The current issue and full text archive of this journal is available at
www.emeraldinsight.com/0025-1747.htm

Innovation and business growth through corporate venturing in Latin America

Analysis of strategic fit

Received December 2005
Revised January 2006
Accepted January 2006

Rajagopal
Business Division, Institute of Technology and Higher Education, ITESM, Mexico City, Mexico

Abstract

Purpose – The purpose of this research is aimed at discussing the external and internal strategic fit in corporate ventures in Latin America.

Design/methodology/approach – This study is based on empirical investigation through semi-structured interviews administered to the managers of multinational companies operating in Mexico. The success of the corporate ventures in Mexico has been evaluated from the perspectives of economic and relational attributes. The results of the study showed that the degree of fit between a corporate parent and venture affects the success of the venture. The success is associated with high levels of commitment, competitive skills and dynamics in the functional management of the venture. In this study the variables of economic and relational dimensions of external and internal fit have shown greater association with venture success. It has also been found that ventures opt for greater autonomy and less economic dependency with their parent ventures for leading success and these findings make an intuitive sense.

Findings – The study may have limitations on generalizing some of the findings because of the survey type study.

Research limitations/implications – Corporate venturing as a strategy for international business development has become significant in view of the process of globalization resulting in free trade and business development opportunities for multinational companies. This study provides an understanding of the venture managers to succeed in Latin American business environments in view of the organizational culture and employee behaviour.

Practical implications – This paper is based on the economic and behavioural indicators affecting strategic fit in the corporate venture.

Originality/value – This paper would contribute to important areas in Latin American business where such studies are scarce.

Keywords Innovation, Finance, Corporate strategy, Business performance, Corporate ventures

Paper type Research paper

The corporate venturing strategy has regained its strength with the booming concept of globalization, virtual business and rising demand for high value products. The concept of corporate venturing has become a significant method for business development (Block and MacMillan, 1993; Burgelman, 1983, 1985; Gompers and

The author acknowledges the support provided by Ananya Rajagopal, Graduate student of Industrial and Systems Engineering of ITESM, Mexico City Campus in computing the data and developing Tables in this paper.

Management Decision
Vol. 44 No. 5, 2006
pp. 703-718
© Emerald Group Publishing Limited
0025-1747
DOI 10.1108/00251740610668932

Lerner, 1999). The principle reason behind popularity of this strategy may be counted on the presumed ability of corporate venturing to facilitate continuous growth by embracing high-level innovation and accessing cutting-edge technological development. Some companies have conceived the corporate venturing as a core concept in their strategic planning (Burgelman, 1983). Firms become multinational companies (MNCs)s by setting up manufacturing or marketing subsidiaries overseas. Some researchers argue that internationalization is a process of transferring an MNC's knowledge, which embodies its advantage, from one country to another (Kogut and Zander, 1993). That is, knowledge flows from headquarters to overseas subsidiaries. Venturing is serious business, requiring skill, patience, and entrepreneurial flair. Most new ventures involve entering unfamiliar markets, employing unfamiliar technology, and implementing an unfamiliar organizational structure. An approach of particular promise is the new-style joint venture, in which a small company with vigor, flexibility, and advanced technology joins forces with a large company with capital, marketing strength, and distribution channels. The most intensive corporate involvement occurs in the internal venture, in which a company sets up a separate entity within itself in order to enter new markets or to develop entirely new products (Roberts, 1980).

Review of literature

The discussion on the issues of corporate venturing has received considerable attention in academic literature in the recent past (McNally, 1997) with focus on the later stages of the venturing process (Block, 1982; Block and MacMillan, 1993), such as the organizational designs for carrying out the corporate venture activity (Block and MacMillan, 1993), the criteria for developing a portfolio of ventures into a winning entity (Day, 1994), the development and growth of a venture (Simon *et al.*, 1999), and possible exit strategies (Gompers and Lerner, 2001). It has been found that the research studies also laid strong applied focus on the later stages of the venture process. The process of globalization resulting into the free trade and business development opportunities for multinational companies has further strengthened the corporate venturing as a strategy for international business development. It involves investment in high-risk activities that generate new businesses within or closely related to the activities of the parent corporation. Hence, this may be described as a business development strategy, which seeks to generate new businesses for the corporation in which it resides (Von Hippel, 1977). Corporate venturing is used strategically to encourage corporate renewal in the parent organization (Elfring and Nicolai, 1997), as a growth driver by investing in ventures with high growth potential, or to diversify the core business of the parent by investing in ventures in diverse industries (Block and MacMillan, 1993). The ideas for new businesses can originate either inside the organization or externally. Activities hosted by the corporate venturing unit will often be new to the organization and require the parent company to extend their resources by acquiring new equipment, people or knowledge (Biggadyke, 1979). The corporate venturing activities possess significantly higher risk or failure rate and greater uncertainty (Block and MacMillan, 1993). Such attributes of corporate venturing appear to distinguish this strategy from other business development strategies such as takeovers, corporate R&D, traditional venture capital financing, and joint ventures (Albrinck *et al.*, 2001).

