to an "if it ain't broke, dorn't mend it" mentality (Hagon 1994:53). Although Swiss watch firms did practice quality, and never stopped making incremental improvements, they failed to anticipate major shifts and the need for radical innovation (Kandampully and Duddy 1999). Rowe (2008) notes that Swiss watch manufacturers focused too much on making the perfect timepiece and lost sight of the developments in electronics and quartz crystal technology. Their internal focus ignored the competitive environment which was undergoing fundamental change (Rowe 2008).

During the interviews, several informants confirmed this general lack of proactiveness in the industry. For example, informant (9) stated: *"Although we would like to take the initiative, we always assess the market and the rivals carefully to make sure that we can make it…our budget is too limited to be always the first mover… we focus our efforts on those things that we can manage and control."* Informant (9) was then asked if that means he should be pushed by other people or other firms? He responded …*Not really … we have our own rules. We should be confident about the market that we are going to enter. In this regard, we usually look for the native distributors who invest in our products and import them in their own lands. I think they know their segment markets far better than we do.*

Informant (15) believes in a reactive strategy instead of a proactive approach. He said: …*You know, we look at the circumstance in the market and we act up on it…* In contrast, informant (3) shows his proactive policy indicating a first mover strategy. In fact, although Swiss watch firms had both knowledge and resources, the company focused on today's needs and future. …*We are not waiting for the market to dictate what we should do… we try to be the first to come up with a new design for the market…*

Informant (17) confirmed that the Swiss watch industry failed to anticipate the future. He was asked to share his opinion about the failure of the industry and how they would predict the future. He said …*I guess nobody expected that Swiss watch manufacturers would lose market share to Japanese products… However, I am optimistic about the future of our industry. Simply look at the statistics of the sales and growth of the Swiss [watch] during the last* 5 *years…* Similarly, informant (16) said that …*although I am optimistic about the future, I believe that we have to be cautious about our movement in the market place…we don't know what will happen in the future… we are a small firm and not so strong that we can be very proactive in new market… we are searching a niche market for our products. For any new market, we attempt to gather solid information and to have a clear picture of the market.* This last quotation reflects a company driven by circumstance without any sign of proactiveness.

Regarding market opportunism and strategic focus, informant (2) stated, …*You know, I always see the big picture and attempt to be alert to new profitable professional opportunities…* Informant (11) noted …*I think it is my nature to organize time so that each day I spend doing strategic and operational work ensuring that the firm is on course to meet my vision and my objectives…* Similarly, informant (2) stated that …*I use my time so that the company's personnel and other resources utilize every moment to produce and work effectively.*

Innovativeness The Swiss watch industry has a longstanding reputation for precision, reliability and design, but has not always led the field in innovation (Tajeddini and Trueman 2008). Despite having invented the electronic watch, Swiss manufacturers, convinced of the superiority of their high quality mechanical watches, made no real attempt to exploit this innovation and in the 1970s, lost a large share of their market to Japanese and other far eastern competitors (Assink 2006). Put another way, the Swiss watch industry fell into the pitfall of 'marketing myopia' (Levitt 1960) because of a narrow focus on products rather than on customer needs (Tajeddini and Trueman 2008). This caused Swiss watch makers to underestimate the competition plunging it into a dramatic crisis in the early 1998s (Eckert 2005).

Comments from interviewees suggest a resurgence of innovativeness among Swiss watch manufacturers. For example, informant (4) stated …F*or [our] firm, 'innovation' gets top priority…* In a similar vein, informant (8) stated that …"*change for our firm is unavoidable …I am proud to say that more than 70 % of our current sales are in products which were not existence* 10 *years ago…*"

Many interviewees acknowledged that competition in modern business requires a demand for innovation and novelty. Some put an emphasis on research and development. Some use modern advertising and merchandising. Others emphasize quality and service rather than price and cost. Informant (4) notes that his company does not only obtain new ideas from internal professionals, but also from external sources. …*We grasp creative ideas to change our methods from different sources such as customers, managers, salesmen, distributors, friends…we are very open to receive any idea… to improve, modify and customize our products and services …to satisfy our customers…*

