

# SIGNIFICANT LINKS 2: EQUITY OWNERSHIP AND ALLIANCE PORTFOLIO MANAGEMENT BETWEEN AIRLINES COMPANIES

---

*Data de aceite: 01/11/2023*

**Rafael Guerreiro**

Federal University of Uberlândia

**Walter Bataglia**

Mackenzie Presbyterian University

**Ciro Camargo**

Provincial University of Ezeiza

**Mateus Pongeluppi**

Reykjavik University

**Thalles Coutinho**

Technological Institute of Aeronautics

**ABSTRACT:** This empirical research was developed through process design and positivism as a philosophy of science by studying twelve alliances that make up the portfolio of alliances of a focal airline. The research objective was to verify the interaction between relational capabilities, inter-organizational trust, and diversity of the portfolio of partnerships in the passenger air transport industry. Alliances were examined through semi-structured interviews with alliance managers at partner airlines. The interview script was structured based on the literature review. The interviews were transcribed, and the data

were analyzed through categorical thematic content analysis. Based on four defined categories, based on grounded literature, twenty-three interactions between eighteen subcategories were identified, which emerged during the data analysis, generating tentative, non-definitive propositions of comparison between the constructs of interest. Crosswise, the constructs' alliance performance and interpersonal trust perculating these constructs under study were found. The findings contribute to the theory of alliances, pointing out that equity participation influences the relational capabilities, the integration of the focal company in multilateral alliances; the inter-organizational trust-building process; and the performance of alliances. As for the theory of inter-organizational conflict, it contributes to emphasizing shareholding investments as a political tactic. From a management perspective, it contributes by shedding light to the role of the alliance manager and the importance of their social skills, including conflict resolution skills. For public policies, it highlights the importance of an incentive policy for structuring and strengthening hubs (connection centers) that have a relevant economic and social role for the regions in which they are located,

requiring new regulations by regulatory bodies.

**KEYWORDS:** Alliances, Relational Capabilities, Interorganizational Trust, Portfolio Diversity, Portfolio Performance, Air Transport.

## 1 | INTRODUCTION

Since the beginning of its activities, the aviation industry has played an essential role in society in several aspects. Concerning the economic part, in 2019, if it were a country, this sector would occupy the twentieth position in the world ranking in terms of Gross Domestic Product (GDP) (Air Transport Action Group - ATAG, 2019). However, in most countries, a common point in this economic sector is the concentration of this industry in a small number of competitors, considering 290 companies are associated with the International Air Transport Association (IATA, 2020), representing 82% of passenger revenue traffic across the globe.

Since 2010 the global airline industry has grown annually, reaching a new record in 2017, carrying 4.1 billion passengers. Despite the promising scenario, 2020 brought the biggest passenger-air transport industry crisis due to the COVID-19 pandemic (ICAO, 2020). Companies have different alternatives to adapt their structures when activities are resumed. Alliance is one of these strategies adopted, for example through codeshare agreements in specific complementary routes. In this sense, alliances may arise as one feasible tool to adapt existing service offers to market demands. Given these partnership opportunities, airlines themselves have long been the biggest beneficiaries of alliances of all sorts (Azul Brazilian Airlines, 2020; Delta & Latam Airlines, 2020; Douglas & Tan, 2017; U.S. Department of Transportation, 2020).

The complex world and industry scenarios, suggest practitioners and academics may lead meaningful exploration in strategic management by bringing to the surface the importance and understanding on how alliances in passenger air transport evolves. Therefore, the objective of the research was to verify the interaction between inter-organizational trust, relational capabilities, and diversity of the portfolio of alliances in air transportation.

## 2 | RESEARCH METHOD

We adopted a qualitative approach in this research through a case study focused on collecting, analyzing, and combining qualitative data to understand the research object better. The research characterized itself by analyzing the micro-processes of alliance integration, as the structures and activities that occur at the relational level, reflecting the alliance integration capabilities. This case study made it possible to confirm propositions previously tested by quantitative studies (Schilke & Goerzen, 2010) and track the behavioral mechanisms that link antecedents, processes, and results. It has revealed new evidence of

the operations and activities needed to integrate alliances. For that, the qualitative method in depth was adopted, specifically the content analysis.

The definition of the participants is not shaped by measurement, and there was no interest in standardization or in guaranteeing the representative of the random sample of respondents, who were purposely chosen, based on objective criteria, as they are part of a specific and relevant case (Flick, 2013). In this endeavor, the interviewees were alliance managers of airlines that are part of the alliance portfolio of one of the most extensive loyalty programs.

The decision to interview the managers of the airlines, members of the loyalty program aforementioned, was because they are senior-level executives from selected airlines. These professionals hold positions such as vice president, head of alliances, and regional manager (country manager) in small, medium, and large companies, with offices in all continents, except Oceania. This diversity provided a broad spectrum of interviewees, forming an essential panorama of the sector.

Interviews were conducted in person, via web conference, and by telephone, due to the geographical distribution of respondents and the travel limitations imposed by the COVID-19 pandemic.

The research was framed in the condition of a cross-sectional study (Sekaran & Bougie, 2013) and focused on the survey of qualitative data through semi-structured interviews. It was characterized as a case study, as the interviewees are part of a representative group of their universe. In this method, the interviews conducted between December 2019 and May 2020 followed a pre-determined script, which guided the data collection process.

Whereas in qualitative research, the usual number of respondents is between five and twenty-five people (Creswell, 2014). Twelve managers were interviewed, representing fourteen companies that are part of the loyalty program alliances of the focal airline, that is, 70% of your alliance portfolio.