The knowledge may also flow in the opposite direction; in the process of establishing and running its overseas operations. An MNC learns, intentionally or unintentionally, from the process the multinational firms build new capabilities to adapt to changing environments through the corporate venturing as a core of strategic business management. However, contemporary research has addressed this question only recently. How do the firms develop a capability to create and develop ventures through corporate venture capital, alliances, and acquisitions has been addressed in an integrated model (Keil, 2004). The model is based on two longitudinal case studies of large corporations operating in the information and communication technology sector in Europe. The model envisages learning processes, which enable the firm to build up an external corporate venturing capability, by utilizing learning strategies both within and outside venturing relationships. The study finds that the firms engage in acquisitive learning, in order to build this new capability and adapt to the firm specific context through experiential learning mechanisms. Corporate venture firms often rely heavily on their ability to develop firms around "winning" ideas and too little on how they can promote the development of a continuous flow of high quality ideas.

Internal and external fit

Firms with growth aspirations have several ways of reaching their goals. Mergers, acquisitions, and joint ventures are a few of the better-known approaches to firm growth. Another route, which is of interest to both managers and researchers, is corporate venturing-growing a business from the inside out. The motives for launching a corporate venture include improving corporate profitability, (Zahra, 1996), generating strategic renewal (Guth and Ginsberg, 1990), fostering innovation (Baden-Fuller, 1995) and gaining knowledge that may be parlayed into future revenue streams (McGrath *et al.*, 1994). The corporate venturing has been identified as a vehicle for firm growth (Arrow, 1982; Burgelman, 1983) and has addressed several issues unique to this growth mechanism. The previous studies address the performance implications of corporate ventures, the relationship between CV performance and environmental context (Covin and Selvin, 1994; Tsai *et al.*, 1991; Zahra, 1993), the role of compensation practices within corporate ventures (Block and Ornati, 1987), and the influence of corporate venture champions (Day, 1994).

The relationship between a corporate parent and its corporate venture has also been studied (Miller *et al.*, 1991; Sorrentino and Williams, 1995), however, to empirically test whether the connection, or fit, between parent and venture influences performance of corporate venture, not substantial literature is available. Although some authors have argued that high levels of relatedness between corporate parent and corporate ventures are desirable (Dougherty, 1995; Macmillan *et al.*, 1986) while other researchers have contended that tight coupling is negating to venture success (Burgelman, 1983; Ginsberg and Hay, 1994). However numerous studies have argued that corporate venturing is a dynamic process, that is, one in which the relationship between parent and venture evolves as the venture matures (Burgelman, 1983; Garud and Van de Ven, 1992; Schrader and Simon, 1997; Sykes 1986). The degree of fit may be thought of as a continuum, anchored at one end by what Sykes (1986) refers to as total congruence (Sykes, 1986). At the other end of the continuum is an independent entrepreneurial enterprise (Miller *et al.*, 1991; Schrader and Simon, 1997). The debate revolves around which point on this spectrum is optimal for corporate venture performance.

It is generally agreed that corporate venturing has a positive effect on firm performance (Biggadyke, 1979; Zahra, 1991, 1993; Zahra and Covin, 1995), although such benefits are not guaranteed and ventures may take several years to become profitable. The corporate ventures go through a series of stages as they mature (Garud and Van de Ven, 1992; McGrath *et al.*, 1994; Schrader and Simon, 1997). However, there is general agreement that the nature of corporate ventures is dynamic, not static. Effective corporate venturing has been described as a balancing act with needs for creativity and change on one side and demands for cohesiveness and complementarities on the other (Lengnick-Hall, 1992; Tushman and Nadler, 1986).

Financial and investment venturing

On the financial upfront corporate venturing induces the prospecting entrepreneur to exert an effort that is higher than within the corporation, but lower than the traditional venture capital financing framework. The competition from venture capitalists increases corporate venturing activity, the salaries of potential entrepreneurs, and total economic output. The study reveals consistent results with the observed pro-cyclicality of corporate venture capital activity (Gills and de Bettignies, 2003). Factors affecting corporate venture success may be broadly classified as intrinsic and extrinsic. Intrinsic factors are those inherent to the venture itself, and are subdivided into two categories: product related and managerial. Extrinsic or environmental factors are those determined by the characteristics of the investment sponsor, e.g. corporation or venture capital fund. Extrinsic factors are also subdivided into two categories – structural, which are determined by the organizational and functional relationship to the investment sponsor and procedural, related to managerial processes to be imposed by the investment sponsor (Sykes, 1986). Large companies have long sensed the potential value of investing in external start-ups, but more often than not, they fail to get it right. Remember the dash to invest in new ventures in the post-1990s globalization drive and the hasty retreat when the economy turned? The framework describes four types of capital investments for the corporate venture, each defined by its primary goal-strategic and financial, and by the degree of operational linkage between the start-up and the investing company (Chesbrough, 2002). Driving investments are characterized by a strong strategic rationale and tight operational links. Enabling investments are also made primarily for strategic reasons, but the operational links are loose. Emergent investments, which are characterized by tight operational links, have little current-but significant potential-strategic value. Passive investments, offering few potential strategic benefits and only loose operational links, are made primarily for financial reasons. The passive investments in corporate venture capital dry up in a recessional economy, but may enable gains and drive investments, usually for those which are sustainable in the market.

