

# JOINT VENTURES AS AN ALTERNATIVE TO COOPERATION LEARNING

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Keywords: Cooperation learning, joint venture, commitment, trust, conflict, control

## ABSTRACT

The purpose of this research is to analyze how and when a joint venture is a suitable alternative in cooperation learning. Not all forms of cooperation enable this type of learning in the same way. This study analyzes how a joint venture is a way of cooperating that facilitates initial learning in the cooperation process and to what extent inter-organisational factors such as commitment, trust, control and conflict resolution have an effect on the partners involved.

This study surveys a sample of 74 international joint ventures. The results provide empirical evidence on how commitment is a relevant and necessary variable, although this type of cooperation alone is not enough for partners to learn how to cooperate.

## 1. Introduction

Traditionally, empirical studies on cooperation agreements treat the relationships between partners in cooperation from a static point of view; focusing analysis on each cooperation agreement rather than on the relationships that are created between the partners, and without taking into account the relationships that are forged as a result of repeated alliances and the processes that emerge from these interactions (BarNir, 2012; Dyer & Singh, 1997; Ring & Van de Ven, 1994). Cooperation is a dynamic process, which is more or less flexible. Progress in cooperation is the result of a combination of different changes for the partners involved, not only internal changes but external changes and, therefore, changes in their needs.

Studies that carry out research into cooperation process learning are few and far between. However, prior extensive research probes into the determining factors of cooperation and/or the contractual cooperation relationships. A gap in studies that focus on how firms adapt their learning processes “for” and “in” cooperation. Doz (1996) anticipates the study of these processes by analysing the progress of cooperation projects in the context of large alliances.

The practice of cooperation leads to learning about the process and enables the firm or partner to be able to take part in future cooperation agreements. Failed experiments and previous cooperation can teach valuable lessons and help to prevent any potential difficulties and avoid a partner committing the same mistakes. The best way to understand cooperation is by cooperating. The greater the partners’ ability to cooperate, the more likely they are to meet the objectives set out. The action of cooperating forces partners to develop capabilities that will minimize the interpersonal and organisational differences of the partners (Cao & Xiang, 2012). Cooperation learning furthers the ability of the partner by acquiring a level of knowledge about cooperation, which, in turn, provides an extra resource that can be used to gain a competitive edge.

## **2. Cooperation process learning through joint ventures**

The way in which partners establish alliances can be of huge importance to the success of any agreement and the achievement of present and future goals (Harrigan, 1988). Mowery, Oxley, and Silverman (1996) argue that the structure of alliances are often linked to their content. The idea that the structure and shape of an alliance are not important is, at best, deceiving and, at worst, dangerous. Giving importance to the shape and structure of an alliance does not guarantee success but it dramatically improves the possibility of its success.

By using the classifications that were proposed by authors such as Killing (1988), Yoshino and Rangan (1995) and Das and Teng (1998), we grouped the cooperation agreements into two blocks: 1) structured agreements with the creation of a new entity, also known as joint ventures and 2) contractual agreements that do not involve the creation of a new entity such as combined production agreements, R+D agreements, marketing agreements and technical support contracts, which may have a common organisational unit.

We define a joint venture as an agreement through which two or more independent firms decide to create a new firm, which will be a legal entity in its own right, and it will possess social capital. Furthermore, it will be assigned the necessary resources in order to function properly, and, in return, shall receive the results generated by the activity of said firm, while being subject to the competitive strategies of the parent companies. A joint venture is considered to be international (IJV) when at least one of the partners has its central office outside of the country where the joint business has set up the, or if a significant amount of activity is carried out in more than one country (Geringer & Hébert, 1989).

When a partner gains experience by working with another partner, cooperation costs can reduce if the partners create cooperation routines and establish a climate of trust. Firms learn the process of cooperation, that is to say, they learn to interact in a cooperative way (Andersen & Kask, 2012; Kanter, 1994), and they establish what the corresponding

routines of the partners are *for* and *in* cooperation through the experience gained. Routines store knowledge and behaviour about the cooperation of a partner in a way that enables rapid change to new situations and new partners. It also increases the possibility that present and future cooperation agreements will function correctly, given that routines establish links between the partners. Therefore, a partner, through multiple cooperation actions, develops a set of behaviour, which is stored in the cooperation routines and is able to map out the direction of any interaction, especially when a level of trust is established between the partners (Das & Kumar, 2007; Gadde, Hjelmgren & Skarp, 2012; Zollo, Reuer & Singh, 2002).