Another point that should be highlighted is that the research instrument used, the semi-structured interview script, was developed using Schilke and Goerzen's (2010) review, entitled "Alliance Management Capability: an investigation of the construct and measurement". From this article, whose study was carried out through the quantitative method, the themes were adapted to the qualitative approach, safeguarding its central points through open questions inherent to the topics covered by the authors.

For data analysis, we chose, with the help of the NVivo software (QsrInternational, 2020), the content analysis method, whose data analysis met the proposed organization criteria: pre-analysis, material exploration, and treatment of results, the latter comprising codification and inference (Bardin, 2011).

Finally, thematic, categorical content analysis was adopted based on the theoretical framework, with previously defined categories.

## 3.1 CONTENT ANALYSIS, DISCUSSION OF RESULTS, AND TENTATIVE PROPOSITIONS

### 3.1 Types of Alliances

Alliances are considered a hybrid model of governance for collaboration, national and international, inter-firm (Osborn & Hagedoorn, 1997; Williamson, 1991). In this sense, specifically in passenger air transport, it is as if the alliances were distributed along a continuum. At one end, there are those known as interline, and the other, the alliances known as a codeshare. Between these extremes, there is a myriad of combinations, from the simplest to the most complex agreements, which involve capital participation in the partner company, even having a seat on its Board of Directors (Board).

Another influent alliance format is an equity partnership or ownership whereas Legacy Airlines purchases equities in companies with other business models, called Hybrid Companies (Hybrid Airlines) or Low-Cost Companies (Low-Cost Airlines), to expand the reach of their network and destination coverage through alliances. Equity partnerships may also trim closer cooperation between the local carrier and the investor's competitors. This strategy suggest that a partner's equity participation may enable decisions towards owner's self-interests, therefore equity ownership within alliances influenes how an association is forged and managed. Furthermore, an equity relationship may ease conflicts and its influential spectre is directly linked to the percentage owned. Since these partnerships are not limited to financial investment, equity partners not only decide strategies but often manage tactics together.

The passenger air transport industry has been developing new alliance formats with its partners, in addition to the traditional types of alliances (Gulati, 1995; Barney & Hesterly, 2011; Hitt, Ireland & Hoskinsson, 2012). When signing specific contracts for certain products (routes), they adopt a hybrid model, combining more than one alliance format between two or more companies. In other words, the model called JVA appears as something unprecedented because, based on the traditional alliance's classifications, joint ventures would demand the creation of a separate legal entity. The partners contribute capital for its constitution. However, there is no new company formation in this case, and each of them deploys existing resources and capabilities. The parties, then, share the result of this contractual alliance only based on the joint operation created on certain specific routes. In most cases, these routes are long-range flights and often carrying large volumes of passengers within high-density corridors. Thus, the first indications of the interactions between relational capital and the diversity of the alliance portfolio are found.

The above suggests that focal companies may employ capital participation through an equity alliance as a moderating factor (A) in certain interactions to influence partnerships' decisions of various modes.

## 3.2 Relational Capabilities

We started the analysis of the relational capabilities category by the subcategory “coordination of activities”. That leads to implicit presence of the situation called “relational inertia” (Dyer, Singh & Hesterly, 2018), which is present especially in long-term relationships. From this perspective, the discussion brought up two other relevant subcategories of analysis for the research: “Forms of Interaction” and “Learning” in the alliance. The constant interaction between the focal company and its partners is notorious (I4).

Furthermore, the study found that alliances perspectives vary among respondents, and the different ways of viewing an alliance may also be the product of individual experiences, which is highly influenced by the period each respondent worked in the company. The interviewee can express not only their vision but also that of the company. The company’s vision may have become theirs, looking at alliances purely as a set of tasks and routines or as a passenger distribution channel that enables the company to reach destinations that would otherwise be unattainable, thus securing added destinations and higher passenger occupancy of its aircraft. On the other hand, managers could also adopt an enhanced strategic look at the alliances make-up and the reasons why they should exist.

Regarding the interviewed managers’ perception about alliances, there is an explicit confirmation of the concern with relational risk (Ireland, Hitt & Vaidyanath, 2002). It seems that, in this industry, when talking about alliances, the situation is one of great opportunity and, at the same time, meaningful added complexity to business. Such complexity leads into two venues, which depend significantly on what the partners desire as the product for an alliance. In this sense, there is the “Intensity of the Relationship” (I1). Also, there is what is defined as “Means for Collaboration” (I2). We propose both walk hand on hand and, eventually, will intersect in the future.

Regarding the intensity of the relationship, a close interaction at the personal level was found between the alliance partners. As their relationship intensifies, a learning process (I3) between the parties is generated, to a lesser or greater degree. This process confirms that relational capital, on the one hand, facilitates learning through intimate interaction between alliance partners and, on the other hand, minimizes the likelihood of one partner engaging in opportunistic behavior (Kale, Singh & Perlmutter, 2000). Despite the idiosyncratic relational risk for individual strategic alliances, performance risk is common to all strategic decisions (Ireland, Hitt & Vaidyanath, 2002). In this sense, the existing relationship between the focal company and its partners has generated knowledge sharing, whose interaction results from alliance coordination (I5). However, many of the managers stressed that this sharing of knowledge and experiences takes place exclusively within contractual and legal limits

This study also proposes there is an intense exchange of experience, which generates learning between the focal company and its partners in a bilateral way. However, two fundamental aspects must be highlighted. The first lies in the fact that most processes

are operational, as they focus on issues related to the operation itself. By crossing the perceptions of managers concerning such topic and characteristics of the companies they work for, a fact of this relationship stands out, which is the fact that the closer the companies are, in terms of agreements, the higher the integration levels among executives are also likely to be. Following the logic, one may also notice that, as the exchange between management deepens, joint tactics and strategies tend to take place as part of an evolving partnership, too. Additionally, the second aspect states that, often, the focal company is not part of any multilateral alliance (global alliance) and that condition facilitates the formation of bilateral alliances with companies that are often members of multilateral alliances. The diversity of a focal firm's portfolio is closely related to the fact such airline may cooperate with partners that may be associated with two or more global alliances. Also, the focal firm may join forces with other carriers not belonging to any global alliance as well. As a consequence, the focal company benefits from management on-going management exchanges that, ultimately, lead to the the adoption of best practices, usually well-developed and streamed by most senior partners.