Technology and innovation

In view of globalization the media and academics have frequently maligned corporate investments in venture capital and have highlighted visible failures. The best ideas have languished in many corporations, either because of internal resistance or an inability to execute on the initial insight. In other cases, more nimble companies, often venture-backed start-ups, have turned innovative ideas of corporations into commercial successes (Gompers, 2002). The origin of Unilever's home pregnancy test – Clearblue, which was launched in 1985, has been used as a case study to examine the viability of one version of this strategy. Unilever was able to translate its extensive knowledge base in immunology into a successful branded product in medical diagnostics by creating a separate corporate entity as *Unipath* with a distinctive culture, shielded from the mainstream of the organization. However, this product could be able to make impact on marketing and financial resources through its corporate abilities. However, the very distinctiveness of *Unipath* orphaned it within Unilever, and the business was divested in 2001 (Jones and Kraft, 2004). Such downsides emerge in high technology business ventures as large established corporations face many challenges to develop and sustain dynamic capabilities in innovation and the creation of new businesses because of constraints arising from technological and resource lock-ins, and routine and cultural rigidities. The number of firms using alliances as part of their corporate venturing or market entry strategies has surged over the past decade. Three common reasons found for pursuing alliances are technology convergence, market access and alliance partners' complementary resources (Ghandour *et.al.*, 2004). Theoretical and empirical evidences suggest that highly related ventures benefit from existing resources, exploiting corporate know-how, and sharing experience effects. High-relatedness implies high levels of resource sharing that should decrease the incremental costs needed to launch the venture. Thus high-related ventures have greater amounts of resources to be used for aggressive entry strategies than low-related ventures. However, the top management cannot decide a priority whether or not a new corporate venture should be highly related to the parent firm; high image firms should only venture in highly related businesses. Building image at the corporate level pays if various high-related ventures are present (Sorrentino and Williams, 1995).

Corporate venturing can be an important source of technological innovation for corporations by providing a window on emerging technologies, market opportunities, new business models, and distribution channels,. However, effective implementation requires a clear view of the objectives, dedication to understanding the process, and discipline. There are two major tactics for external investing: invest in a venture capital fund, or invest directly in a start-up company, and the strategy a company chooses should be tied to its objectives (Markham *et.al.*, 2005). One of the most challenging aspects of corporate venturing is finding the right people, and corporations must be willing to devote significant time and resources to working closely with their portfolio companies if they wish to gain satisfactory value from their external investments. A study examines the variety of corporate venturing activities in the pharmaceutical and life sciences sectors, identifies the range of initiators, motives and structures, and evaluates the potential opportunities for professional venture capital firms (Tidd and Barnes, 2000). It is discussed in the study that on one hand, pharmaceutical companies need to maintain the new product pipeline that has increased the demand for technology acquisition and on the other, mergers and rationalization within the sector have resulted in a significant growth in technology divestment. Both trends have boosted corporate venturing activity. The study finds that while there is a wide range of venturing options, there is considerable confusion in the industry over ends and means. Specifically, many firms have failed to differentiate sufficiently between strategic, financial and operational goals, and have therefore created inappropriate forms of corporate venture.

Another study conducted with a small number of corporate executives having line experience in corporate venturing showed that joint ventures appear to be a highly useful way of starting off in venturing activity at the same time reducing the initial risk (MacMillan *et.al.*, 1986). The study indicated that experience of executives at venturing resulted in improvement in venturing performance, but only after several venture attempts**.** It has been observed that many executives take for granted that the first company in a new product category gets an unbeatable head start and reaps long-lasting benefits. However, much depends on the pace at which the category's technology is changing and the speed at which the market is evolving. By analyzing these two factors, companies can improve their odds of succeeding as first movers with the resources they possess (Suarez and Lanzolla, 2005). Gradual evolution in both the technology and market provides a first mover with the best conditions for creating a dominant position that is long lasting (Hoover in the vacuum cleaner industry is a good example). In such calm waters, a company can defend its advantages even without exceptional skills or extensive financial resources. When the market is changing rapidly and the product is not, the first entrant with extensive resources can obtain a long-lasting advantage (as Sony did with its Walkman); a company with only limited resources probably must settle for a short-term benefit (Suarez and Lanzolla, 2005).

Corporate venturing in Latin America

Ecotourism has been heralded as a potential economic and environmental savior in much of Latin America, though explosive foreign investment in ecotourism ventures raises questions about the validity of ecotourism as a tool of sustainable local development. A research using three case studies from coastal Belize and the Bay Islands of Honduras to illustrate the challenges that local communities face while attempting to derive ecotourism benefits, finds that there is marked cultural shift toward planning and politicization of corporate venturing in Latin America and Caribbean (Moreno, 2005). Another study discusses the impact of culture on relationships of authority, trust and performance in USA-Mexican business alliance negotiations using a sample of fifty-five Mexican firms with experience in alliances with USA counterparts in terms of governance structure (authority) and relationships (trust) in the alliance. The study finds that Mexican managers view authority balance as a positive contributor to alliance performance, while authority advantage to the benefit of the Mexican partner at the expense of the USA partner is viewed as having a negative impact on performance of the corporate ventures. Besides, the trust also plays an important role in achieving the alliance performance (Teegen and Doh, 2002)

Market-oriented structural reforms were implemented in Latin America under the expectation that the transition from an inward-oriented, state-led growth strategy to a more market-led and outward-oriented one was going to be rewarded by a sustainable long-term improvement in the region's rate of economic expansion and productivity growth (Katz, 2004). The corporate venturing has been found encouraging since the economic activities in the Latin American and Caribbean (LAC) countries following the debt crisis of the early to mid-1980s have created opportunities for USA firms to expand their business presence in the region. The study provides evidence on the shareholders' wealth effects of expansion by USA firms into the LAC region. Three hundred twenty-two announcements of expansion to the LAC countries by USA firms during 1980-1996 are analyzed using event study methodology (Gleason *et.al.*, 1999).