Competitive aggressiveness Gathering competitive intelligence helps firms analyze the weaknesses, strengths, opportunities and threats of their rivals and accordingly formulate their strategy to outperform industry rivals in the marketplace. When a firm decides to enter a market and to beat the competition and outperform its rivals, it formulates its strategy based on a strong offensive posture directed at overcoming competitor advantages. For example, informant (8) stated that *…[Our company] is performing better than some competitor firms despite the crisis… [We achieve that] through our sale promotion and effective advertisement, new products, active participation in trade fairs, seminars, exhibitions, and adoption for exporting, systematic market research, and after sales service…* This assessment is consistent with MacMillan and Day (1987) who state that some firms spend aggressively compared to competitors on marketing, product service and quality, or manufacturing capacity.

Venkatraman (1989) stresses that competitive aggressiveness can be accomplished by setting ambitious market share goals and taking bold steps to achieve them. However, informant (10) stated that *…we are a small firm, however we have been able to tap new markets and build new niches….we have focused on pricing policy such as low-cost product…so few firms can compete with us.*

Informant (4) was asked if a major competitor of his company were to launch an intensive campaign targeted at his customers, what would he do in response? He showed confidence in his existing strategy and product image. However, he admitted that the behavior of his company would change (i.e. turn aggressive) in response to any threat from rivals. He said: …*well, simply we would change our strategy and tactics. In this case, I would put more emphasis on advertisement informing customers of the superiority of our products and services quickly. Having said that, I simply believe that our customers trust us because we deliver what we promise. In doing so, we continuously customize our products and services. The quality and brand of [our company] is well known and I guess it is very difficult for some firms to compete with us. If they assume that they can—as some did in the past—intensive advertisement using different marketing campaigns which is not affordable for many firms will be employed.*

Risk taking During the interviews, we found that Swiss watch managers tend to be averse to risk-taking. For example, informant (1) put emphasis on conducting research before any risky action. …*We always investigate the feasibility and possibility of a niche market for our products. For this purpose, we use [comprehensive] market research. For example, we use surveys or face-to-face interviews with the stores, outlets, and experts. We don't enter any new market without having a deep understanding of the market, customers, demands, and competitors…*

These managers appear more market-orientated than entrepreneurial-oriented by making a thorough assessment of market needs before undertaking any bold action. This approach is consistent with the findings of Stokes (2000) who states that marketing—as opposed to entrepreneurship—requires a well-researched, established need among customers. Similarly, informant (8) stated that: *"We always monitor the marketplace, customers, cultures, their needs and wants….other actual and potential suppliers, rivals… culture, social–psychological elements to reduce the risk."*

The above statements indicate a conservative attitude towards risk-taking. However, these statements are also consistent with the entrepreneurship literature indicating that propensity to risk-taking is not necessarily a predictor of successful new ventures (Birley 1989; Drucker 1985; Schumpeter 1951). Entrepreneurs make decisions based on a calculated but uninsurable risk in the hope of sales for future profit (Park 2005). They prefer a defensive strategy and shy away from more proactive, innovative, future-oriented strategies that involve considerable more risk taking (Tan and Tan 2005). In this sense, risk-taking reflects the readiness to chase aims despite the uncertain results which might require a moderate or calculated risk (Miller 1983; Segal et al. 2005). In this regard, informant (12) stated that *…to capture a market, I look at risk differently from other people. I never bet the company, but I simply believe that if am not taking some risk, I will stop [growing]…*

Informant (3) described a more conservative approach to risk. …*"For any project, we detect risk at an early stage. Our research and technical teams establish assessment methodology. To be honest, we always pay close attention to risk assessment reports due to our limited budget and not wanting to make a mistake. Therefore, when we are confident in the technology that we choose, we proceed".*

Autonomy Swatch illustrates an example of autonomy in corporate entrepreneurship. Nicolas G. Hayek took independent action free of stifling organizational constraints and tradition to bring forth his idea and vision and carry it through to completion. He engineered one of the world's most spectacular industrial comebacks—the revitalization of the Swiss watch industry (Hayek and Taylor 1993). But Swatch is more than a turnaround story. It is a case study of Hayek's management philosophy and strategic thinking, both of which are strikingly at odds with prevailing wisdom about how to compete in the new economy.