Nevertheless, partners have a great deal to lose in a joint venture if their behaviour is opportunist in style, since the level of resources committed are greater than in other forms of cooperation. A high level of commitment means that the partners involved in a cooperation agreement can achieve their objectives by reducing their opportunist behaviour. Thus, the greater the commitment, the more effort the partners will make in order to solve any problems of cooperation (Mohr & Spekman, 1994).

In cooperation, there must be coordination between all of the participants. Its implementation provides the required learning on all levels so that protocols can be developed. These protocols act as the information channels through which knowledge and capabilities/abilities will be exchanged, making communication between partners easier. Protocols restrict what partners can ask each other and they define the limits between cooperation and competition (Lai, 2011; Lei, Slocum & Pitts, 1997; Siegel & Renko, 2012).

As a result, periodic checks are made on the situation throughout the duration that the agreement is in place. These checks act as formal control mechanisms that examine the health of the agreement and how it is progressing, which creates cooperation learning. Through these checks, we are able to sense any possible problems or conflicts and it enables us to treat them in real time (Spekman, Forbes, Isabella & MacAvoy, 1998) so as to reach a

satisfactory solution. This control system reinforces relations between the partners and creates greater trust. If, on the other hand, there is no agreement, the joint venture may be dissolved. The partners increasingly get to know one another better and they learn how to work together given that each permanent change in each of the conditions in the cooperation creates cooperation learning.

### *2.1. Partner commitment*

We understand partner commitment as being the ability to make the necessary efforts to maintain the relationship by contributing the required staff, time and resources (Mohr & Spekman, 1994). This partnership means that the firms that make these necessary efforts can be sufficiently assured that their partners will provide the time and resources required to maintain commitment. It also means that the partners have to accept a certain level of risk, which will be greater as the level of investment rises, provided that the resources invested are valid (Parkhe, 1993).

Borys and Jemison (1989) believe that a joint commitment is necessary in cooperation agreements. Each partner is required to dedicate themselves to a high level of commitment so that they maintain their high expectations and achieve their objectives (Doz, 1996). Partners achieve their objectives by gaining greater experience through cooperation and learning. In other words, the partners increase their chances of success by applying high levels of commitment in an efficient manner (Kumar & Nti, 1998). A lack of commitment damages the relationship between the partners and has a negative effect on future relations (Ariño & de la Torre, 1998).

Therefore, there is a need for a strong level of commitment in order to overcome the natural resistance to risks, to provide the necessary resources for this cooperation, and to foment the exchange of sufficient information (Ariño & Doz, 2000; Barners, Pashby & Gibbons, 2002; Lee, Olson & Trimi, 2012). A willingness on the part of the partners to learn

what it is that the other parties can contribute and what it is that they want in return (Ariño & de la Torre, 1998; Doz, 1996) creates a capacity to cooperate, which enables the development of cooperation learning through trial and error.

**H1.** The commitment of the partners in a joint venture has a positive influence on cooperation learning.

## *2.2. Partner trust*

Trust among partners plays an essential role in cooperation agreements (Van Aken & Weggeman, 2000). From an organisational perspective, Axelrod (1984) and Zucker (1987), together with other authors, see trust between cooperating firms as an expression of assurance between the different parties or an exchange of some sort (a type of trust that will not be placed at risk by the actions of the other party).

It is essential that there is a continuing level of trust that will guarantee the progress of the cooperation so as not to expunge the efforts that may have been productive up to that point (Dulbecco, 1994). If the partner responds to cooperation expectations, the level of joint trust will gradually increase. In contrast, negative perceptions surrounding the negative or non-cooperative behaviour of the partners can destroy this trust. If trust is not developed, it can lead partners to act defensively and can even result in the termination of potential alliances (Das & Teng, 1998), therefore, control measures are put in place (Inkpen & Currall, 2004; Sánchez, Vélez & Ramón-Jerónimo, 2012) in order to minimise the risk of opportunist behaviour.

According to Inkpen and Currall (2004), when partners create a joint venture and the initial conditions enable continuing cooperation, trust between partners develops. Therefore, past actions generate trust and this trust provides information depending on the level of commitment between the partners (Kumar & Nti, 1998). An atmosphere of trust

allows cooperation to take place more easily and attempts to provide better solutions to problems that appear suddenly. The existence of trust between partners reduces the need to strictly supervise the cooperation and cuts down the agreement re-negotiation period (Parise & Sasson, 2002). It also curtails uncertainty in partner behaviour and eliminates the disadvantages of cooperation (Hoffmann & Schaper-Rinkel, 2001). By developing a set of confident behaviours, management can reduce this risk of opportunism (Whitener, Brodt, Korsga & Werner, 1998).