The "Means for Collaboration", derived from "Forms of Interaction", deserves special focus specially the airline's modus operandi (B), a much commented fact that often emerged during the interviews. In this sense, this modus operandi allows companies to fulfill the fundamental steps of an alliance agreement, whose level they define themselves. Thus, it the intensity of the agreement will determine its strategic level, just as it occurs in the manager's perspective of the alliance.

Therefore, based on the above, it is proposed that:

P1: The view that managers have about alliances may determine the performance of their companies' alliances, as it will influence the existing interaction between relational capabilities and diversity of the alliance portfolio.

In addition to the modus operandi (considering chaining of actions, mainly operational, common to industry members, especially those who are already part of some type of alliance), more aspects refer to two other components of an alliance, which are: the "Activities Synchronization" (I6) and the "Contract Flexibility" (I7), both highlighted in the research as subcategories.

Regarding the topic "Synchronization of Activities", two issues emerged during the interviews. The first concerns the airlines' systems used to integrate their activities, which is of fundamental importance to implement any alliance agreement, and the second is complexity.

It is also valuable to bring up another confirmation of the research on social capital (Ireland, Hitt & Vaidyanath, 2002), is easily identified:

So, the personal interaction of those in charge of the departments is essential to facilitate or hinder some negotiation. Not only know who is who but also talk with the partner to have a relationship, even personal, let's say, to facilitate

some approach if necessary. Of course, the decision will be corporate. Nobody gives anything for the partner's beautiful eyes. Still, it is easier to put a situation when you know the person and have a personal relationship.  
*Regional Manager / Bilateral Alliance 18*

Based on the above, one can label (I8) existing between the categories “Relational Capabilities” and “Interorganizational Trust”, as as “relational capital”. The study confirms that inter-firm trust also depends on institutional factors, including location, the national companies' culture, or even the existence of sectorial arrangements to facilitate interactions between them (Kale & Singh, 2009).

Although the airline industry is one of the largest sectors in the world, there is substantial business volume concentration among few competitors. These companies' executives know each other, especially those who work in alliances, regardless of whether their companies have an agreement or not. Additionally, many of these executives have been in the industry for many years and previously served as employees other airlines as well. Thus, through continuous interaction, companies learn about each other and develop trust around equity standards, or based on knowledge (Gulati, 1995), showing, both theoretically and empirically, that there is an interaction between the categories: “Relational Capabilities” and “Interorganizational Trust”. These recurrent interactions influence trust and are called “perfect ties” between the focal company and each partner (Gulati, 1995). They are also often present when it comes to the “Relationship Intensity”. These findings were essential to understanding the context in which managers are inserted and prove what Gulati (1995, p. 91) defines as trust: “[...] a type of expectation that alleviates fear”. In the wake of this finding and based on the subcategories “Learning” and “Intensity of Relationship” analysis, one executive stated the following:

Our relationship with our partners is based on trusting each other. If we don't trust each other, there's no way we can work with that partner. I'll tell you one thing, if you're partnering with another airline and you don't trust each other, it won't work. Believe me. After all these years (43 years) of doing this work, if you can't trust the partner or the partner can't trust you, that partnership won't work. *Vice President of Distribution and Alliances / Alliance 11*

Finally, throughout the analysis and discussion of the results, it was clear that, when discussing the subcategories related to the relational capabilities category, there were often references to the category inter-organizational trust, which will be discussed below.

### **3.3 Interorganizational trust**

There are two forms of alliances (bilateral and multilateral) that should be considered to better understand the interactions within the scope of Interorganizational Trust and a focus on alliances in passenger air transport. As for bilateral alliances (I10), the agreement occurs directly between the two companies that define their terms among themselves. Multilateral

alliances (I11), also known as global alliances, are described as network of companies allied through an entity that regulates the agreements between members.

The alliances under study are dubbed international strategic alliances or cross-border alliances, which show more significant obstacles to building trust and a concomitant greater potential for appropriation concerns than domestic alliances (Gulati, 1998). Even so, it was clear that the relationship between the parties is a necessary form of trust (Barney & Hansen, 1994):

The companies' relationship has been building over a long period. The people involved in the entire process were almost always the same on the Focal Company team, so there was no break in relationship continuity. It was only at the very end that the Alliances Director ended up moving to another role, so we always negotiated with him, almost 100% of the time it was with him, so we had frequent interactions. *Regional Manager / Bilateral Alliance 18*

The above proposes the understanding on how bilateral trust is built due to the behavioral component of trust, which is fundamental for the alliance's effective functioning during the post-formation phase, whose various trust-building mechanisms are present (Kale & Singh, 2009). The proposition also illustrates the importance of informal and personal connections (Gulati, 1998). The fact that the focal company had a single executive for over twelve years in charge of the alliances' department made such statement valid, especially concerning the relationship high levels of positivism and the empathy developed between assisted parties throughout time.