Hayek's influence impacted the entire industry. For example, informant (8) stated that *…Although we are a Swiss watch firm, and it is our pride, we are not traditionally oriented… Over the last few years we changed some parts of our products to reduce our cost while keeping the quality and accuracy as before… I can assure you… I am happy to say that our growth is remarkable …We could enter many niche markets with our new brand … because we offer our product with a reasonable price that many people can afford…*

Informant (6) states that while most firms are geared toward traditional mass production, independent action is committed to designing unique products and turning normal products into meaningful products. She said ... *Our [product line]is unique. We produce only for ladies. The rhombus shape and design are distinctive. My design symbolizes water, moon and femininity ... the central part of the watch shows the universal of life and prosperity. When I started my business, many colleagues did not believe that I would be successful. They laughed at me and discourage me. But I followed my desire and passion. My design shows my passionate about harmony in real life…*

The importance of these perceptions was underscored by Flamholtz's (1983) research. He found that a manager's perception of business performance is only 'pseudo' if organizational culture is highly rules-oriented and tradition-bound. For instance, informant (7) observed an independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion. *The first time that I changed some parts of my watch [product], many colleagues of mine criticized me. For them, if a Swiss brand does not keep the Swiss tradition and rules, it should not be considered as "Swiss" anymore. But I can say that my personal decision was very innovative and I did pay much attention to keep our pride Swiss brand… this is not a personal judgment, but it is a matter of confident, commitment to innovation and improvement…our business is growing and in spite of economical crisis, we could succeed and perform far better than many of our rivals in different markets.*

In addition, within a corporate entrepreneurship environment employees are encouraged to contribute ideas. For example, informant (18) stated that *...there is no doubt that if someone has a good idea, we are happy to receive it ... [however,] we decide whether this idea is feasible, possible and profitable… and if so, we put it into practice.*

Discussion

The approach taken in this study was one of "listening" to a group of executives responsible for managing the technical competencies of their companies. This study assessed the entrepreneurial orientation of 18 firms in a 'mature' Swiss watch industry that responded to adversity by introducing various elements of corporate entrepreneurship. Throughout the discussion, we have attempted to show the complementarities between theory and practice in corporate entrepreneurship. In this regard, we followed a strategic view (Covin and Miles 1999: Hayton 2005; Lumpkin and Dess 1996) analyzing corporate entrepreneurship across its five dimensions: (1) proactiveness, (2) innovativeness, (3) competitive aggressiveness, (4) risk-taking, and (5) autonomy.

Proactiveness The views of interviewees regarding proactiveness were mixed. While some showed eagerness to take initiative, most still rely on a traditional marketing style that includes a careful identification of customer needs through formal market research. Overall, this case study reveals a lack of proactiveness in the Swiss watch industry. In spite of our presumption, a few of the executives in this industry have reoriented and learned from the past to consider first-mover advantage while others have not.

Innovativeness Despite the industry's past, receptivity to new ideas is generally accepted by the executives—provided they can improve customer satisfaction. This suggests that innovative activities are generally important to the success of the Swiss watch industry. Findings indicate that businesses are required to consistently pay attention to the notion of new ideas to meet the changing needs and wants of their target market segments. Put differently, in order to beat the competition in a modern challenging world, paying attention to innovation and novelty in products and services is essential (Tajeddini and Trueman 2008).