The parties in a partnership gradually acquire a certain level of cooperation learning and especially if cooperation agreements are repeated between the same partners, something which leads to mutual understanding and trust and enables the implementation of more flexible control structures (Ring & Van de Ven, 1992, 1994). Therefore, increased trust results in a greater understanding of the partners and yields a higher quality experience in cooperation, which, in turn, develops the ability to cooperate with one another. The creation of trust between partners, therefore, provides increased cooperation learning.

**H2.** Trust between partners in a joint venture has a positive effect on cooperation learning.

### *2.3. Partner control*

Literature suggests that control is a key variable in cooperation between firms (Beamish, 1988; Sohn, 1994). According to Das and Teng (1998), partner control is a regulatory process through which the elements of a system are made more predictable. This is achieved by establishing a standard for the pursuit of objectives or desired states, where the control level is the result of the control process. Establishing the appropriate control mechanism means assigning desired objectives, which can be predicted. Therefore, clear objectives not only help to establish cooperation agreements but they also enable the creation of specific rules and regulations (Das & Teng, 1998; Parnell, Lester, Long &

Köseoglu, 2012).

In joint ventures, an added control objective is property control (Aulakh, Kotabe & Sahay, 1997; Das & Teng, 1998). Joint venture property control is basically determined by the share percentage in the property. The broad idea is that joint ventures which comprise two partners with a share of 50% each shall guarantee equal cooperation and protect the interests of the two partners, however, such an equal share can cause control issues which can result in decisions being blocked due to the lack of a majority rule.

In general, authors such as Birnberg (1998) and Inkpen and Currall (2004) believe that learning to cooperate with a partner is the opposite concept to that of control, thus, in the context of a joint venture, the subject of control often acts as a source of conflict between partners. Cooperation learning with a partner is a mutual and not an asymmetric process. Cooperation process learning provides the mechanism through which an inverse relationship is established between trust and control in a joint venture.

Joint venture control does not have to be especially strict. It can be replaced by a greater level of trust in the sense that partners gradually achieve more experience through cooperation and they understand the practices of their partners to such an extent that, finally, a partner will choose between the implementation of control measures or learning “with” and “about” their partner (Harris & Ogbonna, 2011; Inkpen & Currall, 2004). Taking all of this into account, we deducted that partner control in a joint venture does not make cooperation learning easier but the complete opposite.

**H3.** Partner control in a joint venture has a negative effect on cooperation learning

#### *2.4. Resolved conflicts between partners*

Das and Teng (2002) recognise that conflicts between partners are an important aspect in cooperation. A conflict can arise either from the different characteristics of the



partners or from the context of the cooperation agreement, which is why conflict management is a key aspect in maintaining equality and efficiency throughout the agreement. A conflict is a multi-dimensional construct consisting of at least two dimensions: a) work-related conflicts and b) relationship conflicts. Some conflicts, the so-called functional conflicts, maintain the group's objectives and improve performance, whilst the dysfunctional conflicts obstruct group performance.

Communication helps partners to clarify the contributions of each other during conflict management (Kale, Singh & Perlmutter, 2000; Welbourne, Neck & Meyer, 2012), which is why it is essential to identify the reasons behind the conflict and solve them. The seriousness of the conflict will be determined largely by the reasons that provoked it. As the cooperation process progresses, it is quite likely that relational, human and cultural problems will arise, which will endanger the cooperation if not dealt with quickly. These problems can often bring about change and the partners have to be aware that such changes can alter the initial conditions of the cooperation, meaning they will have to be re-assessed in order to adapt the agreement accordingly.

If conditions do change during the cooperation period, discrepancies may arise between the partners that could affect the rapport and lead to conflict in their relationship (Kumar & Nti, 1998). Conflicts are inevitable and often prove to be legitimate and sometimes even desirable within the organisation, provided that it does not result in damaging or breaking the agreement. Conflicts create change, or at least they force a re-think of the current situation. Conflicts have a positive aspect and a negative angle. The question is not how to remove the conflict but rather how to deal with it conveniently without losing sight of the fact that any conflict can cause serious problems for any organisation. It is vital to re-direct the conflict in order to maximise the benefits and minimise the damage.