It became clear that building trust is an exercise in diplomacy, especially in international strategic alliances. This is challenging and takes time, mainly by reinforcing that a company should only designate its most competent and astute managers to work with its partners because these people will be the only direct link between the company and its partner (Das, 2005).

It was also possible to confirm that trust based on interaction is also developed and it is based on personal experience between two (or more) individuals (Bachmann & Inkpen, 2011). In this sense, the existence or not of trust at the interpersonal level between two companies (that is, between the employees of the two companies) affects how these two companies rationally depend on each other at the inter-organizational level (Ashnai et al., 2016; Kwok et al., 2018).

Based on these findings, it is proposed that:

P2: Developing inter-organizational trust in international strategic alliances depends largely on interpersonal trust between the alliance managers of partner companies.

In addition to the inter-organizational trust aspect, the air transport industry is heavily based on systems (C), which strengthens trust between the parties from an operational point of view.

Another essential point, which emerged during the interviews, is that airlines holding



equity stakes in a given company are ideal for forming alliances. It influences the alliances agreed by that given company and other airlines.

However, unlike what Gulati (1998) proposes, specifically in the case under study, it was not found that the breadth of the portfolio of alliances impacts the relationship and trust between their peers in the passenger air transport industry. So influences these peers are whether they are part of a multilateral alliance and which economic group they belong.

Thus, it was possible to identify an interaction between relational capabilities and inter-organizational trust (I8) and between inter-organizational trust and diversity in alliances portfolio (I13), noting that particularities differentiate inter-organizational trust relationships in bilateral and in multilateral alliances.

Therefore, based on these arguments, it is proposed that:

P3: The combination of shareholding composition and participation in a multilateral alliance determines the intensity of diversity and the definition of the company's portfolio of alliances.

Thus, to better understand this interaction I8 and I13, it was required to deepen the analysis on the diversity of the portfolio of alliances, which is the following topic.

### **3.4 Diversity of the Alliances Portfolio**

The focal company, from the beginning, knew how to combine its partners well, living up to the definition of orchestration of its alliance's portfolio (Haier & Mariotti, 2016) that has enabled it to obtain the best results from each of its partnerships. Although there are, in some cases, partner airlines that act very closely, such as in an orchestra, if well combined, these airlines may generate deliverables that would be unfeasible to produce as a stand alone carrier.

In addition, the research made it possible to understand that the interpretation of an alliance portfolio definition is directly related to the subcategory "Portfolio Balance". This definition also depends on the position occupied by the company managing the portfolio and the strategy adopted.

Furthermore, it was also possible to identify the importance of having a balanced portfolio, especially in companies that consciously or not consider their alliance portfolio an "Orchestration of the Alliance Portfolio". What is more, companies often increase revenue by entering new markets or developing new products, or as alternative, by increasing productivity with their existing asset base and product line. To this, a balanced portfolio combines two types of alliances resulting in superior performance (Chiambaretto & Wassmer, 2019). Also, a balanced portfolio can be the advantage of an alliance portfolio, determined not so much by the portfolio's size but by the characteristics of the companies to which a focal organization is connected (Stuart, 2000). All these situations were confirmed during the interviews, especially when looking at the balance of the company's alliance

portfolio. From this perspective, the subcategory “Configuration of the Alliances Portfolio” (I16) comes into play. Within the scope of existing research on alliance portfolios, there are two different streams: a) configuration (I18) and b) capabilities (I17) (Bos, Faems & Noseleit, 2017). When the gaze turns to the focal research company, it becomes clear that Stuart’s (2000) proposal into comes to light when considering the various international partners in its alliances’ portfolio.

The focal company has also sought to configure its portfolio, taking both perspectives (Bos, Faems & Noseleit, 2017). Within the scope of the regional domestic market and the international market in the region in which it operates, which are the countries surrounding it, the focal company adopts the perspective of capabilities. In contrast, the configuration perspective is adopted with other international partners, especially those operating long-distance flights. These perspectives have direct interaction with the selection of partners (I19) and complementarity (I22). To better understand this issue, one should understand how the formation of the alliance portfolio occurs, which is possible through two other subcategories: “Partner Selection” and “Portfolio Complementarity”.

In partner selection, aspects of convergence (I20) and divergence (I21) within an alliance portfolio must be analyzed.

Concerning heterogeneity, it was proven that, almost in its entirety, partner companies alliances’ portfolio is considered, by their managers, as “little similar” or “very diverse”, therefore, in a way which can be deemed to be specialized in heterogeneous partnerships (Cobeña, Gallego & Casanueva, 2017).

When analyzing the focal company alliances’ portfolio, it is clear that there are two distinct groups of partner companies, which leads to the interpretation that the focal company portfolio can be defined as heterogeneous. Although the portfolio can be considered heterogeneous, it comprises two groups of companies considered homogeneous among themselves. The most prominent has legacy companies operating on international long-distance routes, with the focal company performing, for these partners, a critical feeder role in South America. Another group, smaller and less representative but no less important in strategic terms, has regional companies as focal company feeders. In addition, a specific case of cooptation, should be highlighted. From one point of view, can be grouped in the first group and from another angle, can be linked to the second group, a situation of cooptation, whose relationships vary in terms of portfolio intensity and can become balanced or unbalanced over time (Bengtsson & Raza-Ullah, 2016).

Thus, the focal company knew how to build a general alliance strategy to avoid uncontrolled growth (Hoffmann, 2005), in other words, ensuring the balance of its alliance portfolio (Mohr, Wang & Goerzen, 2016). Particularly, when multiple dyads or alliances are used to set a joint strategic objective into practice, companies need to coordinate how they develop individual alliances with the primary purpose or basic strategy (Hoffmann, 2005). The focal company does precisely that. It has been doing with partners many times. It was

only possible because it has not been associated with the three multilateral alliances with global operations. A company can be based on just cooperative or collaborative alliances or on a combination of both (Chiambaretto & Fernandez, 2016), which is the case in the present point.