Competitive aggressiveness It appears that the informants and their companies attempt to improve their position relative to their firms by taking different actions such as continuous marketing campaigns and improving image perspectives. However, if a firm adopts a market-driven strategy (for example, launching a marketing campaign), they will attempt to take into account the plausible actions and reactions in an aggressive way to neutralize the rival's campaign. This discussion may be a source of understanding for practitioners when making long term strategic decisions.

Risk-taking Evidence from this study highlights the importance of entrepreneurial risk-taking. Indeed it shows that Swiss watch makers are generally averse to risk. This result may in large part be attributed to culture. Krasna (2003) reports that the Swiss people are generally averse to risk-taking. She observes that it is easier to launch a business in the English speaking world where there is a strong tradition of entrepreneurship and willingness to take a risk. She further argues that the English phrase "*venture capital*" is linked with ideas of adventure and exploration, while this phrase in Switzerland means "risk capital" with regard to money invested in new businesses (Krasna 2003).

Among Europeans, the most adverse to risk are the Swiss, whose caution is legendary (Tixier 1994). Given the generally conservative nature of the Swiss people, the qualitative semi-structured interviews confirm this characteristic among managers of Swiss companies.

An obstacle to entrepreneurship and risk-taking in Switzerland is a bankruptcy law which extends indefinitely creditors' claims against a bankrupt entrepreneur. Beyond its deterrent effect on the creation of businesses, entrepreneurs are less likely to take risks and may refrain from expanding their activities, particularly if it requires bank credits (OECD, 2006).

A recently published comprehensive comparative study of techno-entrepreneurs in Switzerland and the UK reports that Swiss entrepreneurs have a great propensity for risk (Tajeddini and Mueller 2009). An avenue for further research would be to test the cultural stability of our findings and compare with other societies and cultures.

Autonomy While some interviewees contend that they are proud of "Swiss" traditions which are built up on a rule-based system, others are more likely to operate under higher levels of autonomy and independence inclination. Such evidence supports previous arguments which states that in organizations which are rule-based system and there is a lack of decision-making autonomy, business performance suffers (Gul et al. 1995; Subramaniam and Ashkanasy 2001). However, too much autonomy can create problems as well. When a stereotypical owner-manager strives for autonomy and independence, this may manifest itself as an 'autocratic, egocentric, impulsive and often unpredictable' managerial style (Beaver and Prince 2004).

In stimulating an entrepreneurial corporate climate, the impact of employees' willingness to share their ideas is crucial. While employees are generally encouraged to contribute [good] ideas, they are often not given the autonomy to make decisions. This points to a centralized structure where final decision-making authority remains vested in top management. Nevertheless, this behavior may exploit the available autonomy from the corporate center and eventually creates a more favorable climate for innovation (Rafiq and Saxon 2000).

Conclusions Since the 1970s, a large number of Swiss watch manufacturers failed or merged. However, recent trends reveal that the Swiss watch industry is gradually returning to prominence yet far from its golden age. The important lesson here is that successful firms need to have strong entrepreneurial orientations to compete and survive technology intensive industries. One way to strengthen the findings and conclusions with respect to how entrepreneurial orientation can be maintained in acquired technology companies would be to examine similar acquisitions at other companies competing in the same business areas (Christensen 2006). In this study we had an inside look through the perception of the actual experience in this industry with the specific conditions related to the culture and acquisitions.

A limitation of the present study is reliance on the subjective perception of a small number of executives. While qualitative research contributes to a deep understanding of the subject leading to discovery and theory-building, mixed-method studies can reconcile contradictory demands of theory development and the application of rigorous research techniques (Srnka and Koeszegi 2007). Given its importance, we suggest further investigation of corporate entrepreneurship using both theory-enriching qualitative approach and positivistic paradigm employing statistical rigorous methods to provide a clearer picture.

References

Assink, M. (2006). Inhibitors of disruptive innovation capability: a conceptual model. *European Journal of Innovation Management, 9*(2), 215–233.

