

## **The Triptych of Strategic Alliances Performance in Developing Countries**

Alidou Ouedraogo  
University of Moncton  
School of Management  
Moncton E1A 3E9  
Canada  
Email: Alidou.ouedraogo@umoncton.ca

---

Received Oct. 2, 2016, Revised Dec. 15, 2016, Accepted Dec. 29, 2016

### **ABSTRACT**

*Strategic alliances are seen as a means for favoured access to knowledge in order to acquire or maintain a sustainable competitive advantage. On the literature, strategic alliances have evolved to stress mainly determinants such as the specificity of assets, the complementarities of skills, or risk sharing between partners. However, numerous questions remain unanswered; in particular, the impact of strategic alliances on the performance of each partner remains a central preoccupation. The aim of this article is to address this problem by identifying the determinants of the success of strategic alliances involving nation states and multinationals firms. Based on a data from the World Bank, our results confirm that strategic alliances in developing countries are more performing than other local firms and that this performance is based on three successful factors, the triptych of strategic alliances: technological expertise, financial borrowing capacity, and the level of education of the local managers.*

***Keywords:*** *strategic alliances, competitiveness, performance, three keys factors, developing countries*

## INTRODUCTION

The proliferation of strategic alliances has been a new business trend of the global economy over the last two decades. Strategic alliances can help firms to acquire knowledge, market share, new capabilities, and other relevant resources (Beamish & Lupton, 2009). Moreover, there is a substantial literature on strategic alliances performance including capacity building, longevity, survival, productivity, stability, and instability. The research on strategic alliances in developing countries has pointed out the frequent intervention of the governments in such countries. Governments mediate the interaction between the MNCs and partners in developing countries. A different trend, until now marginal, now gathers increasing interest in strategic alliances taking root in developing countries (Sovannara and McCullough, 2010; Friedman and Kalmanoff, 1961; Beamish, 1984; Schaan, 1983; Child and Faulkner, 1998). In effect, the hostile business environment in these countries and the difficulties related to utilising resources brings these authors to privilege strategic alliances as the most appropriate means to acquire the skills and resources vital to the company and to postulate that strategic alliances can even serve as macro-economic models. It is increasingly acknowledged that strategic alliances can even constitute essential means of development in a global economy that is more and more integrated. To do this, the performance of strategic alliances must be superior to those of other companies that are locally entrenched. In such an instance, a number of researchers have noted the importance of the triad, knowledge, education, and the financial ability to draw funds as

determinants of this performance (Marcotte, 1999; Lyles, 1994). Consequently, the objective sought throughout this research is, in part, to evaluate the performance of strategic alliances compared to other companies, and as well to further reflect more deeply on the consequences of this performance for improving the economic situation in developing countries.

## **LITERATURE REVIEW**

### **Background of strategic alliances**

Inter-company cooperation agreements cover a large range of contractual obligations such as commercialization, licensing, contracts for exchanging technology (Lowen and Pope, 2008; Contractor and Lorange, 1988). The common subsidiary appears when at least two independent companies share the capital and the control of a distinct legal organizational entity. Our research is centered on the particular case of developing countries. The first large studies pertaining to strategic alliances, and especially on the co-firms established in developing countries, were realized at Columbia University (Friedman and Kalmanoff, 1961; Friedman and Beguin, 1971). Their results were then corroborated by Reynolds (1979) and Tomlinson (1970) but lacked surprise and revelation. At the beginning of the 1980's, the team at the University of Western Ontario, under the stewardship of professor Beamish, evolved the problematic of establishing strategic alliances in developing countries as an autonomous and structured research field (Beamish, 1984; 1985; 1988; Schaan, 1983; Inkpen, 1992; Hébert, 1994). Therefore, the rapid development of strategic alliances in developing countries (via the privatization of public companies) observed by these authors served to complete the movement initiated by multi-national joint ventures described by Dussauge and Garrette (1995). Historically,

these multinational joint ventures that operated in developing countries for many decades followed government legislative constraints rather than purely economic objectives. However, the economic environment of these countries was always anchored by a strong predominance of public companies and other types of organizations such as foreign private companies, private/public partnerships, and local private companies. Nonetheless, in the last decade, the context of globalization has transformed this near quasi-political environment into a vast domain of socio-economic changes favouring the emergence of strategic alliances. We infer the following hypothesis:

*Hypothesis 1: In Developing Countries, strategic alliances are more performing than other local firms.*

### **The Determinants of Strategic Alliances Performance**

Environmental analysis and endogenous capacity has always occupied a premium place in strategic reflection (Andrews, 1971). However, the concept of internal analysis has seen important developments in recent years (Vaidya, 2009; Barney, 1991). In effect, according to the classic paradigm, the ability of a company to obtain a superior rate of profit compared to its capital cost depends on two factors: the attractiveness of the industry in which it is part and establishing a competitive advantage over its competition (Porter, 1980; 1985). Consequently, the source of the competitive advantage is essentially derived from the positioning of the company within the industry itself. Furthermore, it presupposes that all companies have a relatively free access to the resources. This foundation of competitive advantage presents an inherent empirical weakness (Rumelt, 1991). Actually, the majority of studies do not establish any significant relationships between the characteristics of an industry and the profitability of

individual companies that are part of that industry (Rumelt, Schendel and Teece, 1991; Rumelt, 1991; Hansen and Wernerfelt, 1989). For example, research by Rumelt (1991) shows that the profitability spread between individual companies within the same industry are considerably more important than the profitability spread between different industries. This conclusion leads us to anticipate that the source of the competitive advantage will not only come from the positioning of the company but also from the specific dimensions of the company. As a result, numerous researchers will center their reflection on the resources and the skills of the firm (Wernerfelt, 1984; Barney, 1986). This approach finds its origins in the work done by Penrose (1959). Skills and resources are comprised of three types of tangible and intangible assets associated in a quasi-permanent manner with the company (Barney, 1991): physical resources (technology, finance, buildings, and primary resources), human resources (education, experience, intellectual know-how by personnel) and organizational resources (formal command structure, formal and informal planning systems, control and coordination, informal relations between internal and external company groups). Certain resources assume a particular importance such as know-how, which is a result of the accumulation of knowledge gained through everyday routines (Nelson and Winter, 1982). Consequently, a competency results from a particular combination of resources and organizational processes (Amit and Schoemaker, 1993).

