RESOURCE MOBILIZATION LEVELS AND THE CONFIGURATION OF THE ALLIANCE PORTFOLIO

Completed Research Paper

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Abstract

Alliance Portfolio Configuration (APC) conditions access to network resources, however, not all access to partner resources is finally mobilized by the firm. Our paper contributes to the understanding of alliance portfolio performance by examining how an acceptable configuration of the alliance portfolio will be conditioned by the level of resource mobilization that the firm really achieves. A variance-based structural equation modelling (Partial Least Squares) has been applied to a sample from the Top International Airlines database. Results from the data analysis show that the Level of Network Resource Mobilization (LNRM) (a) fully mediate the effect of alliance portfolio configuration on the operating performance; and (b) partially mediate this effect on financial performance of airlines.

Keywords: *Alliance portfolio configuration; network resources mobilization level; airlines performance; mediation analysis.*

1. Introduction

The study of Alliance Portfolios is a relevant area of research that is yet to be widely studied. The study of strategic alliances began by centring on the alliance as a unit of analysis. However, in so far as attention is moving towards the individual level of the firm that forms alliances, the need also arises for a joint analysis of all the alliances in which the firm participates. In other words, its Alliance Portfolio, the study of which still presents important areas that should be explored (Wassmer, 2010).

Previous studies on Alliance Portfolios have centred on Alliance Portfolio Configuration (APC), in other words, who the partners of the focal firm are and how they relate with it and between each other (Hoffmann, 2007; Wassmer, 2010); on their management, seeking opportunities for alliances, designing relational governance and globally coordinating the alliance portfolio (Lavie, 2007; Sarkar, Aulakh, & Madhok, 2009); and on how the alliance portfolio affects performance (Lavie & Miller, 2008; Wassmer & Dussauge, 2012).

In particular, the configuration of the alliance portfolio is linked to the study of strategic networks. The confluence of the Resource Based View and the study of inter- organisational networks has made it clear that the choice of partners in the firm and the structure of their inter-organisational relations are relevant strategic decisions. APC has a multidimensional

nature (Wassmer, 2010). Portfolio size, the density of the links between partners of the firm, the existence of structural holes in the network, the intensity of the links with partners and their characteristics may all be considered among its dimensions and (Hoffmann, 2007). APC is linked to the choice of partner and is, therefore, a widely covered theme from different points of view in the literature on strategic alliances.

APC conditions access to network resources. Hence, it also affects performance. Hoffmann (2007: 834) affirmed that the configurations of the alliance portfolios "determine the quality, quantity, and diversity of information and resources to which the focal company has access". Network resources are those that firms can access through their ties (Gulati, Nohria, & Zaheer, 2000) and, more specifically, the network resources of the focal firm (Lavie, 2007). There is evidence that access to partner resources has positive effects on performance (Casanueva, Gallego, Castro, & Sancho, 2014; Lavie, 2007).

Not all access to partner resources is finally mobilized by the firm. The level of network resource mobilisation (LNRM) to which the focal firm has access through the APC will also affect performance. Therefore, an acceptable configuration of the alliance portfolio will be conditioned by the level of resource mobilization that the firm really achieves (Casanueva et al, 2014).

Previous literature on the Alliance Portfolio has not covered the separation between access to and mobilization of network resources (Batjargal, 2003; Casanueva et al., 2014). A question therefore arises over the interrelation between the following aspects: (1) access to partner resources derived from the composition of the alliance portfolio; (2) the level of mobilization of those resources that the focal firms achieves, (3) and its performance.

The objective of this work is gain insight into how the configuration of the alliance portfolio (APC) affects the performance of a firm in financial and operational terms and to analyse the possible mediatory relations arising from the LNRM.

In response to that objective, access and mobilization of an important partner resource in the airline business at an international level has been studied: the destinations of partners that the focal firm can exploit through code-sharing agreements. The results show that APC affects both operating and financial results. The main contribution of this work is that it clearly presents the effects of the full mediation on the level of resource mobilization in the case of operating results and partial mediation in the case of financial results.