Baden-Fuller, C. (1995). Strategic innovation, corporate entrepreneurship and matching outside-in to inside out approaches to strategy research. *British Journal Management, 6*(Special Issue), S3–S16.

Barker, J. A. (1989). *Discovering the future series: The business of paradigms*. Burnsville: Charthouse International Learning Corporation.

Barrett, M. E. (2000). Time marches on: the worldwide watch industry. *Thunderbird International Business Review, 42*(3), 349–372.

Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal, 20*, 421–444.

Beaver, G., & Prince, C. (2004). Management, strategy and policy in the UK small business sector: a critical review. *Journal of Small Business and Enterprise Development, 11*, 34–49.

Beer, M., Eisenstat, R., & Spector, B. (1990). *The critical path to corporate renewal*. Boston: Harvard Business School Press.

Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing, 2*(1), 79–93.

Birley, S. (1989). Female entrepreneurs: are they really any different? *Journal of Small Business Management, 27*(1), 32–38.

Brockhaus, R. H. S. (1982). The psychology of the entrepreneur. In Kent et al. (Eds.), *Encyclopedia of entrepreneurship* (pp. 39–57). Englewood Cliffs: Prentice Hall.

Bryman, A., & Bell, E. (2007). *Business research methods*. Oxford: Oxford University Press.

Burgelman, R. A. (1984). Design for corporate entrepreneurship. *California Management Review, 26*(2), 154–166.

Cadogan, J. W., Diamantopoulos, A., & Mortanges, C. (1999). A measure of export market orientation: scale development and cross-cultural validation. *Journal of International Business Studies, 30*(4), 689–707.

Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. C. (1984). Differentiating entrepreneurs from small business owners: a conceptualization. *Academy of Management Review, 9*(2), 354–359.

Chen, M. J., & Hambrick, D. (1995). Speed, stealth, and selective attack: how small firms differ from large firms in competitive behavior. *Academy of Management Journal, 38*(2), 453–483.

Christensen, K. S. (2006). Losing innovativeness: the challenge of being acquired. *Management Decision, 44*(9), 1161–1182.

Cooper, A. C., & Dunkelberg, W. C. (1986). Entrepreneurship and paths to business ownership. *Strategic Management Journal, 7*, No. January/February, 53–68

Cooper, R., & Evans, M. (2006). Breaking from tradition: market research, consumer needs, and design futures. *Design Management Review, 17*(1), 68–76.

Covin, J. G., & Covin, T. J. (1990). Competitive aggressiveness, environmental context, and small firm performance. *Entrepreneurship Theory and Practice, 15*(2), 35–50.

Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice, 23*(3), 47–63.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 11*, 75–87.

Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory & Practice, 16*(1), 7–25.

Cunningham, J. B., & Lischeron, J. (1991). Defining entrepreneurship. *Journal of Small Business Management, 29*(1), 45–61.

Damanpour, F., & Wischnevsky, J. D. (2006). Research on organizational innovation: distinguishing innovation-generating from innovation-adopting organizations. *Journal of Engineering and Technology Management, 23*, 269–291.

Darling, J., Gabrielsson, M., & Seristo, H. (2007). Enhancing contemporary entrepreneurship: a focus on management leadership. *European Business Review, 19*(1), 4–22.

de Jong, A., de Ruyter, K., & Lemmink, J. (2003). The adoption of information technology by self-managing service teams. *Journal of Service Research, 6*, 162–179.

Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive, 19*(1), 147–156.

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*(9), 677–695.

Dickson, P. R. (1992). Toward a general theory of competitive rationality. *Journal of Marketing, 56*, No. January, 69–83.

Donze, P.-Y. (2007). Joint venture companies and technology transfer from the West to Japan: Citizen Watch Co and the Swiss watchmakers (1890–1940). In Editor (ed)^(eds), Book Joint venture companies and technology transfer from the West to Japan: Citizen Watch Co and the Swiss watchmakers (1890–1940)

Drucker, P. (1985). *Innovation and entrepreneurship: Practice and principles*. New York: Harper & Row.