Skills and resources are perfectly detailed and can thus be protected by patents; in addition, they are represented in the assets or exist on plans and in formulas (Miller and Shamsie, 1996). Badaracco (1991) advances four conditions as prerequisites for formal skills and resources: «*First, the knowledge must be clearly articulated and reside in packages. Second, a person or*

*group must be capable of opening the package, of understanding and grasping the knowledge. Third, the person or group must have sufficient incentives to do so, and fourth, no barriers must stop them» (p.34).* The economic situations in the majority of developing countries are fertile ground for the reality of formal skills and resources. This is precisely the case for contracts dealing with technology transfer used by companies in developing countries to acquire the necessary technology for their industrial production (Oman, 1984). But, as noted by Kiggundu, Jorgensen and Hafsi (1983), when the transfer between industrialized countries and developing countries evolves beyond purely the technology aspect and implicates the environment, success becomes uncertain and problematic. Thus, the transfer of technology in developing countries is confronted with problems of implementation (Munir, 1998). The eventual risk of the appropriation of formal skills and resources is tied to the protection clauses in the legal justice system (Miller and Shamsie, 1996). Depending on the nature of the industry or the geographical location, such legal protection can be more or less enshrined, hence the importance of tacit agreements on skills and resources. We infer the following hypothesis:

*Hypothesis 2: Access to technology favours more strategic alliances than other locally established companies.*

As noted by Nelson (1987), the skills and resources based on knowledge are more or less transferable. In effect, the enhanced value of assets based on knowledge depends on the ability of companies to continue absorbing new knowledge (Cohen and Levinthal, 1990), to stimulate social interactions necessary for the creation of such knowledge (Kogut and Zander, 1992), and to select, conserve, and reactivate the knowledge of the organization

(Garud and Nayyar, 1994). In order to maintain and develop these different abilities, companies must be able to access skill and gifted human resources, and in sufficient quantities. Starting with this premise, we can infer that the ability to maintain and develop these skills is a function of the general context in which companies evolve; in other words, the companies of developing countries are considerably less able to maintain and especially to develop these skills (Austin, 1990; Kiggundu, 1989). Access to tacit skills is therefore contingent on the degree of development in countries.

The approach to skills and resources must therefore be adapted to the context of developing countries in which they rarely have access to sufficient human resources, nor to adequate physical, financial, and organizational resources (Delalande, 1989). For example, Gauthier et al. (1995), and Saadi (1999) showed that numerous companies in developing countries, especially the smaller ones, are excluded from the banking financial system. In this case, strategic alliances represent an effective means for company directors to reinforce their financial borrowing ability.

Consequently, strategic skills become particularly difficult to create. As seen in numerous works (Austin, 1990; Delalande, 1989; Bourgoin, 1984), the strategic value of resources, in such a context, is a function of the economic, social, and cultural conditions. We infer the following hypotheses:

*Hypothesis 3: Access to technology favours more readily strategic alliances than other locally established companies. The level of education of the local director more often favours strategic alliances rather than other locally established companies.*

*Hypothesis 4: The financial ability to borrow more often favours strategic alliances over other organizational forms.*

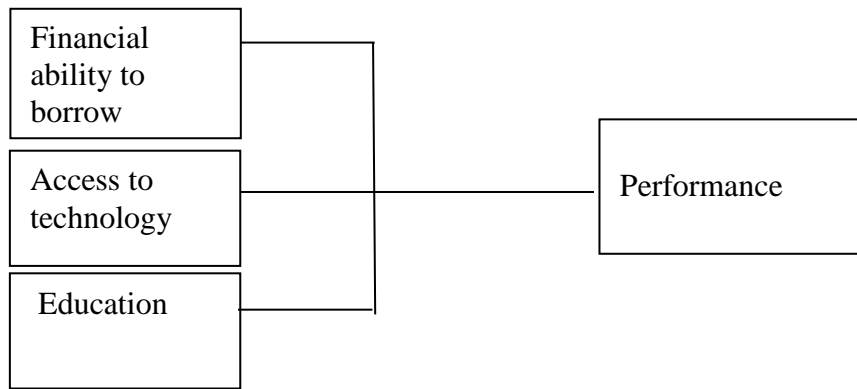


Figure 1: Research Model

The research framework describes the relationship between skills and resources and the performance of companies. It shows that access to critical skills and resources (ability to borrow, technological know-how, and education) determine the performance of all companies established locally, particularly favouring strategic alliances.

## **METHODOLOGY**

### **Survey and Sample description**

The Regional Program on Enterprise Development (RPED), initiated by the World Bank (And the Canadian International



Development Agency), is designed to take stock of the overall condition on the dynamics of the manufacturing sector in a number of African countries. As such, it encompasses many universities (HEC Montreal, Oxford, and Amsterdam University) along with many African countries (Cameroun, Ghana, Ivory-Coast, Kenya, Burundi, Zambia, and Zimbabwe). The database used relates to Cameroonian companies. The RPED collected data by means of panels over a three-year period (1993-1995). It comprises a sample size of 611 companies. A questionnaire was administered directly to local managers by a team of researchers and nine (9) subject matters were discussed: the creation of companies, companies in general, technology, marketplaces, financial markets, resolving conflicts, infrastructure, regulations, and services that assist companies.

### **Description of the variables**

Variable operational procedures are based on a precise knowledge and definition of each variable. We have identified in the database the most pertinent indicators susceptible to accurately measure the given variable. In certain cases, we introduced binary variables. As for dependent variables, we retained the evolution of the survey over three years (1993-1995), the dollar value of sales, and the number of jobs (Gauthier et al., 1995). As for the explicative variables, we identified the different types of companies as per the three dimensions outlined in our conceptual framework; namely, environmental, resource, and local leadership. Regarding the different types of companies, we retained as a category variable the capital structure that we transformed into five diatomic variables according to the type of shareholder (local, public, and foreign or mixed).