2. Theory and hypotheses

Alliance Portfolio Configuration (APC) refers to its content and to its arrangement. It is a complete and complex concept that attempts to cover different dimensions (Wassmer, 2010). In this sense, Hoffman (2007) considered that the configuration of the alliance portfolio of the focal firm determines the quality, quantity and diversity of the resources to which it has access, efficiency in accessing those resources, and the position of the focal firm in the inter-organizational networks. In addition, he proposed that four parameters determine the configuration of the alliance portfolio: the number of alliances, dispersion, redundancy, and the intensity or strength of the links.

The first parameter, the number of alliances or portfolio size, will condition the volume of information and the resources which the focal firm can access (Koka & Prescott, 2002). The second parameter refers to the diversity of partners. Previous investigations have pointed to the importance of establishing alliances with non-similar partners, particularly in global markets (Goerzen & Beamish, 2005). The third parameter refers to the redundancy presented by the ego net, which rarely has a uniform structure. For example, sparse networks with few redundancies and many structural holes will imply asymmetry in access to information and

other resources within the ego net (Burt, 1992; Castro, Roldán, & Acedo, 2014; Sapsed, Grantham, & DeFillippi, 2007). Finally, the last parameter refers to the intensity of the links. In accordance with the concept of Granovetter on strong rather than weak links, these parameters of the alliance portfolio will condition characteristics and attributes such as confidence and the quality of relations, which will to a large extent stem from the history of the company and its reputation (Granovetter, 1992).

These four parameters will jointly determine the APC. So, the focal firm, through the establishment of cooperative agreements, will continue to develop a relational pattern that, if done with strategic intention, should benefit the ego by composing a high performance portfolio (Ozcan & Eisenhardt, 2009). Some researchers point out that the configuration of the alliance portfolio, understood as a multidimensional construct, impacts in a positive way on the performance of firms (Castro et al., 2014). In addition, there is evidence that each of the parameters of the portfolio affects performance. Alliance portfolio size constitutes an important variable to explain performance differentials (Mouri, Sarkar, & Frye, 2012; Wassmer & Dussauge, 2012). In relation to the second parameter, having access to various partners can be an important source of novel and diverse knowledge as well as other resources for the ego firm, which can increase its performance (Phelps, 2010; Vasudeva & Anand, 2011). The third parameter, the reduction of redundancy in the alliance portfolio, in so far as it can afford the opportunity of bridging structural holes, allows the focal firm to enhance the performance of its alliance portfolio (Castro et al., 2014; Dyer, Singh, & Kale, 2008). In relation to the last parameter, the strength or intensity of the nexus of contacts in the alliance portfolio will have a positive impact on the quality of the relations, which in turn contributes to the performance of the APC (Sarkar, Aulakh, & Madhok, 2009).

Finally, two ways of measuring the performance of the focal firm were employed, to analyse how the management of the alliance portfolio influences it. The first has centred on operational aspects (Casanueva, Gallego, & Sancho, 2013; Park, Srivastava, & Gnyawali, 2014) and the second on more global and financial aspects (Koka & Prescott, 2008; Lavie, 2007; Wassmer & Dussauge, 2012). Therefore,

H1a: The composition of the alliance portfolio of a firm is positively related to its operational performance.

H1b: The composition of the alliance portfolio of a firm is positively related to its financial performance.