Eckert, H. (2005). Switzerland needs entrepreneurs again. *Swiss Review, 4*(4), 18–19.

Ferreira, J. (2001). Corporate entrepreneurship: a strategic and structural perspective. *New England Journal of Entrepreneurship, 4*(2), 59–71.

Ferreira, J. (2002). Corporate entrepreneurship: a strategic and structural perspective, International Council for Small Business, 47th World Conference San Juan Puerto Rico, June 16–19.

Flamholtz, E. G. (1983). Accounting, budgeting and control systems in their organisational context: theoretical and empirical perspectives. *Accounting, Organisations and Society, 8*, 153–169.

Gul, F. A., Tsui, J. S. L., Fong, S. C. C., & Kwok, H. Y. L. (1995). Decentralization as a moderating factor in the budgetary participation-performance relationship: some Hong Kong evidence. *Accounting and Business Research, 25*, 107–113.

Gupta, V., MacMillan, I. C., & Surie, G. (2004). Entrepreneurial leadership: developing and measuring a cross cultural construct. *Journal of Business Venturing, 19*, 241–260.

Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: some insights for entrepreneurship education and training in Turkey. *Education and Training, 48*(1), 25–38.

Hagon, T. (1994). Putting the logistics manager in the driving seat. *Logistics Information Management, 7* (5), 53–57.

Hayek, N. G., & Taylor, W. (1993). Message and muscle: an interview with Swatch Titan Nicolas Hayek. *Harvard Business Review, 10*, No. March–April, 98–110.

Hayton, J. C. (2005). Promoting corporate entrepreneurship through human resource management practices: a review of empirical research. *Human Resource Management Review, 15*, 21–41.

Herbig, P., Golden, J. E., & Dunphy, S. (1994). The relationship of structure to entrepreneurial and innovative success. *Marketing Intelligence & Planning, 12*(9), 37–48.

Jones, R., & Butler, J. E. (1992). Managing internal corporate entrepreneurship: an agency theory perspective. *Journal of Management, 18*(4), 733–749.

Kandampully, J., & Duddy, R. (1999). Competitive advantage through anticipation, innovation and relationship. *Management Decision, 37*(1), 51–56.

Khan, A. M., & Manopichetwattana, V. (1989). Innovative and noninnovative small firms: types and characteristics. *Management Science, 35*(5), 597–606.

Knight, G. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing, 12*, 213–225.

Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics. *Journal of Managerial Psychology, 11*(3), 12–25.

Krasna, B. (2003). Start-ups: life after the boom. Interview with Beth Krasna, CEO of Albert-Inc SA In: Vision, l (August), 16–22

Langfred, C. W., & Moye, N. A. (2004). Effects of task autonomy on performance: an extended model considering motivational, informational, and structural mechanisms. *Journal of Applied Psychology, 89*, 934–945.

Levitt, T. (1960). Marketing myopia. *Harvard Business Review, 38*(4), 45–56.

Lieberman, M., & Montgomery, D. (1988). First-mover advantages. *Strategic Management Journal, 9*, 41–58.

Lodato, M. W. (2006). Market definition is a multi-dimensional process. Integrated Sales Process Management: A Methodology for Improving Sales, Author house, http://www.businessprocesstrends.com/publicationfiles/06-06-ART-MarketDefinition-Lodato.pdf accessed date 12.3.2009.

Lofland, J., & Lofland, L. H. (1984). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont: Wadsworth.

Lucas, B. (2005). Structured interviews. *Performance Improvement, 44*(8), 39–43.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135–172.

Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance. *Journal of Business Venturing, 16*, 429–451.

MacMillan, I. C., & Day, D. L. (1987). Corporate ventures into industrial markets: dynamics of aggressive entry. *Journal of Business Venturing, 2*(1), 29–39.