Table 1. Description of the variables

Variables	Descriptions
Dependant variables	
<i>Value of sales (SALES):</i>	Progression over 3 years 1993/1995. LOG
<i>Value for employment (EMPLO)</i>	Progression of employment over 3 years 1993/1995. LOG
Independent variables	
<i>Strategic Alliances (STRAAL)</i>	Comprises companies controlled by local and foreign shareholders.
<i>Local private companies (PRIVEN)</i>	Comprises companies controlled by local shareholders.
<i>Public companies (PUBEN):</i>	Comprises companies controlled by public shareholders.
<i>Public/Private Companies (PAPEN)</i>	Comprises companies controlled by public and local shareholders.
<i>Foreign private companies (PRIVFEN)</i>	Comprises companies controlled by private foreign shareholders.
<i>Access to financial resources (ACFRE)</i>	Ability to borrow from banking system: 1- Yes; 2-No.
<i>Access to technological know-how (ACTEK)</i>	Contract for technical assistance: 1- Yes; 2-No.
<i>Level of education (LEVDU)</i>	Level of education of the local director: 1- secondary or less; 2-higher education.

Hence, the private local companies (PRIVEN) are characterized by the presence of only local shareholders, public companies (PUBEN) are comprised only of public shareholders,

and partnerships between public and private local companies (PAPEN) are identified by the presence of local enterprise and public shareholders. Foreign private companies (PRIVFEN) are controlled by foreign private shareholders. However, strategic alliances (STRAAL) are characterized by both local and foreign shareholders. Regarding resources, skills, and access to financial capital, we retained the ability to borrow from the banking system (ACFRE). Finally, upon examining technological know-how, we retained both the technical assistance contracts and no assistance at all (ACTEK). We also retained the level of education of the local director (LEVDU). See the Table 1 is below:

### **Data Analyses**

We have conducted comparisons of means and standard deviation between the different variables in order to identify the existence of certain extreme values susceptible of influencing the results of our analysis (Anderson, 1982). At this stage, the objective is to identify and suppress, when needed, these extreme values so as not to alter the nature and pertinence of the statistical results. In our analysis, the comparisons of the means and the standard deviation do not include very strong extreme values of a nature that would affect the credibility of our results on the selected values (See Table 2). After the descriptive analysis that shows the pertinence of the variables retained, we then proceeded to the multiple linear regression analysis to estimate the impact of the explicative variables on the dependent variables.

### ***Multiple Linear Regression Analysis***

In this section we will present the results of the multiple linear regression analysis of the two dependent variables. The method for estimating ordinary least squares was judged to be more appropriate for our analyses.

Table 2. Means, standard deviation and correlations (N: 611)

	Vari- able s	Mean s	S. devi ation	1	2	3	4	5	6	7	8	9	10
1	SAL ES	18.6 4	2.54	1	.765 **	.345 **	.997 **	.556 **	.875 **	.442 **	.874 **	.532 **	.855 **
2	EM PLO	3.17	1.54	.345 **	1	.227 **	.861 **	.667 **	.543 **	.912 **	.533 **	.124 **	.991 **
3	STR AAL	0.19	0.39	.234 **	.654 **	1	.429 **	.334 **	.455 **	.459 **	.245 **	.843 **	.346 **
4	PRI EN	0.58	0.49	.139 **	.432 **	.556 **	1	.865 **	.637 **	.348 **	.744 **	.243 **	.451 **
5	PAP EN	0.01	0.12	.490 **	.321 **	.554 **	.419 **	1	.587 **	.563 **	.428 **	.567 **	.951 **
6	PRI VFE N	0.00	0.09	.125 **	.223 **	.342 **	.228 **	.443 **	1	.298 **	.543 **	.857 **	.342 **
7	PUP EN	0.09	0.29	.092 **	.454 **	.789 **	.337 **	.552 **	.511 **	1	.567 **	.357 **	.641 **
8	ACF RE	0.43	0.49	.229 **	.675 **	.336 **	.118 **	.778 **	.336 **	.519 **	1	.354 **	.833 **
9	ACT EK	0.14	0.34	.564 **	.553 **	.557 **	.129 **	.453 **	.216 **	.248 **	.873 **	1	.688 **
10	LEV DU	0.29	0.45	.342 **	.876 **	.448 **	.225 **	.432 **	.649 **	.866 **	.724 **	.661 **	1

\*\*P<0.01

To verify the heteroscedasticity and the residual normality, we calculated the Durbin-Watson statistic in order to detect an eventual auto-correlation of estimated residual (Dodge, 1993). Its value is normally between 0 and 4. If the value is close to 2, this generally indicates that the residuals are not auto-correlated and, consequently, the variance of the estimated parameters is minimal. To verify the absence of multicollinearity, we calculated

the inflation factor of the variance that allows us to detect the existence of collinearity between explicative variables. As a general rule, if the inflation factor of the variance (IFV) of an explicative variable is higher than 10, there is multicollinearity between the variable under study and the others.

### **Analysis and Design Models**

Considering that our base model depends on two dependent variables, it is imperative to present our analyses by following these two sub-models (sale value and employment value).

#### *The first sub-model: Sales Value*

For all models, we obtained a Durbin-Watson (DW) statistic of 1.830 and an IFV of approximately 1, which in turn indicates that we do not have heteroscedasticity or multicollinearity. As previously mentioned, we have conducted a partial regression of each explicative variable: models (1), (2), (3) and (4). These different models are exploratory in nature and allowed us to emphasize the most interactive model. It turns out that this model is the one which comprises all the variables (see Table 3).

The  $\beta$  coefficients are, respectively, 2,864, -0.480, 2010 and 2098, for the variables STRAAL, PRIVEN, PAPEN, and PRIVFEN. These coefficients mean that the different types of companies contribute more to the value of sales than the reference companies (public). Moreover,  $\beta$  coefficients are 1.469 for the variable ACFRE, 0.652 for the variable ACTEK and 0.574 for the variable LEVDU. These results show that these variables contribute favourably to the value of sales. Comparatively speaking, the model indicates that the performance of the companies can be classified in decreasing order as follows: 1-STRAAL, 2-PRIVEN, 3-PAPEN, 4-PRIVFEN.