The size of the alliance portfolio, its internal structure, the diversity of partners, and the intensity of the relations (the parameters of the APC) all basically condition access to network resources (Hoffmann, 2007). However, not all the resources to which a firm has access through its relations are finally used or mobilized (Casanueva et al., 2014; Grant & Baden-Fuller, 2004). Therefore, its level of access to resources is different to their level of mobilization. Mobilization of the resources that the partners own is subject to a double condition: voluntarism and capability. Voluntarism is a two-edged process, as a focal firm should exist that is interested in using the resources that its partners possess and a partner that is willing to concede the use of its own resources. Some authors have pointed to a series of reasons to understand this mutual willingness, for both economic and social motives (Huggins & Johnston, 2010), and the power of negotiation (Kumar, 2010). Moreover, firms should develop a certain capability to mobilize the greatest level of network resources to which they potentially have access through their ties; in other words, through the composition of their alliance portfolio (Casanueva et al., 2014).

Access is therefore a necessary, but not a sufficient condition for the mobilization of network resources (Casanueva et al., 2014), there being an inter-connection between the

Alliance Portfolio Configuration (APC) and the Level of Network Resource Mobilization (LNRM). In this sense, it is APC that establishes the channels or conduits through which the network resources will have to flow. APC will principally determine the quality, quantity and diversity of the network resources that the focal firm may access (Hoffmann, 2007). However, it will also condition the level of mobilization to a certain degree, as it determines "the efficiency of the access to these network resources" (Hoffmann, 2007: 834). Consequently, the APC will impact on the LNRM.

Equally, Casanueva et al. (2014) pointed out that the capability or skill that the firm has to mobilize network resources is linked to its performance. Previous studies have provided evidence that the use of external resources (Acquaah, 2007) and their mobilization (Batjargal, 2003) improve the performance of firms.

In conclusion, it is likely that the focal actor will intentionally develop an APC that allows a high LNRM. In addition, the higher the access to network resources and the higher the level that is really mobilized, then the higher the performance of the focal firm. From the earlier arguments, it follows that the more strategically the structure of the alliance portfolio is composed, the more network resources the focal firm will be able to mobilize (the more it is able to mobilize the network resources that are available through its alliance portfolio, the better its performance will be). In consequence,

H2a: The relation between APC and PER (Load Factor or operating performance) is positively mediated by the level of network resource mobilization (LNRM).

H2b: The relation between APC and PER (Financial performance) is positively mediated by the level of network resource mobilization (LNRM).

3. Methods

Sample. We studied the airline industry at a portfolio level. The airline industry is a mature sector, with intense rivalry and a wide range of competitive practices within it. These are large-sized firms that, because of the industry's own logic, are present throughout the world. It is likewise an industry with a dynamic movement towards inter-firm relations, which range from commercial agreements to integration processes (acquisitions and mergers). This characteristic turns it into an especially appropriate sector for network analysis (Gimeno, 2004; Shah & Swaminathan, 2008).

In this industry, a destination is an airline resource that includes a market, airport slots, the capability to offer land-based services (handling, maintenance...), and the knowledge associated with it, among other aspects. It is a resource that each firm quite clearly controls, but that may also be used by its partners. It therefore permits the analysis of access to and mobilization of network resources.

In this study, an alliance between two airlines was considered to exist in cases where they had entered into a codeshare agreement (Min & Mitsuhashi, 2012). A codeshare allows an airline to sell seats to its clients on the flights of another company with which it has the agreement. This means that an airline company can fly to destinations that it does not itself offer thanks to its alliances with its partners. In a shared codeshare alliance, the partners can incorporate the destination in its routes, but the resource remains under the control of the firm that holds it. Therefore, destinations are an appropriate physical resource with which to analyse access to network resources and their mobilization. In this industry, destinations are a key resource, whether understood as an element in a network structure or as a market (Wassmer & Dussauge, 2012).