Authors such as Mohr and Spekman (1994), Ariño and de la Torre (1998) and Kale,

Singh and Perlmutter (2000) state that the manner in which a conflict is resolved will have an impact upon the success of the cooperation, whilst a unsatisfactory resolution will be negatively associated with the success of the agreement.

In a joint venture context, conflict resolution is a question of relationship satisfaction between partners. As conflicts arise, partners will have to determine how to resolve it appropriately which, in turn, will continually develop their ability to build a relationship with the other partner and their ability to cooperate. The same characteristic that stimulates learning can be vital for the success of the cooperation by identifying the discrepancies that create conflicts in cooperation management (Kumar & Nti, 1998). Therefore, the deadlock that the conflict has created is broken down (Lin & Germain, 1998) and the cooperation continues.

A continuing agreement will depend on the partners' ability to adapt their cooperation behaviour and routines (Ariño & de la Torre, 1998; Doz, 1996). Furthermore, whilst the cooperation continues, the partners are gaining a level of experience in cooperation and understanding each other better, something, which improves their capacity to cooperate.

**H4.** Resolved conflicts between partners in a joint venture have a positive effect on cooperation learning.

### **3. Method**

In order to compare our hypotheses, we used a quantitative study. We found a database that could be adjusted to our objectives, the ZEPHYR database, where we found a selection of firms that had undertaken a joint venture. It comprised 1.837 firms spread across several continents. This database was refined and used in conjunction with other business analysis and search tools such as SABI, Amadeus and Thomson One Banker, in addition to

checking the web pages of each of the firms that made up the database.

On the one hand, we were unable to contact 231 of the total firms through incorrect or missing data and, on the other hand, there were 396 firms that decided that they did not fit the joint venture profile as it was defined in the letter that accompanied the questionnaire. The questionnaire was sent via post and e-mail in three languages: English, Spanish and French. The number of firms that we actually reached was 1.210. Finally, the sample used was for 74 firms. We found empirical studies on cooperation and learning where the sample size was similar to this study. These were published by Dyer and Singh (2002) using 78 firms, Colombo (2003) 67 firms, Lane, Salk and Lyles (2001) 78 joint ventures and Lane and Lubatkin (1998) 69 firms. Quantitative studies are few. As a result, we opted to create our own scales, which have enabled us to determine the scope and dimensionality of each construct.

### *3.1. Studying the reliability of the measuring instrument*

Normally, in the field of Business Management, not one but several constructs appear. Cronbach's alpha for each separate factor, for example, does not take into account the reliability of the rest of the constructs. This is why Fornell and Larcker (1981) proposed calculating the Composite Reliability Index (CRI) and the Variance Extracted Index (VEI) (Uriel & Aldás, 2005), which we also used.

The cooperation learning scales have a Cronbach alpha of 0.90. We carried out the same technique with these scales as we did with the rest of the scales that appear in our model. In order to simplify the presentation of this process, we have provided a summary in Table 1, in which we set out all of the results obtained for all of the factors after having eliminated the items that did not exceed 0.7. As we can see from this model, all of the scales apart from one had a Cronbach alpha greater than 0.7. The conflict resolution scale, which

had a value of less than 0.53 was maintained as it was considered to be an exploratory scale and because it was one of only a number of tests that we were going to carry out.

As demonstrated in Table 1, the Composite Reliability Indices for all of the factors are greater than 0.7, which is why we decided to keep the conflict resolution scale, as it had a Composite Reliability Index of more than 0.7 and the CRI is a more powerful index than the Cronbach alpha.

\*\*\*\*\*INSERT TABLE 1 HERE\*\*\*\*\*

We also calculated the average variance extracted index (VEI). In general, the VEI results, which are also set out in Table 1, were quite satisfactory. They all recorded figures of higher than 0.5, which is why we included all of the scales.

### *3.2. Analysing the validity of the measuring instrument*

In terms of the criteria used to determine when a measurement had reached content validity, we examined a number of theoretical and, in particular, empirical studies to try to understand what the dimensions of each scale were.

In order to analyse the convergent validity, we carried out a Confirmatory Factor Analysis (CFA) and eliminated the insignificant items. In the cooperation learning factor, we used the first seven items on the scale. With regards to commitment, trust, control and conflict resolution, we used all of the items we had up to that point.

\*\*\*\*\*INSERT TABLE 2 HERE\*\*\*\*\*

The CFA model results, as shown in Table 2, show very good estimations with a high level of significance (all of the  $t$  statistics are greater than 3.29 and, as a consequence, are significant for  $p < 0.001$ ) and standardised  $\lambda$  with high values.