Table 3: Results of linear regression: Sales Value

Items	(1)	(2)	(3)	(4)
(Constant)	18.005 (0.280)**	17.961 (0.278)**	15.875 (0.617)**	17.917 (0.276)
**				
STRAAL	3.048 (0.344)**	2.932 (0.345)**	4.970 (0.645)*	2.864 (0.341)
**				
PRIVEN	-0.539 (0.306)	-0.564 (0.304)	1.640 (0.630)*	-0.480 (0.301)
PAPEN	2.922 (0.729)**	2.708 (0.728)**	2.052 (0.872)**	2.010 (0.716)
**				
PRIVFEN	2.321 (0.402)**	2.240 (0.400)**	4.101 (0.683)**	2.098 (0.398)
**				
ACFRE		1.897 (0.178)**	1.765 (0.173)**	1.469 (0.180)
**				
ACTEK			1.399 (0.286)**	0.652 (0.252)
*				
LEVDU				0.574 (0.195)**
R <sup>2</sup> adjusted	0.372	0.380	0.450	0.394
N.	474	474	375	474

Constant: public companies

\* P < .05, \*\* P < .01

We can conclude that the value of sales are more performing for strategic alliances than for other types of companies. This result is similar to that of Krishnan (2002) who shows that strategic alliances improve the marketing and communication abilities of partnerships. However, Gauthier et al. (1995), while confirming the results, highlight that the strategic alliances in Cameroon are generally comprised of large companies whose sales volume largely surpass those that smaller companies could hope to realize.

*The second sub-model: Employment numbers*

For this linear regression, we obtain a Durbin-Watson statistic (DW) of 1.980 and an FIV factor of approximately 1, which confirms that we have neither heteroscedasticity, nor multicollinearity. As previously mentioned, we conducted a partial regression on each of the explicative variables; namely, models M1, M2, M3 and M4. These different exploratory models allowed us to uncover the most interactive model (See Table 4).

The analysis of the contributions of the variables deemed significant to job creation is based on the  $\beta$  coefficients. Thus, the  $\beta$  coefficients are respectively 1.321, 1.159 and 0.894 for STRAAL, PRIVEN and PAPEN. These coefficients indicate that these types of companies contribute more to job creation than the referenced public companies. Nonetheless, the  $\beta$  coefficients are, respectively, 0.609, 0.152, and 0.314 for the variables ACFRE, ACTEK, and LEVDU, which indicate that their contributions to employment are positive. Overall, the model shows us that the performance of companies can be classified in decreasing order as follows: 1-STRAAL, 2-PRIVEN, 3-PRIVFEN, and 4-PAPEN. This shows that upon examining the employment numbers, strategic alliances are more performing than other types of companies.

Table 4: Results of linear regression: Employment numbers

Items	(1)	(2)	(3)	(4)
(Constant)	3.110 (0.167)**	3.065 (0.165)**	3.269 (0.350)**	2.956 (0.161)
**				
STRAAL	1.432 (0.210)**	1.348 (0.208)**	1.094 (0.368)**	1.321 (0.201)
**				
PRIVEN	-0.604 (0.183)**	-0.626 (0.181)**	-0.818 (0.357)*	-0.475 (0.176)
**				
PAPEN	1.604 (0.460)**	1.428 (0.456)**	1.245 (0.532)**	1.159 (0.440)
**				
PRIVFEN	10.024 (0.250)**	0.958 (0.247)**	0.529 (0.394)	0.894 (0.239)
**				
ACFRE		1.003 (0.112)**	0.993 (0.109)**	0.609 (0.117)
**				
ACTEK			0.835 (0.175)**	0.152 (0.165)*
LEVDU				0.314 (0.125)*
R <sup>2</sup> adjusted	0.312	0.331	0.409	0.372
N	512	512	404	512

Constant: public companies

\* P < .05, \*\* P < .01



These results are confirmed by a number of research studies done in an African context by Gauthier et al. (1995), Delalande (1989), Sleuwaegen and Goedhuys (2002) and Kessy (2000). The study by Kessy shows how, in the context of the Ivory-Coast, partnerships well grounded in cultural relationships can favour solid economic performances and also create employment. Our results show that strategic alliances (STRAAL) are more performing in creating employment and generating sales than other companies. Besides, these results indicate that this performance is based on the technological know-how, the level of education of local company directors, and the financial borrowing ability. We shall now analyse the range or reach of these results.

## DISCUSSION

*Is the performance of strategic alliances superior to that of other types of companies established locally?*

Statistical results show that strategic alliances are generally more performing than other companies established locally. Such a result is important since it answers a multitude of hypotheses postulated by previous researchers (Sovannara and McCullough, 2010; Friedman and Kalmanoff, 1961; Friedman and Béguin, 1971; Beamish, 1984; 1988; Schaan, 1983; Hébert and Beamish, 1997). In fact, since the beginning of the 1980's, strategic alliances have been considered as the organizational form most appropriate to compete in the globalization of markets that inherently create numerous economic (Kogut, 1988), strategic (Dunning, 1979) and organizational (Hamel, 1991; Jarillo, 1988) difficulties for companies. Strategic alliances are thus seen as a preferred means by which companies, while conserving their key skills, ally themselves with other partners to acquire certain skills they are missing. However, this strategic vision is not

universally shared. For example, authors such as Porter (1990; 1991) and Reich (1986) warn companies against the potential dangers, deceit, and damages of an alliance. These authors believe that it is nothing but a «Trojan Horse» used by certain companies to unscrupulously and deceptively gain the skills of their new partner. On this point, Hamel (1991) suggests that, from now on, an essential factor for a successful strategic alliance requires the implementation of contractual terms and conditions that allow the sharing of knowledge between partners while withholding from transfer select private in-house information. According to him, this is one of the reasons why the Japanese rapidly learn from their occidental partners whose know-how is easy to imitate, while the latter have difficulty learning from their Japanese partners because of the cultural complexities and practices in Japan. This risk allows Porter (1991) to state that strategic alliances are but transitory manoeuvres and unstable partnerships that are inevitably destined to fail. However, despite this reticence, the research generally shows that the results substantially favour this type of organizational form and that it is best suited to face the multiple challenges faced by developing companies (Beamish and Killing, 1997).