The focal company's alliances portfolio characteristics only reinforce the findings of Cobeña, Gallego, and Casanueva (2019). In building a portfolio, they say it is not about agreeing with each partner independently but about looking for an acceptable combination within alliance portfolio members. There is a tendency to seek different partners with different resources from those of the focal company.

Therefore, based on the evidence and crossover with the existing theory, it is proposed that:

P4: The diversity of the alliance portfolio allows the focal company to combine different perspectives in the configuration of its portfolio, resulting from the interaction between relational capabilities and inter-organizational trust.

Considering that the diversity of the alliance portfolio can be defined as the degree of variation in the partners, functional purposes and governance structures of the alliances, the diversity of the alliance portfolio must also take into account the variation in the operational scope and structure on governance of alliances (Jiang, Tao & Santoro, 2010); as well as that trust based on knowledge is the result of historical interaction and mutual understanding, in which the behavior of the counterpart is predictable, and trust based on knowledge, in fact, implies improved performance and shared objectives, which lead to a more effective sharing of personal and tacit knowledge (Chen, Lin & Yen, 2014) and expansion deepens the relationship and leads to less complexity in terms of the number of connections, as the expansion decision can also have positive implications for the reputation of partner companies, such as reliable partners who build deep relationships, bringing future possibilities for alliances (Pangarkar, Yuan & Hussain, 2017); as well as based on the analyzes carried out so far, it is proposed that:

P5: The balanced interaction between relational capabilities and diversity of the alliance portfolio reflects on the alliance's performance.

Another subcategory that consequently emerged was "Portfolio Differentiation". This subcategory proposes that a company seeks to align itself with the focal company. It is directly related (I23) with the subcategory "Portfolio Complementarity. Finally, it was found that the focal company operates with reduced diversity. It provides better access to a wide range of information and resources than a more extensive portfolio of alliances with related partners. In theory, it is not known whether affiliated alliances' diversity portfolio necessarily results in better performance, as it happens in the context of company diversity (Penney, 2018).

The survey also made it possible to understand that one of the challenges for alliance managers is to find the ideal number of partners, maintaining synergy, and avoiding

conflict between them. Considering legacy and flagship companies represent 90% of the focal company portfolio, increasing the relevance of different partners, concentrating on those with essential knowledge inputs, generates benefits for innovation and integration knowledge performance. It was noted during the interviews (Hagedoorn, Lokshin & Zobel, 2018).

To add and complement further insights, alliances can be seen as a portfolio of shares. Investors protect risk through diversification or maximize risk while also maximizing return (George et al., 2001). The stock market can also respond positively to the announcement of an alliance and its long-term performance (Kale, Dyer & Singh, 2002). Portfolios from various alliances can be difficult and costly to manage, but they imprint immense potential for receiving benefits if the task of coordination is adequately done (Rossmannek & Rank, 2019). Thus, it is proposed that:

P6: The more relevant the partners and the greater the relational breadth, the better the performance of the alliance portfolio.

Therefore, we propose that the interaction between the three categories of analysis, which are “Relational Capabilities”, “Interorganizational Trust” and “Diversity of the Alliances Portfolio” are subcategories in which interaction between partners takes place with greater intensity. There are often references to the category “Performance of Alliances”, which will be analyzed in the next topic.

### 3.5 Alliance Performance

Partner companies consider two factors when analyzing the performance of an alliance, One with a more macroeconomic view, for the market as a whole, through its monitoring, and another with a more microeconomic perspective, for the results of the alliance itself. Therefore, to reach the final result, there is a combination of these two views, complementing each other.

Except for joint ventures, measuring the performance of alliances by accounting or financial metrics proved difficult, given the particularities of the agreements (Kale, Dyer & Singh, 2002). In parallel, evaluating the performance of an alliance based on longevity was also insufficient (Hamel, Doz & Prahalad, 1989; Parkhe, 1991; Mohr & Speakman, 1994). In this case, we propose to use an objective indicator (sales volume) and an effective measure regarding the satisfaction of one party with the other (Mor & Speakman, 1994). Regarding performance measures, Kasim and Marmut (2020) found that financial indicators have a more significant impact on performance compared to operational indicators for airlines.

It may be challenging to measure such performance levels concerning international strategic alliances, as it depends on different types of strategic adjustments, influenced by relational factors (Noeçsem & Gudergan, 2012). Studies on the performance of alliances do not reach a consensus regarding the best way to measure this phenomenon (Ariño, 2003;

Schilke & Goerzen, 2010). Nevertheless, in the air transport industry, each company has found its formula, albeit somewhat subjective, of evaluating the performance of its portfolio of alliances.

However, it was confirmed that measuring the performance of alliances still lacks the development of specific metrics. A common aspect is that the perception of measurement is closely related to indicators such as aircraft occupancy. Countries like Brazil require alliances that guarantee the necessary destination reach to serve the market and well-synchronized system integration for the full functioning of the passengers and cargo transfer between partners. Based on these arguments and analysis, it is proposed that:

P7: The alliance's performance results from a combination of microeconomic (operational) and macroeconomic (strategic) factors, both of which stem from the way the alliance portfolio is managed.

In other words, operational aspects often emerged during alliances managers' statements throughout the interviews, reflecting how alliances are managed and evaluated. It suggests to be the amalgam that strengthens the integration between the categories: relational capabilities, inter-organizational trust, and diversity of the alliance portfolio. Therefore, based on these findings, it is also proposed that:

P8: Alliance performance results from relational capabilities, inter-organizational trust, and alliance portfolio diversity.