Alternatively, the goodness of fit statistics generally uses values above 0.9. The goodness of fit indicators for cooperation learning reached the desired values except AGFI, which reached a value of 0.78. The independent variables of commitment, trust, control and conflict resolution generally have a good fit apart from the SRMR, which exceeded 0.05 slightly. In synthesis, the measuring model of the model has a good fit and, therefore, we can ascertain that there is convergent validity.

We now come to the analysis of the discriminant validity shown in Table 3. We have laid out a comparison matrix showing the correlations and the Cronbach alpha and VEI values.

\*\*\*\*\*INSERT TABLE 3 HERE\*\*\*\*\*

The highest correlation in this matrix is that which corresponds to F3 and F2, which has a value of 0.64. If we square this value, we obtain a figure of 0.41, which is less than the F2 VEI (0.68) and the F3 VEI (0.80). These results confirm the discriminant validity of the measuring instrument we are using. Finally, in the structural model, we set out an analysis of the causal relationships which was determined by the formulation of the hypotheses. To carry out this analysis, we used Structural Equations Models (SEM).

### *3.3. Details of the structural model*

The goodness of fit indicators in our “theoretical model” do not reach the desired levels, as shown in table 4, which is why we continued with the model analysis.

\*\*\*\*\*INSERT TABLE 4 HERE\*\*\*\*\*

By analysing the “theoretical model”, we can see that two relationships arose with regards to the commitment variable and a further one with respect to the influence of trust on other independent variables. This was provided by the Lagrange multiplier, which is theoretically justified and, as a result, we included it in this model.

For this reason we moved ahead with readjusting the “theoretical model” and introduced the relationships mentioned above. We obtained a re-specification of the original model, which we titled “revised model”. As shown in table 4, the goodness of fit indicators has improved and now represents acceptable values. Below, we set out the “revised model”.

\*\*\*\*\*INSERT FIGURE 1 HERE\*\*\*\*\*

We now proceeded to compare the hypotheses that we carried out in the model.

#### **4. Results**

In table 5, we set out the results we attained from the relationships established in our hypotheses, as well as the relationships that arose between them. In terms of the first hypothesis, we have confirmed the direct, positive and significant influence that commitment has on partners in cooperation learning, given that  $t$  has a value of 3.63, meaning that the first hypothesis (H1) has been accepted.

Furthermore, we obtained an unforeseen relationship with regards to trust, something we had not predicted in the “theoretical model”, which improved this model significantly. In this relationship, R1, a very significant influence in trust ( $t=7.99$ ) was noted; the more commitment there is between partners, the greater the trust that is created among them. This is consistent with other studies such as those by Ring and Van de Ven (1992) and Das and Teng

(1998). We can therefore conclude that commitment, aside from “directly” influencing cooperation learning, also has an “indirect” effect through this variable.

In recent articles that have dealt with quantitative empirical studies using structural equations, such as those by Wu and Cavusgil (2006), it was confirmed that commitment is a resource that has a positive influence on cooperation learning. Commitment is a necessary condition yet is not sufficient enough itself for cooperation learning.

\*\*\*\*\*INSERT TABLE 5 HERE\*\*\*\*\*

We reject the second hypothesis, H2, which would be in-keeping with the views of the empirical study by Lane, Salk and Lyles (2001), which did not find any significant relationship between trust and learning through joint ventures either. We agree with Robson, Skarmeas and Spyropoulou (2006) that studies on strategic alliances have underestimated the importance of commitment and overestimated trust as determinants in cooperation.

In the validated items, the question was asked as to whether managers were certain that their partners were going to demonstrate a satisfactory level of cooperative behaviour “before” and “during” the joint venture. By using these items and not the hypothesis itself, we can ascertain that in joint venture cooperation, “previous” trust is less important than in other types of cooperation, since trust does not just exist, it develops during the cooperation period. It is important that a certain amount of relationship trust between the partners is generated in order for the cooperation to progress.

According to the theoretical framework, trust between partners is vital in reducing the risk of opportunist behaviour in cooperation (Gulati, 1995). This risk diminishes if there is previous experience of developing cooperation agreements, especially between the same partners, as this past experience generates mutual understanding and trust which fosters the creation of more flexible control structures in future cooperation (Gulati, 1995; Ring & Van de

Ven, 1992, 1994; Rodenbach & Brettel, 2012). Van Aken and Weggeman (2000) state that informal cooperation agreements are based more on trust and mutual understanding than on legal obligations. Therefore, we believe that a certain amount of existing previous trust among partners is necessary in creating cooperation agreements with more flexible structures. We believe that the existence of trust can depend on the type of cooperation structure, as does Langfield (2008), who points out that the level of partner trust can affect the choice of organisational structure in an agreement.