Nevertheless, if strategic alliances seem to be the organizational type best suited to face the challenges by companies in the industrialized world, how do such organizations fare with companies in developing countries? On this point, most authors that are interested believe strategic alliances can help developing world countries reduce the spread in development that separates them from industrialized countries by improving notably the performance of other companies locally established (Friedman and Kalmanoff, 1961; Beamish, 1984 and 1988; Hébert and Beamish, 1997; Gherzouli, 1997). It is by acquiring skills through these strategic alliances that improves the business

environment, the resources, and the leadership of local companies. From this perspective, Chrysostome (2000) showed that alliances can improve the transfer of skills between companies in developing and industrialized countries. However, he indicates that this transfer is often difficult because of cultural differences and difficulties in communication over distances. Recently, Krishnan et al., (2002) measured the contribution of strategic alliances to local businesses in an Indian context. Their results show that alliances do not bring a satisfactory contribution to local businesses if they are centered on research and development or technological innovation. On the other hand, those that concentrate on advertising and promoting products are beneficial for local companies since the latter can increase their sales and profits. Furthermore, the authors emphasize that cultural distance between partners have a negative impact on performance overall. These examples complete and reinforce those that we have obtained by demonstrating that the contribution of alliances can take several forms. It is now time to return to the determinants of their performance.

*Which Determinants of Strategic Alliances Performance?*

Differing from the industry based approach by Porter (1980), the resource approach proposes to rely on the skills and resources of the company to produce a durable competitive advantage (Vaidya, 2009; Wernerfelt, 1984; Barney, 1986). It suggests implicitly that the source of the competitive advantage no longer lies solely with the positioning of the company but also within the company itself through the distinct skills and resources. Many authors have tried to render it operational. For example, Miller and Shamsie (1996) first proposed to make a distinction between the resources based on property-based rights and those on knowledge-based rights. They showed, by studying the case of

film studios in Hollywood, that resources based on property rights were more performing when they were linked to a stable environment; on the other hand, resources based on knowledge rights were more profitable and adaptable when they are linked to turbulent and uncertain environment. These results tend to support ours and show that each resource can only be effective in an appropriate environment.

The first hypothesis postulates that in the presence of technological know-how, the performance of alliances is better than those of other enterprises. It is validated according the value of sales and number of jobs, as confirmed by our statistical results. In effect, the first type of empirical study encountered in literature review concerns technological knowledge that is based entirely on the transfer mechanism or technique (OECD, 1998; CNUCED, 1995). This concept of technological transfer that overlooks the know-how has been contested. Marcotte (1999) shows that the most important elements involved in the process of technological transfer are based on the cognitive experience acquired by local partners during their apprenticeship. As our statistical results show, it seems necessary to integrate in the process of technology transfer not only the technology itself but also specifically the management and the organizational abilities to accompany it thus making both an integral part of this technology (Hafsi, 1990; Kiggundu, Jorgensen and Hafsi, 1983). In any case, we can imagine that in the turbulent and complex environment that is found in developing countries, the transfer of resources based on technological know-how as it happens seems to be better suited than resources based on property rights such as patents, exploitation licences, and equipment.

The hypothesis that postulates that the ability to borrow from the banking system is more profitable for strategic alliances than for other companies is also validated statistically according to the

value of sales and number of jobs. Literature confirms the importance of strategic alliances in the mobilisation of financial resources. The majority of studies on the performance of alliances in developing countries emphasize the primordial role of the foreign partner in strengthening the financial abilities of the alliance (Gherzouli, 199; Saadi, 1999). These studies have revealed that the objective sought by the local partner, through cooperation, is much more linked to the need in strengthening his financial abilities rather than pursuing strategic development objectives. As for the rest, our research arrives at the same conclusions. It shows that local partners seek first and foremost financial partners who are capable of supporting their activities or international development.

The hypothesis that local directors with higher education favours to a greater extent strategic alliances rather than local establishments is also validated by our results. Literature on the role of academic education for managers regarding the performance of companies again supports our research. For example, Kimberly and Evanisko (1981) had established in the context of industrialized countries that formal education by the manager was associated with his innovative spirit. Their results stipulate that a higher level of education by the manager is positively related to his ability for innovation. Besides, Hambrick and Mason (1984) suggest that managers who have a lower level of education have more difficulty in mastering the environmental complexities than managers with a higher level of education. In other words, their results seem to suggest that a manager with a higher academic education is more suited to handling the actual environmental complexities in organizations. This series of results that highlights the link between the education of managers and the performance of companies joins and corroborates the results obtained by Estrin and Wright (1999) in

certain countries undergoing transition in Eastern Europe. This also includes the elements clearly shown in the work of Bourgoin (1984), Kessy (2000) and Mutabazi (2000) with strategic alliances implicating African companies. However, it is important to mention that regarding the work realized in most established alliances in developing countries, the impact by local managers trained on performance issues is often tied to the size of the resistance to change expressed by less trained managers whose numerous privileges are threatened by movements created because of the proliferation of strategic alliances (Estrin and Wright, 1999; Kessy, 2000). However, if these resistances to change are removed, the higher education of local managers mostly profits strategic alliances instead of local establishments because of a certain «cultural proximity». In fact, as shown by our research, the higher occidental type education of the local manager brings him closer «culturally» to the foreign manager and this represents a decisive advantage in the performance of strategic alliances.

## CONCLUSION

Research on strategic alliances centered on governments of developing countries and foreign firms saw unprecedented development in the 1970s and 1980s (Friedman and Béguin, 1971). Certain researchers initially structured their work on the problematic of economic development. The question, therefore, was whether the success of *strategic alliances* would guaranty developing countries their own economic expansion (UNCTC, 1988). In the 1990s, the research was essentially structured around strategic alliances as a new type of organization (Gugler, 1992). According to Hafsi and Foucher (1996), «the opening of markets coupled with globalization brought to the forefront more

complex behaviours». Seen from a strategic viewpoint, this evolution allowed us to understand the importance of changing our existing strategic approach based on a product/market rapport towards a strategy based on mastering skills and resources. This meant that the entire framework and implementation of strategic alliances would be re-examined under this new approach. Our research shows that strategic alliances result in superior performance over other locally established companies. It also shows that companies participating in strategic alliances profit more than other local types of companies in technology know-how, higher education for local directors, and the ability to borrow from financial markets.