The study discusses the mode of expansion and shows that announcements of both FDI and non-FDI forms of expansion produce positive significant excess returns and significant positive reactions are observed for expansion to Brazil. However, the competitive discipline imposed by a more open and deregulated economic regime was expected to induce faster innovation and technological modernization efforts from firms and individuals and, thereafter, a gradual but steady convergence to world-wide income and productivity standards. A global look at the region's performance throughout the 1980s and 1990s tells us that such an expectation was far from realistic in the Latin American region (Katz, 2004). Over some general observations, one of the studies investigates the effect of the North American Free Trade Agreement (NAFTA), a prime example of this new regionalism, on foreign direct investment in Mexico (Waldkrich, 2003). The study revealed that NAFTA has raised investment from the partner countries, the United States and Canada, but not from the rest of the world. The increasing use of outsourcing and a commitment effect conveyed by the agreement are candid explanations for a change in investors' sensitivity to the determinants of foreign direct investment.

Contemporary trends in the organization of multinational enterprises (MNEs), developments in regional economic integration, and evidence pertaining to the globalization of innovative activities are suggestive of the need to revisit the question of the contribution of overseas MNE affiliates to the technological capacity of developing countries. The contribution in development of technology by the MNEs of the European Union in Mexico has been studies using a small-scale survey (Martinez-Solano and Phelps, 2003). The study shows that Mexico appears to have been enhanced with regional economic integration, and the anecdotal evidence from company case studies hints at possibilities for the future generation of technological know-why. Another study discusses two relevant aspects of innovation-localization and effectiveness of innovation. The former refers to the use of the notion of systems of innovation in environments characterized by relatively poor domestic innovation processes and relatively high levels of diversity. The latter relates to the analysis of the empirical results of an on-going research (involving a network of researchers in Brazil, Argentina and Uruguay) investigating how the macroeconomic transformations of the 1990s have affected the evolutionary trajectory of local productive arrangements, especially in what refers to their capacity to generate, absorb and diffuse innovations (Cassiolato and Lastres, 2000).

The study design

Sample distribution

The study is based on 79 semi-structured interviews conducted at 21 multinational companies operating in Mexico. The reference period of the study is 2002-2005. The firms covered under this study are of USA, Europe and United Kingdom operating in Mexico in real estate, telecommunication, automobiles and pharmaceuticals business ventures. All these companies had corporate venturing departments, though with some variations in their level of experience. At one end of the scale, one of the firms had more than 20 years of experience in corporate venturing in Mexico while other companies included in the study had between six to nine years of experience in corporate venturing activities. None of the firms selected for the study had exits. All interviewees had held positions in corporate venturing at top and middle management level for at least two years. This was an important criterion for their selection as study participants. Each interview lasted between two and three hours. The principal issues deliberated during the interview is exhibited in the Appendix. The interviews played an important role in drawing attention to barriers faced by corporate venturing units in the early stages of the venturing process, especially in terms of ensuring a sufficient inflow of genuinely innovative ideas from which selection could take place. The interview phase of the study was supported by an extensive review of literature on the corporate venturing and strategic management, which served as the foundation for a detailed survey of practices and processes. Of the 21 firms selected for the study one firm was eliminated for the reason of being very old of 40 years of age and another due to non-response. The firm of old age was felt inappropriate to be included in a group of relatively young corporate ventures (see Table I).

The mean values for assets and revenues of firms in reference to the number of employees, the initial response set, and the final sample, do not differ significantly when compared by *t*-values. Thus, the sample of ventures selected for the study appears to be representative for size and revenue characteristics. In all 84 interviews were administered and 79 were considered for the study. Of all, 5 interviews were kept out of bounds of the data analysis due to paucity of information.

Hypotheses

The success of the corporate ventures in Mexico has been evaluated from the perspectives of economic, operational and managerial efficiency. The economic relationship concerns the degree of congruence between the practices of a parent company and its venture in reference to the issues of target scheduling and achievement, market share, returns on investment and profitability eventually. Hence it has been hypothesized that:

H1. The corporate venturing in the Latin American region is decided on the basis of economic variables such as cost of R&D, rate of return, market share and profit etc.

H2. Venture success is associated with the financial targets and achievements thereof.

The operational commitments have been viewed from the perspectives of commitments in the form of large, specialized, recoverable investments. These factors are largely associated with the success of corporate venturing strategies. It has been observed that financial controls are among the more common causes of corporate venture failure (Block and MacMillan, 1993). The arguments were found stronger towards the firms, which evaluate their ventures on the basis of financial targets, to be

Table I.
Sample firms and respondents' attributes

Sample distribution of firms	Final sample	Initial respondents	Active respondents
No of sample firms	19	84	79
Real estate	2	9	7
Telecommunication	6	27	25
Automobiles	5	32	31
Pharmaceuticals	6	16	16

successful more often than the firms that eschew financial benchmarks. Also, the extent of investments on innovation, R&D and product specialization targeted in the corporate venturing strategy send signals to the venture team and external stakeholders such as clients, competitors, and suppliers about the level of commitment of the parent (Ghemawat, 1991). Accordingly, the following hypotheses have been framed:

H3. Large and specialized investments of capital by the parent company stimulate the success of corporate ventures.

H4. Quick, positive financial achievements and good office practices in the new venture are the key factors associated with the success of corporate ventures.

The managerial dimension influences the operational efficiency of internal fit of the corporate ventures. The study addresses some of the questions such as: Are venture managers compensated differently than the managers of the parent company? Are training budgets larger? Is the budgeting process more flexible?