Hence, when previous trust is non-existent or scarce because there is no past experience of working with a particular partner or because their reputation is unknown, a joint venture is appropriate for learning to cooperate. This leads us to believe that trust is not as crucial at the beginning of the cooperation process in a joint venture, unlike in other types of cooperation agreements.

However, trust is generated if the relationship between the partners develops satisfactorily and if there is sufficient trust in the joint venture for it to reach its objectives. When partners create trust between themselves, they are able to establish future cooperation agreements that are less structured.

Trust does not have to be a necessary factor at the start of a joint venture but it is vital for the joint venture to continue over time (Ring & Van de Ven, 1994). Trust does not just exist by itself; it is generated during partner interaction and in the development and progress of the cooperation.

The control variable between partners in a joint venture presents an insignificant relationship with regards to cooperation learning, since  $t$  has a value of less than 1.96, as seen in table 6, which is why the third hypothesis, H3, was rejected.

The analysis of control between partners in a joint venture has been scarce and contradictory, despite the importance of the issue, which focuses more on the control of the joint venture's activities or the property between the partners. The existence of a joint venture



already encompasses control of the property and activity of the joint venture (Aulakh, Kotabe & Sahay, 1997; Das & Teng, 1998), which is why control does not appear to be so vital, given that the activity of the cooperation is channelled through a separate entity. The fair distribution of capital encourages cooperative behaviour; the more inequality there is in capital share, the greater the incentive is not to cooperate on the part of the minority partners.

In the case where there are only two partners in a joint venture, the need for control is less than when there are more partners. If there are more than two partners, partner control measures need to be put into practice. In our sample, 64.9% comprises joint ventures with only two partners.

There is a very positive and significant relationship between the conflict resolution variable and cooperation learning through joint ventures, as we can see in table 5, where  $t$  reaches a value of 3.84. For this reason, we accepted the fourth hypothesis (H4).

Furthermore, it has provided us with a second relationship, R2, where commitment has a positive influence on conflict resolution, since  $t$  is very significant ( $t=4.03$ ). We took this relationship to mean that a high level of commitment is necessary for conflicts to be resolved adequately and to ensure that they do not impede or make cooperation between the partners difficult. The more commitment there is, the more interested the partners will be in resolving conflicts adequately when they arise (Mohr & Spekman, 1994).

Finally, there was another relationship that was created, R3, which implies that partner trust has a negative effect on conflict resolution ( $t=4.68$ ). In effect, a confident atmosphere enables cooperation to flow more freely with fewer conflicts, and it attempts to provide better solutions to unforeseen problems that appear (Hoffmann & Schaper-Rinkek, 2001; Woodside, Ko & Huan, 2012). Creating trust fosters desirable behaviour, which in turn, improves conflict resolution (Mohr & Spekman, 1994; Ring & Van de Ven, 1994). Therefore, the existence of trust between partners lowers the level of conflict (Aulakh, Kotabe & Sahay, 1997) or, in other words, it reduces the impact and importance of a conflict between partners.

Problems that arise, and have been foreseen, will be solved in accordance with the established protocols. However, when unpredicted differences and conflicts emerge, the resultant problems have to be solved so that the joint venture can continue under similar conditions to how it began.

The important matter is not so much the conflicts that are created but rather how they are resolved. For this reason, the attitudes and values of the partners are vital for the outcome of the conflict, which is why a conflict managed in the appropriate manner will encourage cooperation learning. Positive conflict resolution is a question of maintaining satisfaction in the partner relationship throughout the joint venture, which generates the capacity for cooperation learning.

## **5. Conclusions**

Our objective in this research has been the analysis of joint ventures as an instrument for cooperation learning, the identification of the variables that have an influence on said learning and how to manage them conveniently.

In order for cooperation learning through joint ventures to take place, relationships between the partners must be established. These relationships are based on their commitment. Commitment is a variable which directly affects this learning, not to mention indirectly in the shape of trust. Commitment creates trust among partners provided that the cooperation continues to develop satisfactorily. Commitment also has an influence on conflict resolution. The greater the commitment, the more interest there is in solving conflicts satisfactorily.