Martin, W. L., & Lumpkin, G. T. (2003). *From entrepreneurial orientation to "family orientation:" Generational differences in the management of family businesses. Frontiers of Entrepreneurship Research* (pp. 309–321). Babson Park: Babson College.

McFadzean, E., O'Loughlin, A., & Shaw, E. (2005). Corporate entrepreneurship and innovation part 1: the missing link. *European Journal of Innovation Management, 8*(3), 350–372.

Megginson, L. C., Mosley, D. C., & Pietri, P. H., Jr. (1989). *Management: Concepts & applications*. New York: Harper & Row.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science, 29*(7), 770–791.

Miller, D. (1988). Relating Porter's business strategies to environment and structure: analysis and performance implications. *Academy of Management Journal, 31*, 280–308.

Miller, D., & Friesen, P. H. (1982). Strategy-making and environment: the third link. *Strategic Management Journal*, Summer, 221–235.

Milliken, J. (2001). Qualitative research and marketing management. *Management Decision, 39*(1), 71–78.

Mitchell, V.-W., & Papavassiliou, V. (1997). Exploring consumer confusion in the watch market. *Marketing Intelligence & Planning, 15*(4), 164–172.

Morris, H., & Paul, G. W. (1987). The relationship between entrepreneurship and marketing in established firms. *Journal of Business Venturing, 2*, 247–259.
OECD Economic Surveys. (2006). What are the main challenges for the Swiss Innovation System? *Source OECD, 2006*(1), 1–156.
Pang, M. (1999). *The employment situation of young Chinese adults in the British labour market, vol. 28* (1/and West Yorkshire 2): Emerald Group Publishing, pp. 41–57.
Park, J. S. (2005). Opportunity recognition and product innovation in entrepreneurial hi-tech start-ups: a new perspective and supporting case study. *Technovation, 25*(7), 739–752.
Pavlovich, K., & Corner, P. D. (2006). Knowledge creation through co-entrepreneurship. *International Journal of Knowledge Management Studies, 1*(1/2), 178–197.
Rafiq, M., & Saxon, T. (2000). R&D and marketing integration in NPD in the pharmaceutical industry. *European Journal of Innovation Management, 3*(4), 222–231.
Roland, G. (2004). *Law and economics workshop: Entrepreneurship: First results from Russia*. Berkeley: University of California.
Rothwell, R. (1992). Successful industrial innovation: Critical factors for the 1990s. *R&D Management, 22*(3), 221–238.
Rowe, J. (2008). *Studying strategy*. Ventues Publishibg ApS.
Sabaratnam, J. S. (1996). Planning the library of the future—The Singapore experience, 62nd IFLA General Conference—Conference Proceedings—August 25–31.
Sathe, V. (1989). Fostering entrepreneurship in the large, diversified firm. *Organizational Dynamics, 18* (2), 20–32.
Schlegelmilch, B., Diamantopoulos, A., & Kreuz, P. (2003). Strategic innovation: the constructs, its drivers and its strategic outcomes. *Journal of Strategic Marketing, 11*(11), 117–132.
Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge: Harvard University Press.
Schumpeter, J. (1949). Economic theory and entrepreneurial history, change and the entrepreneur, pp. 63–84, reprinted in Schumpeter, J. (1989) Essays on entrepreneurs, innovations, business cycles and the evolution of capitalism. In R. V. Clemence (Ed.), New Brunswick, N.J.: Transaction Publishers, pp. 253–231.
Schumpeter, J. A. (1951). Economic theory and entrepreneurial history. In R. V. Clemence (Ed.), *Essays on economic topics of Joseph Schumpeter*. Port Washington: Kennikat.
Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour & Research, 11*(1), 42–57.
Serrin, W. (1982). Impact on job market: divided predictions. The New York Times, Vol. March 28, No. http://www.nytimes.com/1982/03/28/jobs/impact-on-job-market-divided-predictions.html accessed date 12.5.2009.
Slater, S., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing, 59*(3), 63–74.
Slater, S. F., & Narver, J. C. (2000). Intelligence generation and superior customer value. *Journal of the Academy of Marketing Science, 28*(1), 120–127.
Sloane, P. (2006). Break the rules to produce radical innovations. RealInnovation.com, http://www.realinnovation.com/content/c070611a.asp accessed 2.10.2009.
Smart, D. T., & Conant, J. S. (1994). Entrepreneurial orientation, distinctive marketing competencies and organisational performance. *Journal of Applied Business Research, 10*(3), 28–38.
Srnka, K. J., & Koeszegi, S. T. (2007). From words to numbers: how to transform qualitative data into meaningful quantitative results. SBR, pp. 29–57.
Stokes, D. (2000). Putting entrepreneurship into marketing: the processes of entrepreneurial marketing. *Journal of Research in Marketing & Entrepreneurship, 2* (1,) Spring.
Subramaniam, N., & Ashkanasy, N. M. (2001). The effect of organizational culture perceptions on the relationship between budgetary participation and managerial job-related outcomes. *Australian Journal of Management, 26*(1), 35–54.
Tajeddini, K. (2009). Perceptions of learning among Swiss watch managers. *Journal of Workplace Learning, 21*(7), 525–537.
Tajeddini, K., & Mueller, S. (2009). Entrepreneurial characteristics in Switzerland and the UK: a comparative study of techno-entrepreneurs. *Journal of International Entrepreneurship, 7*(1), 1–25.
Tajeddini, K., & Trueman, M. (2008). The potential for innovativeness: a tale of the Swiss watch industry. *Journal of Marketing Management, 24*(1–2), 169–184.
Tajeddini, K., Trueman, M., & Larsen, G. (2006). Examining the effect of market orientation on innovativeness. *Journal of Marketing Management, 22*(5–6), 529–551.