However, we found that this perception of performance changes due to how the partner company views the agreement with the focal company. It implies that the broader and more strategic, the more complex this type of performance appraisal becomes. Likewise, the more involvement in terms of equity participation of the partner company in the focal company, the more positive the rapport between the parties and, consequently, the more pooling of resources will also be. This expansion of capabilities also enhances alliance strength and performance metrics, including more quantitative and qualitative factors. This interaction between categories can be better understood in Figure 1.

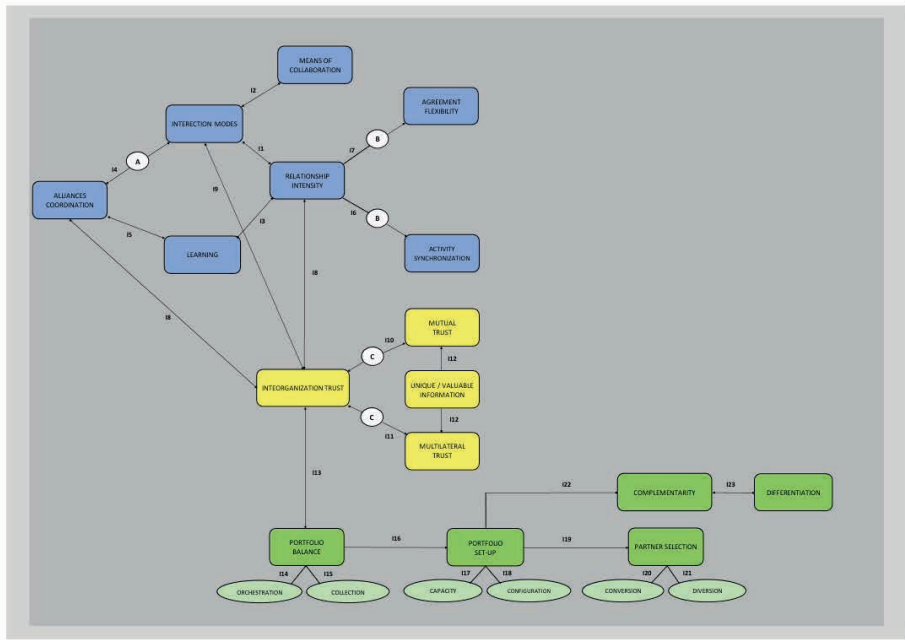


FIGURE 1: Conceptual model. Representation generated in the NVivo 13 Program, with research data (2020).

In addition to the conceptual model (Figure 1) emerged from the analysis, an empirical, theoretical model of the research was generated, represented by Figure 2.

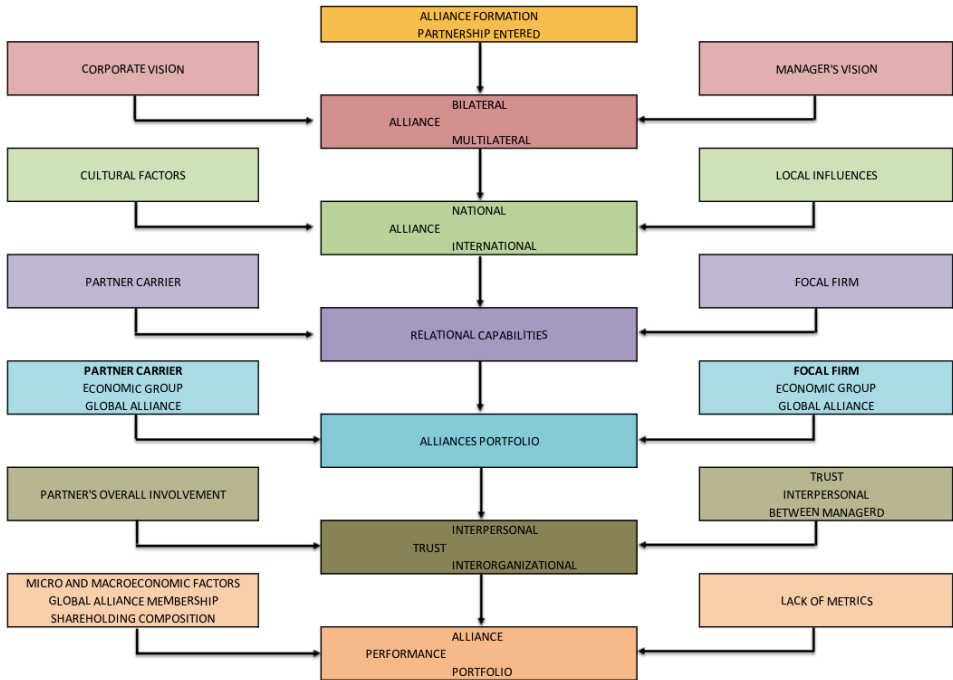


FIGURE 2: Theoretical-empirical model. Graphic generated in the NVivo 13 Program, with research data (2020).

In short, the aforementioned theoretical-empirical model has as its starting point the company's decision about forming alliances with potential partners.

In the pre-training stage, this decision is based on seeking bilateral alliances or entering a multilateral alliance, or both, which will be influenced by the vision that the company's management, as a whole, has about the alliances, combined with the concept, individual, of the alliance manager itself, concerning alliances.

When mentioning the company's vision, it is understood that it is the vision of the governing group and the board of directors, which may or may not be aligned with that of the organization's alliance manager. Then, based on cultural and local aspects, the national and international alliance's forms are defined.