When an airline enters into a codeshare agreement with another firm, we consider that

there is a sufficiently close relationship so that, at least potentially, all other destinations of the partner are accessible and likely to be the object of new codeshare agreements in the future. Thus, the alliance portfolio of codeshares of a focal airline will allow potential access to the destinations of all its partners. However, in practice, the start of a relation based on a codeshare agreement between two airlines has a limited network of routes and destinations on both sides and does not have to be equal. However, the future of those codeshare agreements resides in the slow enlargement of destinations and the routes that both airlines operate. Therefore, potential access to all the destinations of the partner is available from the time at which the first cooperative agreement enters into force. The focal firms will for strategic motives decide on the destinations they have more interest in mobilizing or no interest in mobilizing at all. As time goes by, if the focal firm manages to fly to those destinations that were only potentially accessible at first to the relation with the partner, then it would have increased its mobilization of those resources. That level of mobilization (LNRM), therefore, will increase and decrease over time. For example, Air Canada and Air China signed a codeshare agreement in April 2008 to travel to Beijing and Shanghai. Subsequently, the numbers of destinations increased for Air Canada through Air China.

So, by October 2013 the codeshare agreement with Air China had expanded to the following destinations: Chengdu, Chongqing, Guangzhou, Shenyang, Wuhan, and Xi'An. In addition, the codeshare agreement could incorporate other Air China destinations in the future.

The sample was selected from a ranking of the 200 largest airlines by revenue in 2009, published, in 2010, by the journal Airline Business (Wassmer & Dussauge, 2012). Various business groups appear in that ranking, a detailed analysis of which gave a total of 214 airlines, all of which with a sales volume of over 50 million dollars. Finally, the sample was filtered to work only with passenger airlines that maintained strategic alliances. The final sample consisted of 135 firms, having discounted the cargo companies and the airlines without codeshare agreements. Their total revenue represented 75 percent of the total for the sector. The data on codeshare alliances, provided through the company Flightglobal that extracted from the databases of the ATI (Air Transportation Intelligence) and Airline Business-Alliance Survey, updated in August 2011.

Dependent variable. In this work, the dependent variable is firm performance. Two financial indicators and one operative indicator were used, in order to measure firm performance. Firstly, we measured financial firm performance in the airline industry in terms of sales per employee, which is a shared measure of productivity (Koka & Prescott, 2002), and revenue passengers (Wassmer & Dussauge, 2012). The operative indicator, Passenger Load Factor (PLF) was expressed as passenger-kilometres flown as a percentage of available seat kilometres, which is a relative measure of carrying capacity (Lazzarini, 2007; Rajasekar & Fouts, 2009). Data over 2009-2012 were used for the three performance measurements and a mean average was calculated.

Independent variables: APC parameters. Size of alliance portfolio (SIZE) was measured as the number of partners of the focal firm. Redundancy was measured with the indicator developed by Burt (1992) known as effective size (EffSize). This indicator attempts to measure the number of firms, weighted by the strength of the relation, to which the focal firm is directly linked, minus a redundant factor. So, in the case where none of the actors that constitute the egonet were connected between each other, the effective size would coincide with the total size of the egocentric network (Borgatti, 1997). Diversity was calculated by considering the different segments of the industry in which each airline operates (major, regional, low-cost, charter...). A Blau index was used to calculate it, so as to consider the differences between the partners of the alliance portfolios of the firm under consideration. The intensity of the links seeks to capture the general experience that it has in the management of

alliances. The value of the indicator is the average duration of each alliance in which the focal firm engages. This indicator therefore attempts to reflect the experience of the focal firm in managing alliances over time and the way this experience allows it to intensify its relations, by substituting formal governance mechanisms for other more informal ones such as trust (Koka & Prescott, 2002).

Mediating Variable: Level of network resource mobilization. The level of mobilization of network resources (LNRM) was measured as the ratio between the number of destinations to which each focal firm really operates flights through codeshare agreements with its partners and the total number of possible destinations to which it has access through its alliance portfolio. In other words, the network resource that we consider relevant is the percentage of destinations that the airline really mobilizes from among the destinations to which it has access.

Control variable: the size and the age. We controlled for company size as the logarithm of the number of employees and for alliance experience and alliance function, measured on a seven-point Likert scale (Sarkar et al. 2009). Accordingly, large firms with extensive experience in alliances and with a dedicated alliance function may have greater capabilities to assign resources and to exploit knowledge for the development of alliance portfolio management routines (Vandaie & Zaheer, 2014). Firm age was measured by the date of the firm's establishment. Both control variables have been widely used in the literature as factors that can impact on differences in the performance achieved by the firms.