We have not found sufficient evidence to confirm that trust, or previous trust at least, is necessary to create a joint venture. That is to say, the lack of trust is what makes a joint venture suitable and once the partners have created this trust, they will be capable of undergoing more flexible forms of cooperation in the future. Generating trust means that less importance is placed on conflicts than being solved in a more satisfactory way.

Partner control in joint venture cooperation has been shown to be an irrelevant variable, given that this tends to centre on controlling the activity of the joint venture instead. In this type of cooperation, control over results and processes are more worrying than behaviour control since behaviour is regulated by existing commitment and trust in the joint venture, and even more so if there are only two partners.

However, as all types of cooperation agreements progress, foreseen and unforeseen problems arise which create conflicts, but the issue is not that they occur, rather how they are resolved. Looking for solutions to conflicts implies learning from the process of how to cooperate with the partner in order to avoid these conflicts happening or minimising them as much as possible. As long as conflicts are being resolved satisfactorily, the consequences for cooperation learning will be positive and not the to the contrary.

It is understandable that the commitment variable acts as the driving force in joint venture development. That is to say, it propels cooperation learning in such a way that commitment becomes a necessary variable, although insufficient on its own, in ensuring that cooperation learning can take place.

Joint ventures are established when there is little or no experience of cooperating before, or when little is known of a partner and/or not enough trust can be placed in the partner. Therefore, they learn to cooperate by cooperating and a joint venture is a way of initiating cooperation learning with an unknown quantity. This form of cooperation is less risky than others, since the cooperation learning process is carried out, essentially, through trial and error.

One of the limitations of our study has been the difficulty in contacting the appropriate person in the firm belonging to the joint venture. On the other hand, although we decided to define our own measuring scales for the variables involved in this type of learning, and approached their definitions with care, we could not overlook the fact that, as with other similar studies, these scales do not cease to be an approximation for the latent variables.

Finally, it is worth pointing out that the information gathered on joint ventures has been provided by only one of the partners involved in this type of cooperation; a limitation that is common in joint venture studies and cooperation agreements in general. This limitation is difficult to overcome.

In the future, we would also like to extend this study to other types of cooperation and compare them in order to analyse how different types of cooperation can have various effects on cooperation and, therefore, on cooperation learning.

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**Table 1**  
Scale reliability

Factors or scales	N° of items	Cronbach alpha	N° of items	CRI	VEI
Cooperation learning	16	0.90	7	0.93	0.66
Partner commitment	3	0.85	3	0.87	0.69
Partner trust	4	0.86	2	0.89	0.80
Partner control	2	0.73	2	0.78	0.66
Conflicts resolved	2	0.53	2	0.70	0.58

**Table 2**

Confirmatory factor analysis of the cooperation learning model

Variable	$\lambda$	T	Standardised $\lambda$	<u>Goodness of fit level</u>
<b>Cooperation learning (F1)</b>				
V01 F1	2.90***	11.78	0.92	$\chi^2$ (14 degrees of freedom) = 45.35 BBNFI= 0.91 BBNNFI=0.91 CRI = 0.94 GFI= 0.89 AGFI = 0.78 SRMR = 0.04
V02 F1	3.02***	10.83	0.88	
V03 F1	3.13***	10.34	0.85	
V04 F1	2.17***	7.74	0.70	
V05 F1	2.47***	7.18	0.66	
V06 F1	3.24***	10.34	0.85	
V07 F1	3.10***	9.58	0.81	
<b>Commitment (F2), trust (F3) control (F4) and conflict resolution (F5)</b>				
V08 F2	3.37***	6.91	0.84	$\chi^2$ (9 degrees of freedom) = 13.16 BBNFI= 0.95 BBNNFI=0.90 CRI = 0.96 GFI= 0.94 AGFI = 0.88 SRMR = 0.06
V09 F2	3.97***	7.64	0.91	
V10 F2	3.11***	5.66	0.72	
V11 F3	3.51***	10.45	0.90	
V12 F3	3.38***	10.19	0.89	
V13 F4	1.95***	4.40	0.57	
V14 F4	3.59***	10.00	1.00	
V15 F5	2.25***	13.93	1.00	
V16 F5	1.07***	4.09	0.40	
Levels of significance: * p<0.5; **p<0.01; ***p<0.001; (based on $t_{(499)}$ two lines) $t_{(0.05, 499)} = 1.964$ ; $t_{(0.01, 499)} = 2.585$ ; $t_{(0.001, 499)} = 3.291$				