From this moment on, the alliance formation stage is entered, which is when the issues inherent to the relational capabilities category arise due to the combination of experiences and expectations of the focal company concerning its partners. This combination result will interact, in the focal company and its partners, with the issues inherent to the economic group they are linked to and the definition of whether or not to join a multilateral (global) alliance. Also in this interaction, aspects concerning interpersonal trust between alliance managers, both of the focal company and its allies, and the degree of involvement of the partner with the focal company permeate, which will impact the construction of interpersonal

and inter-organizational trust, which, as seen, are distinct constructs, but which interact.

Finally, it is considered that the absence or lack of metrics standardization in alliances evaluation performance will affect the performance of both individual alliances and the focal company's alliance portfolio. This analysis also considers the interactions mentioned above, taking into account micro and macroeconomic factors, the participation of companies in a multilateral alliance, and their shareholding composition.

Therefore, as a result of the analyses, discussion, and tentative propositions, it was clear that:

- a) The shareholding composition of the focal company influences its relational capabilities and the diversity of its portfolio of alliances. The participation of similar companies in the social capital of the focal company is described as a moderating factor that mediates this interaction. Furthermore, taking into account that strategic alliances are vital for growth and even for the survival of airlines, especially in this moment of recovery of the post-pandemic economy of COVID-19 (Azul Brazilian Airlines, 2020; Delta & Latam Airlines, 2020; Howard et al., 2016; Icao, 2020; Kafruni, 2020). This finding leads to the same direction as another recent study, which found that an acquisition influences the performance of a pre-existing alliance (Koo, Yamanoi & Sakano, 2020);
- b) The participation of a company in a multilateral alliance with global operations (Kasim & Marmut, 2020) impacts the diversity of its alliance portfolio;
- c) Concerning the interaction of capital participation in the focal company and integration in a multilateral alliance, when, together, they generate a more significant impact on the configuration of the alliance portfolio. Although there are studies on how companies select their partners (Andrevski, Brass & Ferrier, 2016; Kale, Dyer, Singh, 2009; Mohr, Wang & Goerzen, 2016) and on the types of alliance portfolios (Boos, Faems & Noseleit, 2017; Haider, Mariotti, 2016; Penney, 2018; Rossmannek & Rank, 2019; Stuart, 2000), especially in the passenger air transport industry (Chiambaretto & Fernandes, 2016; Cobeña, Gallego & Casanueva, 2019; Hoehn-Weiss, Karim & Lee, 2017; Castiglioni & González, 2020), this relationship between shareholding composition and participation in a multilateral alliance is unprecedented;
- d) In addition to the thesis' focus on the interaction between relational capabilities, inter-organizational trust, and diversity of the portfolio of alliances, the theme of alliance performance was closely related and figured across the study, as well as the article that refers to interpersonal trust ;
- e) Considering the constructs "relational capabilities" and "portfolio performance", although there are studies on the relationship between portfolio diversity and performance (Ireland, Hitt & Vaidyanath, 2002; Kale, Dyer & Singh, 2002; Pangarkar, Yuan & Hussain, 2017), the finding of a balanced interaction between relational capabilities and alliances' portfolio diversity is new. It reinforces the importance of the alliance manager (interpersonal trust) and the dedicated role of the alliance (inter-organizational trust). On the one hand, this alliance's performance results from the



vision of the company's managers, as it is the result of the interaction between the relational capabilities and the diversity of the portfolio. On the other hand, alliances portfolio performance is derived from the relevance of the partners and their fine relational range with the focal company. Furthermore, it is the result of the interaction between the relational capabilities and the diversity of the alliances portfolio. On the other hand, the performance of the alliance portfolio derives from the relevance of the partners and the greater relational breadth of the focal company with them;

f) The development of inter-organizational trust in international strategic alliances depends on interpersonal trust between the alliance managers of partner companies;

g) The breadth of the alliance portfolio allows the company to combine different perspectives in the configuration of its portfolio, also resulting from the interaction between relational capabilities and inter-organizational trust;

h) There is an interaction between the studied constructs, "relational capabilities", "inter-organizational trust", and "alliances portfolio diversity", as analyzed, discussed, and graphically represented, through unidirectional or bidirectional interactions. It was explained in the conceptual model of subcategories analyzed.

## 4 | FINAL CONSIDERATIONS

The survey was conducted with partner airlines in one of the three most extensive loyalty programs in Latin America. These relationships entered, with other foreign firms, provide a unique overview of the global airline industry. They are companies of different sizes (small, medium, and large) from four continents (America, Africa, Asia, and Europe), operating in various markets (regional, national and international). Among them are members of the three multilateral alliances with global operations (One World, Sky Team, and Star Alliance), of all categories (low-cost, hybrid, and legacy) and extensive strategic alliances experience, especially across borders.

This research development, based on a case study in the passenger air transport sector, also complied with a recommendation by Dorn, Schweiger, and Albers (2016). Much of the research on cooperation focuses on mechanical engineering and construction industries. There is little knowledge derived from the services sector, such as health, transport, or tourism. For Kohtamäki, Rabetino, and Möller (2018), most qualitative research, even case studies, do not examine the processes in depth. The authors point out that there is little research on alliance integration micro-processes, such as the structures and activities that occur at the relational level, reflecting alliance integration capabilities. They also suggest there is need for more qualitative research based on ethnography, discourse analysis, and narrative analysis.

## 5 | LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The first limitation of this study lies in the fact that it was conceived and implemented in the passenger air transport industry. This understanding occurs in the context of the companies surveyed, in the time and circumstances in which the data were collected. We elaborate your proposals based on civil aviation, which is why replication is not recommended, whether in the context of alliances or in other sectors.