4. Data analysis and results

Tests on the research model, with the assistance of Smart PLS 3.0. software (Ringle, Wende, & Will, 2005) applied Partial Least Squares (PLS), a variance-based structural equation modelling technique (Henseler, Ringle, & Sinkovics, 2009).

PLS is primarily intended for causal-predictive analysis, in which the problems explored are complex and prior theoretical knowledge is scarce. Consequently, PLS is an appropriate technique to use in a theory-development situation that is the case of this study. PLS was also chosen because this contribution focuses on the prediction of dependent variables. The use of PLS with regard to covariance-based structural equation modelling (maximum-likelihood) is also recommended due the sample size (n = 135).

In our work, we have modeled the conceptual variables as composite factor. Thus, we have chosen a composite model in which it has drawn a reflective design where the different indicators are different aspects but they exhibit a certain correlation. The evaluation of the common latent measurement models examines its reliability and validity (Henseler et al., 2009). First, all standardized loadings (λ) exceeded the 0.707 level, except for one item (diversity) from the alliance portfolio composition dimension, but as this construct complied with the two conditions that are analysed further on, and constitute one of the parameters that determine APC (Hoffmann, 2007), we decided to maintain it. Individual item reliability was therefore acceptable. Second, the latent variables met the requirement of construct reliability, as their composite reliabilities (ρc) were greater than 0.7. Such constructs achieve convergent validity, because their average variance extracted (AVE) measures exceed the level of 0.5. Finally, Table 1 shows that all latent variables achieved discriminant validity, calculated by a comparison of the square root of the AVE with the correlations between the constructs. Moreover, we use $HTMT_{.85}$ in order to assess discriminant validity and all latent variables achieved discriminant validity (Henseler et al., 2015).

Table 1: Discriminant validity coefficients

LOAD FACTOR	(APC)	(LNRM)	(PER)	(F_S)	(F_A)
Alliance Portfolio Configuration	**0.827**				
Level of Network Resource Mobilization (LNRM)	0.443 **(0.495_{HTMT})**	**1**			
Load Factor (PER)	0.152 **(0.171_{HTMT})**	0.326 **(0.326_{HTMT})**	**1**		
Firm Size	0.047 **(0.049_{HTMT})**	-0.002 **(-0.002_{HTMT})**	-0.036 **(-0.036_{HTMT})**	**1**	
Firm Age	0.411 **(0.444_{HTMT})**	0.280 **(0.280_{HTMT})**	0.064 **(0.064_{HTMT})**	-0.014 **(-0.014_{HTMT})**	**1**
FINANCIAL					
Alliance Portfolio Configuration	**0.827**				
Level of Network Resource Mobilization (LNRM)	0.443 **(0.444_{HTMT})**	**1**			
Financial (PER)	0.590 **(0.669_{HTMT})**	0.477 **(0.494_{HTMT})**	**0.962**		
Firm Size	0.047 **(0.049_{HTMT})**	-0.002 **(-0.002_{HTMT})**	0.043 **(0.044_{HTMT})**	**1**	
Firm Age	0.412 **(0.444_{HTMT})**	0.280 **(0.280_{HTMT})**	0.301 **(0.308_{HTMT})**	-0.014 **(-0.014_{HTMT})**	**1**

Diagonal elements (bold) are the square root of the variance shared between the constructs and their measures (average variance extracted). Off-diagonal elements are the correlations among constructs. For discriminant validity, diagonal elements should be larger than off-diagonal elements. The results marked in bold in brackets indicate discriminant validity according to the HTMT[85] criterion.