However, researchers such as Kiggundu, Jorgensen and Hafsi (1983), and Kiggundi (1989) believe that when the transfer of skills between companies from industrialized and developing countries involve a relationship between the organization and its environment, western theories are ill suited. It seems that the role played by socio-cultural and ethical parameters in the performance of companies reinforces the complexity of the environment of developing countries. The performance of strategic alliances is dependent on taking into account these parameters. Regarding the methodology, the limitations are related to the quantitative data used in the study. Insofar as these are concerned, the decision that we made to determine strict criteria for the composition of our sub-group of strategic alliances may represent a limitation. Even at the literature level on strategic alliances, the opinions expressed by different authors are not unanimous on the best way to define a strategic alliance. However, the selection criteria that we retained are in agreement with those generally suggested by the most prominent researchers in the field of strategic alliances.

The performance criteria retained may represent another

limitation; we made our selections as a function of the local context, as well as quantitative data. This is why we essentially retained the quantitative criteria to measure performance. Furthermore, to conduct quantitative analyses similar to those we realized, it would have been necessary to arrange for a large quantity of companies in many activity sectors and over a number of years, which would have contributed in reinforcing the external validity of the results. Besides, the researcher is often confronted at one time or another with the question of the quality of his data. Working on secondary data as we have done involves other types of difficulties, despite the number of advantages that it generates, as is the case with the surveys by questionnaire. Thus, with respect to our database, future researchers should be aware of three principal limitations: it relies on 4 activity sectors, rather than on the full set of activity sectors; and it collected data over a 3 year period, which limits all longitudinal analyses. As well, the principal objectives were to facilitate the comprehension of the micro-economic effects on the functioning of the companies rather than reveal their strategic behaviour, as we have purposely done.

However, can we conclude that strategic alliances, which now profit from the current context of globalization, can contribute to decreasing the spread between the economies of developing countries and industrialized countries? That's the big question for future research. For example, East Asia has clearly shown during the greater part of the last three decades the advantages of globalization and the benefits of openness and economic liberalisation (World Bank, 2000). Thanks to their substantial investments in capital and human resources, and also an openness of their economies, these countries recorded an impressive economic growth, and benefited from enviable advances in the reduction of poverty. However, at the opposite end, Africa attracted less foreign capital. A recent study by the



United Nations Conference on Trade and Development (UNCTAD) reveals that direct foreign investments in Africa amounted to 9.1 billion dollars in 2000, compared to 10.5 billion dollars in 1999 (UNCTAD, 2000). This represents less than 1% of foreign investments throughout the world, with the quasi-entirety flowing from industrialized countries to developing countries. At the same time, African exports in 1999 represented less than 2% of world exports. These results show that the integration of Africa into the world economy is considerably less advanced than other regions by the absence of a favourable environment and especially by a lack of qualified human resources. It is perhaps in this light that we should understand the recent implementation of NEPAD (New Partnership for Africa's Development). For one of the first times, a program that provides a vision and traces the perspectives for growth and development for countries in Africa that was conceptualized and designed by African leaders themselves. The implementation of such an ambitious program is based on a new partnership with companies from industrialized countries. Hence, the success of such a program could be the beginning of the integration of African countries with the rest of the world economies. However, to prevent making the same errors and repeating shortfalls as in the past, African leaders should dwell on the words of Nelson Mandela: «A vision that is not accompanied by action is but a dream; an action that does not stem from a vision is but a waste of time; but a vision followed by action can change the world».

## **REFERENCES**

- Alcacer, J., Oxley, J. (2014), Learning by supplying, *Strategic Management Journal*, 35(2), 204-223.
- Aliouat, B. (1996), *Strategies for industrial cooperation*, Paris:

Economica.

- Beamish, W. P. and Killing, J.P. (1997), *Cooperative strategies: Asian-Pacific perspectives*. San Francisco: The New Lexington Press.
- Anderson, J.A. (1982), *Logistics discrimination*, In *Handbook of Statistics*, Krishnaiah P.R et Kamel, L (eds.) North Holland, Amsterdam.
- Andrews, K.R. (1971), *The concept of corporate strategy*, Dow Jones-Irwin, Homewood, IL.
- Badarocco, J. (1991), *The knowledge link*, Boston: Harvard Business School Press.
- Barney, J. (1991), *From resources and sustained competitive advantage*, *Journal of Management*, 17(1), 99-120.
- Beamish, P.W. (1985), *The characteristics of joint ventures in developed and developing countries*, *Columbia Journal of World Business*, 20(3), 13-19.
- Beamish, P. W. (1984), *Joint venture performance in developing countries*, Unpublished doctoral dissertation, University of Western Ontario, London Ontario (Canada).
- Beamish, P. W. (1988), *multinational joint ventures in developing countries*, London: Routledge.
- Bourgoin, H. (1984), *L'Afrique malade du management*, Paris : Eitions, J. Picollec. France.
- Brenner, B, Amobos, B. (2013), *A question of legitimacy? A dynamic perspective of multinational firm control*, *Organization Science*, 24(3), 773-795.
- Callon, M. (1994), *Is science a public good?* *Science, Technology & Human Values*, 19(4), 395-424.
- Chandler, A.D. (1962), *Strategy and Structure*, MIT, Press, Cambridge.
- Child, J. and Faulkner, D. (1998), *Cooperative strategy*, Oxford University Press, UK.

- Chrysostome, M.E. (2000), Learning and developing strategic skills: The case of African companies operating in a context of North-South joint venture, Doctoral thesis in administration, Laval University.
- Cohen, V.M., and Levinthal, D.A. (1990), Absorptive capacity: A new perspective on learning and Innovation, *Administrative Science Quarterly*, 35 (1), 128-152.
- Corredoira, R.A., McDermott, G.A. (2014), Adaptation, bridging and firm upgrading: How non market institutions and MNC's facilitate knowledge recombination in emerging markets, *Journal of International Business Studies*, 45(6), 699-722.
- Delalande, P. (1989), Management of industrial enterprise in Africa, Paris: Economic /ACCT.
- Dierickx, I. and Cool, K. (1989), Asset stock accumulation and sustainability of competitive advantage, *Management Science*, 35(12), 1504-1511.
- Dodge, Y. (1993), *Statistics: Encyclopedic Dictionary*, Paris: Dunod.
- Doz, Y. (1986), *Strategic Management in Multinational Companies*, Oxford: Pergamon Press.
- Doz, Y. (1994), The dilemmas of managing the renewal of key competencies, *French Journal of Management*, January-February. 92-104.
- Doz, Y. (1996), The evolution of cooperation in strategic alliances: initial conditions or learning processes, *Strategic Management Journal*, 17, 55-83.
- Doz, Y. and Hamel, G. (1998), *Alliance Advantage*, Boston: Harvard Business Review Press, USA.
- Dunning, J. H. (1988), The eclectic paradigm of international production, *Journal of international business studies*, 19, 1-31.