Results and discussion

Measuring the performance of corporate ventures shares many of the difficulties associated with evaluation of the performance of small, entrepreneurial firms. The issue of subjective performance measures of small-firm performance over more objective, hard numerical data has been addressed in a few studies (Covin and Selvin, 1989). The subjective measurement has been justified in view of the inability and/or unwillingness of firms to provide financial data, the difficulty of interpretation and comparison of data due to differing firm objectives (Cooper, 1979), and the influence of industry effects (Miller and Toulouse, 1986). The responses were categorized on a scale of 1 to 5 (1 = strongly disagree, 5 = strongly agree) towards their opinion on reaching the predetermined goals of their ventures in Mexico within the given operational limits. About half of the ventures (54 percent) relied primarily on measures of profitability such as ROI and ROA. The milestones were typically established with input from both the parent company and the venture. Many of the respondents indicated that they used multiple milestones, including both financial and non-financial measures of performance. As such, control measures for the specific type of milestone(s) used could not be strictly applied. The relational measures included one single-stage question whether the parent would withdraw support if the venture were to experience adverse conditions.

The variables in reference to the relational measures included the importance of venture culture, sense of autonomy and the role of managers in decision making. The mean score of the survey for the high and low performers in reference to the variables encompassing economic and relational dimensions has been exhibited in Table II. The hypotheses have been evaluated with the help of multi-stage mean scores. The p-values for the difference between the high and low mean score shows that among the variables of economic dimensions, venture leading to optimum returns (V_1), specialized investment (V_4), profit as decisive factor for innovation (V_7) has been < 0.05 while the p-values for rest of variables, V_2, V_3, V_5, V_6 and V_8 has been found < 0.01. The p-values for the variables in the relational dimensions such as high sense of autonomy (V_{10}) and importance of the cultural values associated with the venture (V_{11}) has been < 0.05 while the p-value for the variable decision taken by the teams within organizations

Performance dimensions	Variables	Hypothesis	Mean scores High	Low	Difference
Economic	Venture offered optimum rate of returns (V_1)	*H1*	4.16	2.77	1.39*
	Venture should meet the financial targets (V_2)	*H2*	3.43	3.86	−0.43
	Optimum level of investment in venture (V_3)	*H2, H3*	4.31	3.97	0.34**
	Specialized investments in the venture (V_4)	*H3*	4.28	4.66	−0.38*
	Importance of parent organization's resources in the venture (V_5)	*H3*	3.92	4.13	−0.21
	Venture should have quick, positive financial achievements and good office practices (V_6)	*H4*	4.22	3.42	0.80
	Profit should be taken as a major factor to decide on innovation and improvements (V_7)	*H1*, *H4*	4.77	2.65	2.12*
	Funds are not diverted and used fully within the venture (V_8)	*H2*	4.13	2.94	1.19**
Relational	Decisions are taken within the venture by the management teams/executives (V_9)	*H3*, *H4*	4.62	3.23	1.39**
	Venture should have high sense of autonomy (V_{10})	*H4*	4.61	4.36	0.25*
	Importance of cultural values associated with the venture (V_{11})	*H2, H4*	4.83	3.97	0.86*

Notes: Superscripts indicate p values for one-tailed t-tests; * < 0.05 and ** < 0.01

Table II. Mean scores of the variables on economic dimensions

appeared at <0.01 level of significance. The difference between the high and low performers has been found significant towards the rate of returns associated with the venture (V_1-*H1*), profit governed innovation process in the venture (V_7-*H1*, *H4*), diversion of funds (V_8-*H2*) and delegating decision making powers to the venture managers (V_9-*H3*, *H4*). The logistic regression analysis for variables is exhibited in Table III.

Hypotheses	Variables[a]	F-test[b]	Probability[c]	R
H1. Optimum rate of returns, profit as a major factor for R&D	2*	1.83	0.02	1.02*
H2. Meeting financial targets, optimum level of investment, diversification and utilization of corporate funds	4	1.65	0.09	−0.36**
H3. Specialized investment, decision process, importance of parent organization's resources	4	1.94	0.04	−0.57**
H4. Good office practices, sense of autonomy, importance of cultural values	5	2.51	0.02	0.82**

Notes: [a]Indicates number of interactive variables used to evaluate hypotheses (e.g. *H2* evaluates alternative venturing, sources of investment, risk factors in investments, sunk funds, diversion of funds etc.); [b]F-test is derived from Hotelling's T-square formula $F = [(N - p - 1)/(N - 2)pt^2]$ wherein, $N = n_1 + n_2$ represents total number of observations, p indicates the total number of variables being analyzed; [c]Probabilities are based on the null hypotheses, which explains that the mean vectors of the high and low performers are equal. $H_0 : Hi = Lo$; superscripts indicate p-value * < 0.05 and ** < 0.01

Table III. Descriptive statistics and logistic regression for variable scores

It has been found that while working out the logistic regression, the value of the constant was found 1.63 and the p-value obtained for the same was < 0.01 and the Chi-square for the data has been 3.84. The logistic regression also established all hypotheses *H1* to *H4*. However analysis of the survey results showed that the higher performers relied more on the optimum rate of returns and considered profit as a major factor for stimulating innovation at the venture level and diversification of funds has not been considered as prime factor governing the success of the corporate ventures in Mexico. The relative difference between the low and high performers has been compared through the null hypotheses as the rate of change among the low and high performers was equal.

The hypotheses developed for this study address the effect of the economic and relational dimensions of the corporate venture in Mexico in reference to the internal and external fit on venture performance. The Table IV exhibits the summary of the hypotheses and results.