As Henseler et al. (2009) noted, the use of bootstrapping (5000 resamples) generates standard errors and t-statistics to evaluate the statistical significance of the path coefficients. Simultaneously, calculation of the bootstrapping confidence intervals of standardized regression coefficients forms part of the analysis. As shown in Figures 1B and 2B, five of the six direct effects are significant; also evident in the percentile bootstrap 95% confidence interval. From the analysis of these results, no support was forthcoming for H1a. The direct effect of the alliance portfolio configuration (APC) on the Load Factor (*c'*) is not significant and its confidence interval includes zero. A $Q^2 > 0$ implies that the model has predictive relevance. The results confirm that the structural model is of satisfactory predictive relevance for airline performance (Q^2 = 0.071; Q^2 = 0.351). Finally, we report the SRMR composite factor model in order to determine to what extent the model fits the data. In our two models this indicator is above 0.08 so the good fit of the models is confirmed ($SRMR_{cfm}$ = 0.023; $SRMR_{cfm}$ = 0.04) (Henseler et al., 2014).

We applied the analytical approach described by Hayes et al. (2011), in order to test the mediation hypotheses (H2a-H2b). Figures 1A and 2A describe the total effects of the APC (*c*) on airline performance (PER). Figures 1B and 2B express the total effect of APC on the PER as the sum of the direct (*c'*) and indirect (*a*b)* effects. Thus, $c = c' + a*b$, where c' is the direct effect of the APC on airline performance (H2a: Load Factor or operating performance; H2b: financial indicators), controlling for one mediator (level of network resource mobilization - LNRM). This method has the advantage of isolating the indirect effect of mediating variables, that is, the mobilization level (H2: *a*b*).

The application of bootstrapping tested the mediation hypotheses (Hayes, Preacher, & Myers, 2011). This 5000 resamples in the study generated 95% confidence intervals (percentile) for the mediators.