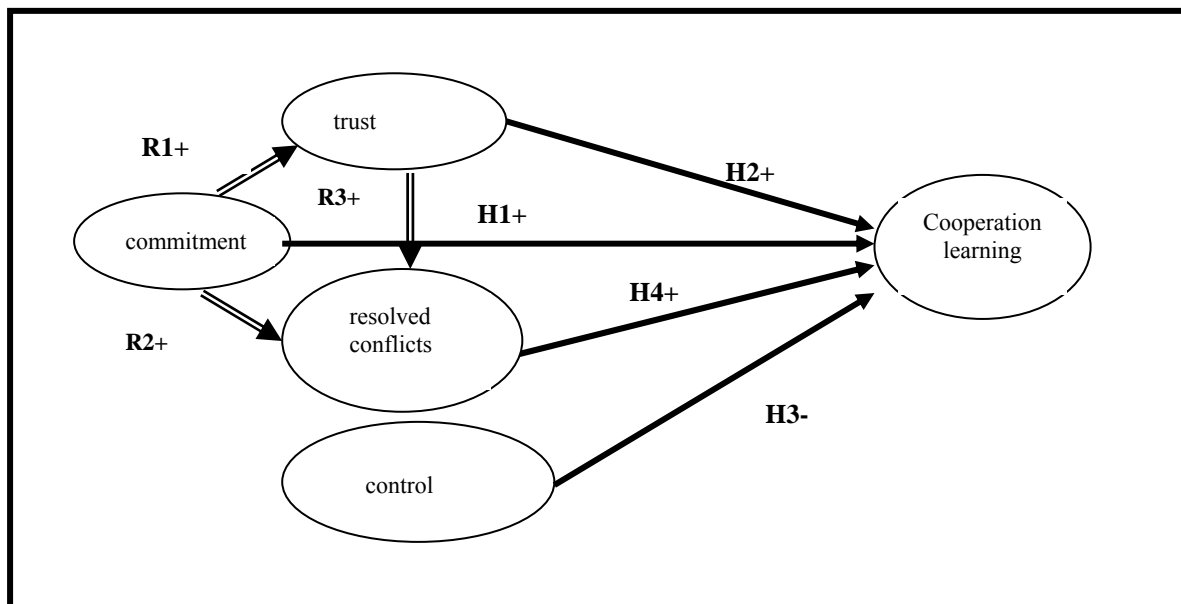
**Table 3**  
Correlation matrix and the Cronbach alpha and VEI

	F5	F4	F3	F2	F1
F5	1				
F4	0.12	1			
F3	-0.24	-0.02	1		
F2	0.14	0.09	0.63**	1	
F1	0.22	-0.07	0.42**	0.49**	1
Alpha	0.53	0.73	0.86	0.85	0.90
VEI	0.58	0.66	0.80	0.68	0.66

**Table 4**  
Comparison of the goodness of fit indices for both models

	$\chi^2$	gl	p	GFI	AGFI	SRMR
Theoretical model	32.66	5	0.001	0.90	0.65	0.08
Revised model	8.12	4	0.05	0.99	0.95	0.05

GFI: close to 0.9  
AGFI: close to 0.9  
SRMR: less than 0.05



**Fig. 1.** Revised model

**Table 5**

Estimated parameters in the revised model

<b>HYPOTHESIS</b>	<b>Standardised loads</b>	<b>t</b>
<b>H1.</b> Partner commitment in a joint venture has a positive effect on cooperation learning.	0.38***	3.63
<b>H2.</b> Trust among partners in a joint venture has a positive effect on cooperation learning.	0.00	0.00
<b>H3.</b> Partner control in a joint venture has a negative effect on cooperation learning.	-0.13	-1.46
<b>H4.</b> Resolved conflicts between partners in a joint venture have a positive effect on cooperation learning.	0.31***	3.84
<b>RELATIONSHIPS</b>		
<b>R1.</b> Partner commitment in a joint venture has a positive effect on the trust between them.	0.62***	7.99
<b>R2.</b> Partner commitment in a joint venture has a positive effect on the conflict resolution	0.48***	4.02
<b>R3.</b> Trust among partners in a joint venture has a negative effect on conflict resolution.	-0.45***	-4.68
<p>p* &lt; 0.05; t &gt; 1.964;  p** &lt; 0.01; t &gt; 2.585;  p*** &lt; 0.001; t &gt; 3.291;</p>		