- Dunning, J.H. (1995), Reappraising the eclectic paradigm in an age of alliance capitalism, *Journal of International Business Studies*, 26(3), 461-493.
- Dunning, J.H. (1979), Explaining changing pattern of international production: In defence of the eclectic theory, *Oxford Bulletin of Economics and Statistics*, 41(2), 269-295.
- Estrin, S. and Wright, M. (1999), Corporate governance in the former Soviet Union: An overview of the issues, *Journal of Comparative Economics*, 27, 398-421.
- Evrard, Y., Pras, B. and Roux, E. (1993), *Market*, Paris: Nathan.
- Friedman, W. G. and Kalmanoff, G. (1961), *Joint international business ventures*, New York: Columbia Univ. Press.
- Friedman, W.G. and Beguin J.P. (1971), *Joint international business ventures in developing countries*, New York, Columbia University Press.
- Garrette, B. and Dussauge, P. (1995), *Alliance Strategies*, Paris: Organization Editions.
- Garrette, B. (1998), Special focus: Strategic alliances, *French Journal of Management*, August, 15 (2), 56-69.
- Gauthier, B. (1995), *The dynamics of manufacturing in Cameroon*, Monograph, HEC Montreal, CETAI.
- Gauthier, B., Legoff, J.P. and Vallee, L. (1995), *State crisis and the manufacturing sector in cameroon*, monograph, HEC Montreal, CETAI.
- Gherzouli, K.(1997), The conditions of success of the Euromaghrebian cooperation, *French Journal of Management*, 17(3), 45-67.
- Grawitz, M. (1993), *Methods of the Social Sciences*, Specific Dalloz.
- Gugler, P. (1991), *Transnational strategic alliances*, institute of economic and social sciences, University of Friborg, Ed. University of Friborg Switzerland.

- Gubler, P. (1992), Building Transnational Alliances to create Competitive Advantage, *Long Range Planning*, 25 (1), 90-99.
- Hafsi, T. (1997), Strategy research: looking for a stick of the blind, *Management International*, 2(1), 11-23.
- Hafsi, T. and Foucher, P. (1996), Competitiveness and governability: Towards a theory of foreign direct investment in a globalized world, *Political and Public Management Review*, 14(4), 25-42.
- Hafsi, T. (1990), *La gestion des entreprises publiques*, Alger: Office des publications académiques.
- Hambrick, D.C. and Mason, P.A. (1984), Upper echelons: The organization as a reflection of its top managers, *Academy of Management Review*, 9(2), 193-206.
- Hamel G. Y. Doz C.K. Prahalad, (1989), Collaborate with your competitors and win, *Harvard Business Review Press*, January-February.
- Hamel, G., Doz, Y. and Prahalad, C.K. (1986), Strategic partnerships: success and surrender, *Harvard Business Review Press*, July-August.
- Hamel G. and Prahalad, C.K. (1990), The core competence of the corporation, *Harvard Business Review Press*, May-June.
- Hamel, G. (1991), Competition for competence and Inter-partner learning within international strategic alliances, *Strategic Management Journal*, Vol. 12, Issue S1, 83-103.
- Hansen, G.S., Wernerfelt, B. (1989), « Determinants of firm Performance: The relative importance of economic and organizational factors », *Strategic Management Journal*, 10(5), 399-411.
- Harrigan, K.R. (1988), Joint Ventures and competitive strategy, *Strategic Management Journal*, 9 (2), 141-158.
- Hebert L. (1994), Control and Performance in International Joint ventures, Unpublished doctoral dissertation, University

- Western Ontario (Canada).
- Hebert, L. and Beamish, W.P.(1997), The characteristics of Canada-based international joint ventures, In P. W. Beamish and J. P. Killing, editors, *Cooperative strategies: North American perspectives*. San Francisco: The New Lexington Press.
- Hennart, J.F. (1988), A transaction costs theory of equity joint-ventures, *Strategic Management Journal*, Vol. 9 (4), 361-374.
- Hosmer, D.W. and Lemeshow, S. (1989), *Applied logistic regression*, J. Wiley, N.Y.
- Inkpen, A.C. (1992), *Learning and Collaboration: An examination of North American-Japanese Joint ventures*, Unpublished Ph.D. dissertation, University of Western Ontario (Canada).
- Itami, H., Roehl, T.W. (1987), *Mobilizing invisible assets*, Harvard University Press, Cambridge, MA.
- Jarillo, J.C. (1988), On Strategic Networks, *Strategic Management Journal*, 9, 31-34.
- Kalika, M. (1988), *Business Structures: Realities, Determinants and Performance*, Paris, Economic.
- Kessy, Z., M. (1998), *African Culture and Modern Business Management*, CEDA Publishing.
- Khan, Z., Shenkar, O, Lew, Y.K., (2015), Knowledge transfert from international joint venture to lacl suppliers in a developing economy, *Journal of International Business Studies*, 46(6), 656-675.
- Kiggundu, M.N., Jorgensen, J.J. and Hafsi, T. (1983), Administrative theory and practice in developing countries: A synthesis, *Administrative Science Quarterly*, 28, 66-84.
- Kiggundu, M.N. (1989), *Managing organizations in developing countries*, Kumarian Press.
- Killing, J.P. (1983), *Strategies for joint-venture success*, New York, Praeger.