The hypotheses have been clustered into three general categories allowing some functional overlapping. Hypotheses *H1*, *H3* pertain to competitive attribute, *H2*, *H3* reveal the functional dynamics attributes and *H4* encompasses the commitment attribute. The results of data analysis established all the hypotheses framed for the study.

Limitations of the study

The study is of empirical nature with limitation of data collection as the data was taken on the self-reported formats from the corporate executives. However, interactive discussion sessions were held to support the reported data. The relational variables may vary in other countries of Latin America as they are largely governed by the factors determining the organizational culture. Hence generalization of the recommendations to the Latin American region needs to be examined in reference to the cultural diversities in the organizations. Other limitations of the study include the cross-sectional study design that makes inferences regarding economic and relational variables narrow, the relatively small sample that reduces robustness of statistical tests and the reliance on self-reported data in the absence of financial indicators of the direct and indirect impact of venture units on their parent organizations.

Attributes	Hypotheses	Cluster	Logical expression of results
Optimum rate of returns, profit as a major factor for R&D	*H1*, *H3*	Competitive	Established
Meeting financial targets, optimum level of investment, diversification and utilization of corporate funds	*H2*	Functional dynamics	Established
Specialized investment, decision process, importance of parent organization's resources	*H3*, *H2*		Established
Good office practices, sense of autonomy, importance of cultural values	*H4*	Commitment	Established

Table IV.
Summary of results

Managerial recommendations

Managers of corporate parents and their ventures have a long standing and pertinent question of how closely to tie the parent and venture for achieving growth and success. Though the technological capabilities with the MNCs in Mexico tend to facilitate lowering cognitive inertia of managers, the dependency relational factors seems to be increasing, affecting the internal fit of the ventures. Hence the parent ventures may provide higher autonomy in phased manner to other ventures in reference to their growth and age. However, effective implementation of autonomy requires a clear view of the objectives, dedication to understanding the process, and discipline in the venture. The venture success is associated with high levels of awareness, commitment, and connection with the parent.

It may be necessary for the Latin American corporate ventures also to engage in acquisitive learning through the convergence of best management practices in order to develop appropriate strategic internal and external fit. Hence the parent companies need to take responsibility for knowledge sharing in ventures. An effective win-win situation may be acquired between the parent and venture by sharing value potentials and offering equity in the venture. This would allow the venture managers to focus fully on the commissioning and on-going sustainable operation of the new facilities to ensure productivity, cash flow and profitability of the business. It would be appropriate for the venture to have greater financial independence accompanied with higher accountability. And, as a venture gains in independence and accountability, the relational dimensions would develop stronger ties with venture and offer improved internal as well as external strategic fit.

Future research prospects

There still exists the need for more longitudinal research studies in the area of corporate venturing with focus on parent-venture, strategic fit between external and internal factors and analytical frameworks of venture performance indices in reference to the developing countries. The research in the area of interplay of parent and ventures in reference to the contemplating the strategies towards economic autonomy and growth in profit seems to be a new initiative in Latin American business environment. Knowledge management in corporate venturing is also an important research field to be pursued in reference to sharing values between the parent and ventures. The future research has also demand in the functional and cognitive areas of venture management. The studies may focus issues concerning about understanding of the relationship between the suppliers of capital and the ventures equity positions. Several dimensions have been emerging within the informal venture capital market. These dimensions, collectively forming the informal venture capital market, can be characterized by portals through which angels enter and participate in the early stage market.

Conclusion

Form these findings it may be concluded that the degree of fit between a corporate parent and venture affects the success of the venture. However, some companies seem to find a dynamic balance between exploitation and exploration, between path creation and path dependence. The success is associated with high levels of commitment, competitive skills and dynamics in functional management of the venture. In the study the variables of economic and relational dimensions of external and internal fit have shown greater association with venture success. It has also been found that ventures opt for greater autonomy and less economic dependency on their parent ventures for leading success and this finding makes an intuitive sense. The relational dimension of the parent-venture interface appears to have a greater association with venture success than does the economic dimension. It was observed during the study that the parent-venture relationship does not differ between the high and low performers. It appears from the analysis that though economic dependency on parent decreases with the ageing of the venture, managerial accountability increases in the organization. The level of economic change across the phases of venture maturity has not been significantly different between high and low performers.

References

Albrinck, J., Hornery, J., Kletter, D. and Neilson, G. (2001), "Adventures in corporate venturing", *Strategy and Business*, Vol. 22, pp. 119-29.

Arrow, K.J. (1982), *Innovation in Large and Small Firms*, Price Institute of Entrepreneurial Studies, New York, NY.

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

Biggadyke, R. (1979), "The risky business diversification", *Harvard Business Review*, Vol. 57, pp. 103-11.

Block, Z. (1982), "Can corporate venturing succeed?", *The Journal of Business Strategy*, Vol. 3 No. 2, pp. 21-34.

Block, Z. and MacMillan, I.C. (1993), *Corporate Venturing: Creating New Business within the Firm*, Harvard Business School Press, Cambridge, MA.

Block, Z. and Ornati, O.A. (1987), "Compensating corporate venture managers", *Journal of Business Venturing*, Vol. 2 No. 1, pp. 41-51.

Burgelman, R.A. (1983), "A process model of internal corporate venturing in the diversified major firm", *Administrative Science Quarterly*, Vol. 28, pp. 223-44.

Burgelman, R.A. (1985), "Managing the new venture division: research finding and implications for strategic management", *Strategic Management Journal*, Vol. 6 No. 1, pp. 39-54.