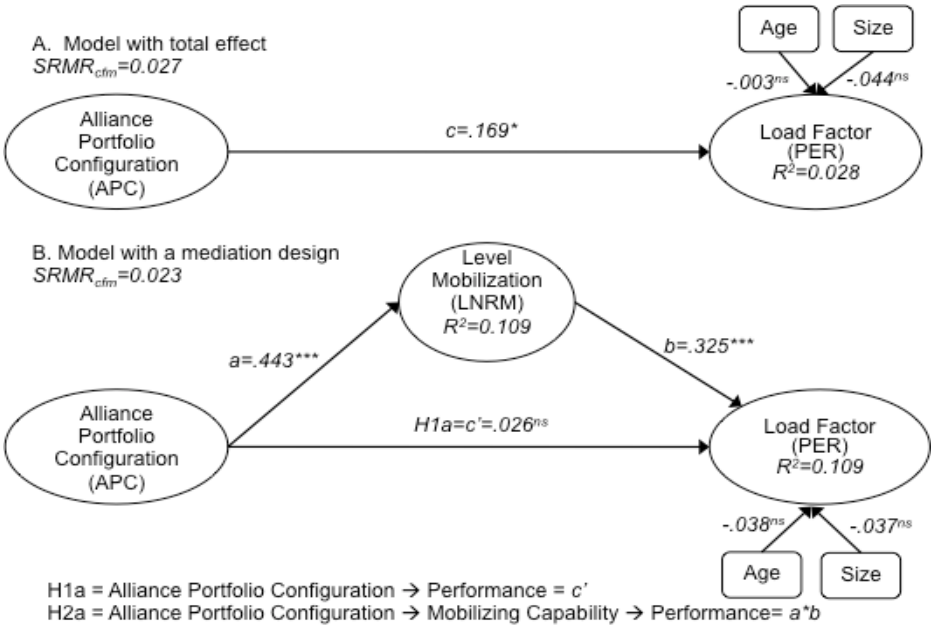

Figure 1: Research model 1: A mediation model Load Factor

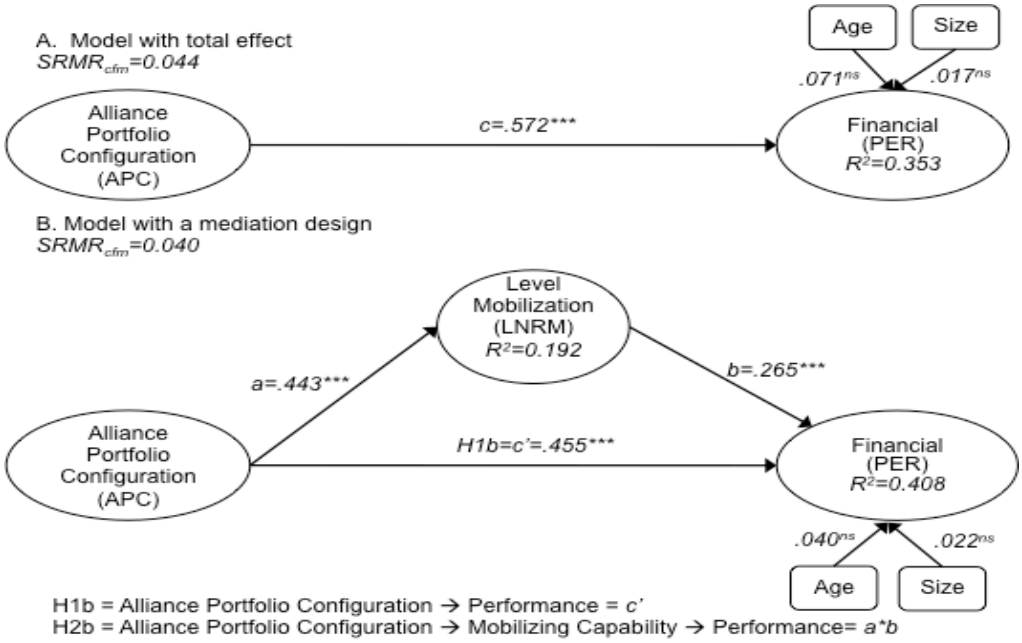

Figure 2: Research model 2: A mediation model Financial Performance

5. Findings

Table 2 shows the results of the tests on the mediating effects of the variables. The APC had a significant total effect on PER (*c* = 0.169, t-value = 1.7 (Figure 1A); *c* = 0.572, *t-value* = 7.8 (Figure 2A)). When the mediating variable (LNRM) was introduced, in the case of the Load Factor, the Alliance Portfolio composition (APC) ceased to have a significant direct effect on the Load Factor (H1a: *c'* = 0.026, *t-value* = 0.276). In the case of Financial Performance, the APC had a significant direct effect on PER (H1b: *c'* = 0.455, *t-value* = 4.609). This result means that the mobilization level of network resources by the focal actor fully mediates the influence of APC on Operating Performance. Indeed, as mentioned earlier, H1a was not supported and H1b was supported. However, no CIs contained zero, so the

indirect effects were significant. Consequently, support was found for H2a–H2b, meaning that the indirect effects of APC on PER were significant in our research models (Figures 1B and 2B). Finally, the results show that the APC had a total indirect effect on Load Factor or operating performance (point estimate = 0.143), which was higher than its direct effect (point estimate = 0.026). In relation to the control variables included in our model, size and age presented negligible and non-significant paths.

Table 2: Summary of mediating effect tests

Total effect on Load Factor			Direct effects on Load Factor			Indirect effects on Load Factor	
	Path	*t*		Path	*t*		Point estimate
APC (*c*)	0.169*	1.667	**H1a** = *c'*	0.026^{ns}	0.276	**H2a**= *a*b*	0.143
						Percentile 95% bootstrap condifence intervals	[0.073; 0.271] Sig
AGE	-0.03^{ns}	0.030	AGE	-0.038^{ns}	0.376		
SIZE	-0.044***	0.509	SIZE	-0.037^{ns}	0.435		
Total effect on Financial Perf.			Direct effects on Financial Perf.			Indirect effects on Financial Perf.	
	Path	*t*		Path	*t*		Point estimate
APC (*c*)	0.572***	7.803	**H1b** = *c'*	0.455***	4.609	**H2b**= *a*b*	0.117
						Percentile 95% bootstrap condifence intervals	[0.044; 0.276] Sig
AGE	0.071^{ns}	1.021	AGE	0.040^{ns}	0.591		
SIZE	0.017^{ns}	0.396	SIZE	0.022^{ns}	0.560		