- Killing, J.P. (1980), Technology acquisition: License agreement or joint venture, *Columbia Journal of World Business*, 15(3), 38-46.
- Killing, J.P. (1982), How to make a global joint venture work, *Harvard Business Review*, 60(3), 120-127.
- Kimberly, J.R. and Evanisko, M.J. (1981), Organizational Innovation: The influence of individual, organizational and contextual factors on hospital adoption of technological and administrative innovations, *Academy of Management Journal*, 24(4), 689-713.
- Kogut, B. (1988), Joint-ventures: Theoretical and empirical perspectives, *Strategic Management Journal*, Vol. 9.
- Koh, H.N., Venkatraman, N. (1991), Joint venture formation and stock markets reactions: An assessment in the information technology sectors, *Academy of Management Journal*, 34(4), 869-892.
- Krishnan, R., Noorderhaven, N.G., Eapen, A.(2002), Collaboration across borders: Benefits to firms in an emerging economy, *Academy of Management Annual Conference*, Denver, Colorado (USA).
- Lyles, M. (1988), Learning among joint venture-sophisticated firms, In F.J. Contractor and Lorange, eds, *Cooperative strategies in international business*, San Francisco: New Lexington Press.
- Lowen, A. and Pope, J. (2008), Survival analysis of international joint venture relationships, *Journal of Business and Economic Studies*, 14(1), 62-80.
- Marcotte, C. (1999), Knowledge, Learning and Success in Technology Transfer in China, *Doctoral Thesis (UQAM)*, July.
- Miller, D. and Shamsie, J. (1996), The resource-based view of the firm in two environments: The Hollywood films studios from

- 1936 to 1965, *Academy of management Journal*, 39 (3), 519-543.
- Mutabazi, E. (2000), National cultures and management: The multicultural experience of African enterprises, *Colloquium of Zacatecas*, July (11-14<sup>th</sup>), 2000.
- OECD (1998), *Investment in human capital*, Paris: OECD, Paris.
- Oman, C. P. and Wignaraja, G. (1991), *The evolution of economic thought on development since 1945*, OCDE, Paris.
- Ouedraogo, A. (2003), *Strategic alliances in developing countries, specificity, management and performance conditions: a study of Cameroonian and Burkina Faso companies*, PhD thesis in administration, HEC Montreal.
- Penrose, E.T. (1959), *The theory of the growth of the firm*, Basil Blackwell.
- Peters, T. and Waterman, R.H. (1982), *In search of excellence*, New York, Harper & Row.
- Porter, M.E. and Fuller, M.B. (1986), *Coalitions and Global Strategy*; In Porter (Eds.), *Competing in global Industries*, Boston, Mass. Harvard Business School Press.
- Porter, M.E. (1986), *Changing patterns of international competition*, *California Management Review*, 27(2). Winter 1986.
- Porter, M.E. (1990), *Competitive Advantage of Nations*, Free Press.
- Porter M.E. (1991), *Towards a dynamic theory of strategy*, *Strategic Management, Journal*, 12, Issue: S2, 95-117.
- Porter, M.E. (1980), *Competitive Strategy*, Free Press.
- Porter, M.E. (1986), *Competing in Global industries*, Harvard Business School Press.
- Quélin, B. (1996), Foreword, Mothe, C., *How to achieve an alliance in research and development*, Paris: The harmattan.
- Reich, R. and Mankin E.D. (1986), *Joint ventures with Japan give*



- away our future, Harvard Business Review Press, March-April.
- Reich, R. (1993), *The Global Economy*, Paris: Dunod.
- Reynolds, J.I. (1979), *India-American Joint Ventures: Business Policy Relationships*, Washington, DC, University Press of America.
- Rumelt, R.P. (1991), How much Does Industry Matter?, *Strategic Management Journal*, 12, 167-185.
- Rumelt, R.P., Schendel, D. and Teece, D.(1991), Strategic management and economics, *Strategic Management Journal*, 12, 5-29.
- Schaan, J.-L. and Beamish, W.P. (1988), Joint venture general managers in developing countries, In F. Contractor & P. Lorange, editors, *Cooperative strategies in international business*. Lexington, MA: Lexington Books, D. C. Heath and Co.
- Sleuwaegen, L., and Goedhuys, M. (2002), Growth of firms in developing countries: Evidence from Ivory coast, *Journal of Development Economics*, 68, 117-135.
- Sovannara, K., and McCullough, J. (2010), Factors influencing joint venture performance in Cambodia, *International Journal of Business Strategy*, 10(4), 132-156.
- Tabachnick, B. and Fidell, L. (1989), *Using Multivariate Statistics*, New York: Harper & Row Publishers.
- Tarondeau, J.C. (1996), How to achieve an alliance in research and development, In Mothe, C., *How to achieve an alliance in Research and Development*, Paris: The harmattan.
- Tarondeau, J.C. (1993), The factors of internationalization of industrial activities, *Collection Economies and Societies, French Review of Management*, 19, 55-71.
- Teece, D.J. (1992), Competition, cooperation and innovation: organizational arrangements for regimes of rapid

- technological progress, *Journal of Economic Behavior & Organization*, 18(1), 1-25..
- Teece, D.J. (1986), Profiting from technological innovation: implications for integration, collaboration, licensing and public policy, *Research Policy*, 15 (6), 285-301..
- Teece, D., Rumelt, R. Dosi, G. Winter. S. (1994), Understanding corporate coherence, theory and evidence, *Journal of Economic Behavior and Organization*, 23(1), 1-30.
- Tomlinson, J. W.C.(1970), *The Joint Venture process in international business: India and Pakistan*, MIT Press: Massachusetts.
- UNCTAD (1995), *Report on world investment, transnational corporations and competitiveness: An overview*, UN Publications
- UNCTC (1988), *Transnational Corporation in World Development: Trends and Prospects*, UN Publications.
- Urban, S., Vendemini, S. (1992), *European Strategic Alliances*, Oxford: Basil Blackwell.
- Urban S., Vendemini, S. (1994), *European co-operative strategic alliances*, De Boeck University, Bruxelles.
- Vaidya, S. (2009), *International joint ventures: An integrated framework*, *Competitiveness Review*, 19(1), 8-16.
- Viola, J-M.(2000), *Management of dual relations*, Doctoral Thesis, HEC Montreal.
- Wernerfelt B. (1984), A resource-based view of the firm, *Strategic Management Journal*, 5(2), 171-180..
- World Bank (1994), *World Development Report 1994*, Washington: World Bank Editions, USA.
- World Bank (2000), *World Development Report 2000*, Washington: World Bank Editions, USA.