Cassiolato, J.E. and Lastres, H. (2000), "Local systems of innovation in MERCOSUR countries", *Industry and Innovation*, Vol. 7 No. 1, pp. 33-53.

Chesbrough, H.W. (2002), "Making sense of corporate venture capital", *Harvard Business Review*, Ref. R0203G, March, pp. 1-8.

Cooper, A.C. (1979), "Strategic management: new ventures and small business", in Schendel, D.E. and Hofer, C.W. (Eds), *Strategic Management: A New View of Business Policy and Planning*, Little, Brown & Company, Boston, MA.

Covin, J.G. and Selvin, D.P. (1994), "Corporate entrepreneurship in high and low technology industries: a comparison of strategic variables, strategy patterns and performance in global markets", *Journal of Euromarketing*, Vol. 3 No. 3, pp. 99-127.

Day, D.L. (1994), "Raising radicals: different processes for championing innovative corporate ventures", *Organization Science*, Vol. 5 No. 2, pp. 148-72.

Dougherty, D. (1995), "Managing your core incompetencies for corporate venturing", *Entrepreneurship – Theory and Practice*, Vol. 19 No. 3, pp. 113-35.

Elfring, T. and Nicolai, F.J. (1997), "Corporate renewal through internal venturing spin-offs: perspectives from organizational economics", working paper, Copenhagen Business School, Copenhagen.

Gaurd, R. and Van de Ven, A.H. (1992), "An empirical evaluation of the internal corporate venturing process", *Strategic Management Journal*, Vol. 13 (Special issue), pp. 93-109.

Ghandour, A.F., Swartz, P., Grenek, H.M. and Roberts, E.B. (2004), "E-business transformation vial alliance clusters", *Technology Analysis and Strategic Management*, Vol. 16 No. 4, pp. 435-55.

Ghemawat, P. (1991), *Commitment: The Dynamics of Strategy*, Free Press, New York, NY.

Gills, C. and de Bettignies, J.-E. (2003), "Corporate venture capital: the upside of failure and competition for talent", CEPR discussion paper No. 4139, Centre for Economic Policy Research, London.

Ginsberg, A. and Hay, M. (1994), "Confronting the challenges of corporate entrepreneurship: guidelines for venture managers", *European Management Journal*, Vol. 12 No. 2, pp. 382-9.

Gleason, K.C., Knowles, L., Mathur, I. and Haar, J. (1999), *The International Trade Journal*, Vol. 13 No. 3, pp. 273-91.

Gompers, P.A. (2002), "Corporations and the financing of innovation: the corporate venturing experience", *Economic Review*, Vol. 4, pp. 1-17.

Gompers, P.A. and Lerner, J. (1999), *The Venture Capital Cycle*, MIT Press, Cambridge, MA.

Gompers, P.A. and Lerner, J. (2001), "The venture capital revolution", *Journal of Economic Perspectives*, Vol. 15 No. 2, pp. 145-69.

Guth, W.D. and Ginsberg, A. (1990), "Guest Editor's introduction: Corporate entrepreneurship", *Strategic Management Journal*, Vol. 11 No. (Special issue), pp. 5-15.

Jones, G. and Kraft, A. (2004), "Corporate venturing: the origins of Unilever's pregnancy test", *Business History*, Vol. 46 No. 1, pp. 100-22.

Katz, J. (2004), "Market-oriented reforms, globalization and the recent transformation of Latin American innovation systems", *Oxford University Studies*, Vol. 32 No. 3, pp. 373-87.

Keil, T. (2004), "Building external corporate venturing capability", *Journal of Management Studies*, Vol. 41 No. 5, pp. 799-825.

Kogut, B. and Zander, U. (1993), "Knowledge of the firm and the evolutionary theory of the multinational corporations", *Journal of International Business Studies*, Vol. 24 No. 4, pp. 625-45.

Lengnick-Hall, C.A. (1992), "Strategic configurations and designs for corporate entrepreneurship: exploring the relationship between cohesiveness and performance", *Journal of Engineering and Technology Management*, Vol. 9 No. 2, pp. 127-54.

McGrath, R.G., Venkataraman, S. and MacMillan, I.C. (1994), "The advantage chain: antecedents to rents from internal corporate ventures", *Journal of Business Venturing*, Vol. 9 No. 5, pp. 351-69.

Macmillan, I.C., Block, Z. and Narasimha Subba, P.N. (1986), "Corporate venturing alternatives, obstacles encountered and experience effect", *Journal of Business Venturing*, Vol. 1 No. 2, pp. 171-91.

McNally, K. (1997), *Corporate Venture Capital: Bridging the Equity Gap in the Small Business Sector*, Routledge, London.

Markham, S.K., Gentry, S.T., Hume, D., Ramachandran, R. and Kingon, A.I. (2005), "Strategies and tactics for external corporate venturing", *Technology Management*, Vol. 48 No. 2, pp. 49-59.

Martinez-Solano, L. and Phelps, N.A. (2003), "The technological activities of EU-MNEs in Mexico", *International Planning Studies*, Vol. 8 No. 1, pp. 53-75.

Miller, A., Spann, M.S. and Lerner, L. (1991), "Competitive advantages in new corporate ventures: the impact of resource sharing and reporting level", *Journal of Business Venturing*, Vol. 6 No. 5, pp. 335-50.

Miller, D. and Toulouse, J.M. (1986), "Strategy structure, CEO personality and performance in small firms", *American Journal of Small Business*, Vol. 10 No. 3, pp. 47-62.