Note: Note: APC: Alliance Portfolio Configuration
Sig. denotes a significant direct effect at 0.05; bootstrapping based on n = 5.000 subsamples
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, ^{ns}: not significant (based on $t(4999)$, one-tailed test)
$t(0.05, 4999) = 1.65$, $t(0.01, 4999) = 2.33$, $t(0.001, 4999) = 3.09$
Sig. denotes a significant direct effect at 0.05; Nsig. denotes a nonsignificant direct effect at 0.05

6. Discussion and Conclusions

The objective of this work was to increase understanding of the importance of Alliance Portfolio Configuration (APC), which permits the focal firm to access valuable network resources, such as the capability to mobilize these resources in both the operating and the financial performance of the airlines. We used an analysis of statistical mediation to achieve this objective. The results show that network resource mobilization capability mediates the effect of APC and both the operating and the financial performance of the airlines.

The principal contributions of this work are twofold. The first implies the consideration of the alliance portfolio as a multidimensional construct to analyse how all their dimensions jointly affect operating and financial performance of firms. The second is the incorporation of the difference between access and mobilization to understand the relation between APC and the aforementioned performance levels in a satisfactory way. The level of network resource mobilization (LNRM) is shown as a mediating variable in that relation.

These findings look deeper into the prior literature on the way in which APC affects performance (Castro et al., 2014), basically through the presentation of the concept of network resource mobilization, which has been considered at a theoretical level, but from which little empirical evidence exists on how it conditions the results of the firms that form alliances between each other (Casanueva et al., 2014). It also implies deepening our understanding of portfolio management, as our findings propose the consideration of network resource mobilization as a relevant factor in the development over time of the group of alliances of a focal firm. The level of mobilization should be managed to increase it during

the life of the alliances, in such a way as to exploit all the potential access arising from a satisfactory APC.

From a practical point of view, these findings suggest the need for network resource mobilization to form part of Alliance Portfolio Management Capability (Sarkar et al., 2009), generating network resource mobilization capability (Casanueva et al., 2014). Prior experience in alliances and the management of partner network relations within the portfolio (Schilke & Goerzen, 2010) form the basis of that capability. On the other hand, clear identification is necessary of which partner resources are strategic and/or complementary for the firm, which partners possess them to a greater extent and which of them are willing to permit the focal firm to use them to its own benefit. The need is also proposed for an acceptable characterization of the resources of the focal firm. Doing so would mean that their mobilization may contribute to performance to a greater extent, as the characteristics of such disparate resources such as those linked to knowledge as opposed to other more tangible or market-related ones will condition the decision-making by the firms that are involved.

Finally, this work presents certain limitations. On the one hand, the analysis of the interactions between access (because of the APC), resource mobilization and performance could be subjected to a dynamic and process-related analysis that has only been covered here at a particular point in time. On the other, the consideration of a single network attribute (airline destinations), despite its relevance to the sector, limits the analysis of the global effect of the APC in performance. Finally, as happens in most of the studies based on social network analysis, it is standard practice to centre on one case or sector (in this work, the airline sector at a global level); so we should be cautious about any generalization of the results.

Future lines of research will attempt to gain a deeper theoretical understanding of what network resource mobilization capability means and how it should managed. The relations studied in this work will include a dynamic and process-related component, by extending this type of analysis to other sectors and to a larger number of relevant resources (which will also include intangible knowledge-based resources).

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