Tan, J. (2008). Breaking the "bamboo curtain" and the "glass ceiling": the experience of women entrepreneurs in high-tech industries in an emerging market. *Journal of Business Ethics, 80*, 547–564.

Tan, J., & Tan, D. (2005). Environment-strategy co-evolution and co alignment: a staged model of Chinese SOEs under transition. *Strategic Management Journal, 26*, 141–157.

Taylor, M. J. (1987). *Chinese pupils in Britain: A review of research into the education of pupils of Chinese origin*. Windsor: NFER-Nelson.

Taylor, W. (1993). Message and muscle: an interview with Swatch titan Nicolas Hayek. *Harvard Business Review, 71*(2), 99–110.

Thomas, A., & Mueller, S. A. (2000). Case for comparative entrepreneurship: assessing the relevance of culture. *Journal of International Business Studies, 31*(2), 287–301.

Tiessen, J. H. (1997). Individualism, collectivism, and entrepreneurship: a framework for international comparative research. *Journal of Business Venturing, 12*(5), 367–384.

Tixier, M. (1994). Management and communication styles in Europe: can they be compared and matched. *Journal: Employee Relations, 16*(1), 8–26.

Uttinger, H. W., & Papera, D. R. (1965). Threats to the Swiss Watch Cartel. *Western Economic Journal (Economic Inquiry), 3*(2), 200–216.

Venkatraman, N. (1989). Strategic orientation of business enterprises: the construct, dimensionality, and measurement. *Management Science, 35*(8), 942–962.

Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: an explorative study. *Journal of Business Venturing, 6*, 259–285.

Zahra, S. A. (1999). The changing rules of global competitiveness in the 21st century. *Academy of Management Executive, 13*, 36–42.

Zahra, S. A., Neubaum, D. O., & Huse, M. (2000). Entrepreneurship in medium-size companies: exploring the effects of ownership and governance systems. *Journal of Management, 26*(5), 947–976.

Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology- and market-based breakthrough innovations. *Journal of Marketing, 69*(2), 42–60.