Moreno, P. (2005), "Ecotourism along the Meso-American Caribbean Reef: the impact of foreign investment", *Human Ecology*, Vol. 33 No. 2, pp. 217-44.

Robert, E.B. (1980), "New ventures for corporate growth", *Harvard Business Review*, Ref. 80411, July, pp. 1-8.

Schrader, R.C. and Simon, M. (1997), "Corporate versus independent new ventures: resource, strategy and performance differences", *Journal of Business Venturing*, Vol. 12 No. 1, pp. 47-66.

Simon, M., Houghton, S.M. and Gurney, J. (1999), "Succeeding at internal corporate venturing: roles needed to balance autonomy and control", *Journal of Applied Management Studies*, Vol. 8 No. 2, pp. 145-59.

Sorrentino, M. and Williams, M.L. (1995), "Relatedness and corporate venturing: does it really matter?", *Journal of Business Venturing*, Vol. 10 No. 1, pp. 59-73.

Suarez, F.F. and Lanzolla, G. (2005), "The half truth of first mover advantage", *Harvard Business Review*, Vol. Ref R 0504J, April, pp. 1-8.

Sykes, H.B. (1986), "The anatomy of a corporate venturing program: factors influencing success", *Journal of Business Venturing*, Vol. 1 No. 3, pp. 274-93.

Teegen, H.J. and Doh, J.P. (2002), "US-Mexican business alliance negotiations: impact of culture on authority, trust and performance", working paper, Center for Latin American Issues, George Washington University, Washington DC, April, pp. 1-43.

Tidd, J. and Barnes, S. (2000), "Spin-in or spin-out? Corporate venturing in life sciences", *The International Journal of Entrepreneurship and Innovation*, Vol. 1 No. 2, pp. 109-16.

Tsai, W.M., MacMillan, I.C. and Low, M.B. (1991), "Effects of strategy and environment on corporate venture success in industrial markets", *Journal of Business Venturing*, Vol. 6 No. 1, pp. 9-28.

Tushman, M. and Nadler, D. (1986), "Organizing for innovation", *California Management Review*, Vol. 3 No. 1, pp. 73-84.

Von Hippel, E. (1977), "Successful and failing internal corporate ventures: an empirical analysis", *Industrial Marketing Management*, Vol. 6, pp. 163-74.

Waldkrich, A. (2003), "The new regionalism and foreign direct investment: the case of Mexico", *Journal of International Trade and Economic Development*, Vol. 12 No. 2, pp. 151-84.

Zahra, S.A. (1991), "Predictors and financial outcomes of corporate entrepreneurship: an exploratory study", *Journal of Business Venturing*, Vol. 6 No. 4, pp. 259-85.

Zahra, S.A. (1993), "Environment, corporate entrepreneurship and financial performance: a taxonomic approach", *Journal of Business Venturing*, Vol. 8 No. 4, pp. 319-40.

Zahra, S.A. (1996), "Governance, ownership and corporate entrepreneurship: the moderating impact of industry's technological opportunities", *Academy of Management Journal*, Vol. 39 No. 6, pp. 1713-35.

Zahra, S.A. and Covin, J.G. (1995), "Contextual influence on corporate entrepreneurship performance relationship: a longitudinal analysis", *Journal of Business Venturing*, Vol. 10 No. 1, pp. 43-58.

Further reading

Frost, P.J. and Egri, C.P. (1990), "Influence of political action on innovation: Part I", *Leadership & Organization Development Journal*, Vol. 11 No. 1, pp. 17-25.

Appendix. Principal questions administered to the respondents

Economic variables

(1) What are the major economic variables that lead to the success of the venture?
(2) In your view, does the success of venture depend on achieving the optimum rate of returns?
(3) Do you think that meeting financial targets of the ventures is one of the significant determinants for its success?
(4) How do you describe the significance of optimum level of investment in the venture?
(5) Does the specialized investment in the venture help to achieve the success of venture?
(6) What is the role of parent organization in driving the economy of the venture?
(7) In your view how significant are the financial resources of parent organization in managing the venture economy?
(8) Describe the good office practices of the venture leading to success.
(9) What should be the appropriate period for the venture to show-up positive financial results?
(10) Which factors drive the innovation and improvements in a venture?
(11) Is profit a major determinant in driving the research and development in the venture?
(12) Describe the process of funds allocation on major heads of the venture.
(13) Are the funds diverted in the venture from the predetermined head of account?
(14) In you opinion, how ethical is the practice of diversion of funds in the venture for the purpose other than earmarked?
(15) What is the role of CEO or authorized personnel in supervising the utilization of funds provided by parent organization in the venture?

Relational variables

(1) Describe the workplace culture in your venture.
(2) Do you prefer to work individually or in team? Offer rationale for your answer.
(3) Describe the process of decisions making in the venture.
(4) How effective is the decision making by teams in your venture?
(5) What type of conflicts do you encounter in working with teams?
(6) Describe your views on venture autonomy for achieving success?
(7) If autonomy is given to the venture, how do you propose to maintain the autonomy?
(8) What are the major implications of venture autonomy in workplace culture?
(9) Do you think the knowledge sharing would be a beneficial process in developing a favorable working environment leading to success?
(10) In your view what is significance of cultural values in managing a venture successfully?

Corresponding author
Rajagopal can be contacted at: rajagopal@itesm.mx

To purchase reprints of this article please e-mail: **reprints@emeraldinsight.com**
Or visit our web site for further details: **www.emeraldinsight.com/reprints**