The second limitation is extrapolating these results to other contexts since this investigation is qualitative. The research has the advantage of being in-depth, with a limited number of interviewees, and this does not allow the generalization of data to the entire industry.

On the other hand, this second limitation presents itself as an opportunity for future research, which may lead this study to an investigation on a quantitative basis, both in the context of the 60 airlines that are members of the multilateral alliances with global operations and in the context of the 290 airlines members of IATA.

Finally, this study is also an opportunity to deepen studies related to metrics for evaluating the performance of alliances, which are useful from the point of view of the air transport industry practitioners. An additional suggestion for future developments is the conceptualization of specific performance scales and for the sector.

## REFERENCES

Air Transport Action Group. (2019) Aviation Benefits Beyond Borders. [S. l.],. Available at: <https://aviationbenefits.org/>. Accessed on: 15 Apr. 2019.

Ariño, A. (2003) Measures of Strategic Alliance Performance: an analysis of construct validity. *Journal of International Business Studies*, vol. 34, n.1, 66-79.

Ashnai, B.; Henneberg, S.C., Naudé, P. & Francescucci, A. (2016). Interpersonal and inter-organizational trust in a business relationship: An attitude-behavior-outcome model. *Industrial Marketing Management*. v.52, 128-139..

Azul Linhas Aéreas Brasileiras. (2020). Azul and LATAM Airlines Brazil announce codeshare and loyalty program agreements. Barueri: Blue. Notice to the market. Available at: [https://s3.amazonaws.com/mz-filemanager/ed78542a-4e01-429a-8926-03d69ccfa307/4df407c8-3236-4c66-a96c-096e8928bf81\\_azul%20latam%20codeshare%20final\\_en.pdf](https://s3.amazonaws.com/mz-filemanager/ed78542a-4e01-429a-8926-03d69ccfa307/4df407c8-3236-4c66-a96c-096e8928bf81_azul%20latam%20codeshare%20final_en.pdf). Accessed on: 15 Oct. 2020.

Bachmann R. & Inkpen, A.C. (2011) Understanding institutional-based trust-building processes in inter-organizational relationships. *Organization Studies*, v. 32, n.2, 281-301.

Bardin, L. (2011). *Content Analysis*. São Paulo: Editions 70.

Barney, J.B. & Hansen, M.H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, Hoboken, vol. 15, p. 175-190.

Barney, J.B. & Hesterly, W.S. (2011). *Strategic management and competitive advantage: concepts and cases*. São Paulo: Pearson.

Bengtsson, M.; Raza-ullah, T. & Vanyushyn, V. (2016). The coopetition paradox and tension: The moderating role of coopetition capability. *Industrial Marketing Management*. v. 53, 19-30.

Bos, B; Faems, D. & Noseleit, F. (2017). Alliance concentration in multinational companies: Examining alliances portfolios, firm structure, and firm performance. *Strategic Management Journal*, vol. 38, 2298-2309.

Chen, Y.H.; Lin, T.P. & Yen, D.C. (2014). How to facilitate inter-organizational knowledge sharing: The impact of trust. *Information & Management*. v. 51, 568-579.

Chiambaretto, P. & Fernandez, A. (2016). The evolution of coopetitive and collaborative alliances in an alliance portfolio: The Air France case. *Industrial Marketing Management*, New York, v. 57, p. 75-85.

Chiambaretto, P. & Wassmer, U. (2019). Resource utilization as an internal driver of alliance portfolio evolution: The Qatar Airways case (1993-2010). *Long Range Planning*. v. 52, 51-71.

Cobeña, M.; Gallego, A. & Casanueva, C. (2017). Heterogeneity, diversity and complementarity in alliance portfolios. *European Management Journal*. v. 35, 464-476.

Cobeña, M.; Gallego, A. & Casanueva, C. (2019) Diversity in airline alliance portfolio configuration. *Journal of Air Transport Management*. v. 75, 16-26.

Creswell, J.W. (2014). *Qualitative inquiry, and research design: choosing from five approaches*. Porto Alegre: I think.

Das, T.k. & Teng, B.S. (2001). Trust, control and risk in strategic alliances: an integrated framework. *Organization Studies*. v. 22, n.2, 251-283

Delta & Can Airlines. (2020). Delta and LATAM sign a trans-American joint venture agreement. São Paulo: Latam Airlines Brasil. Available at: <http://www.latamairlinesgroup.net/static-files/2c460e93-e5bb-49d8-8b70-5dd78ed59afa>. Accessed on: 15 Oct. 2020.

Dorn, S.; Schweiger, B. & Albers, S. (2016). Levels, phases and themes as coopetition: A systematic literature review and agenda. *European Management Journal*. v. 34, 484-500.

Douglas, I. & Tan, D. (2017). Global airline alliances and profitability: A difference-in-difference analysis. *Transportation Research Part A: Policy and Practice*, vol. 103, 432-443.

Dyer, J.H.; Singh, H. & Hesterly, W.S. (2018) The relational view revisited: A dynamic perspective on value creation and value capture. *Strategic Management Journal*. v. 39, 3140-3162.

Flick, U. (2013). *Introduction to Research Methodology: A Beginner's Guide*. Porto Alegre: I think.

George, G; Zahara, S.A.; Wheatley, K.K. & Khan, R. (2001). The effects of alliance portfolio characteristics and absorptive capabilities on performance: A study of biotechnology firms. *Journal of High Technology*, [s. l.], v. 12, p. 205-226.

- Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *The Academy of Management Journal*. v. 38, no. 1, 85-112.
- Gulati, R. (1998). Alliances and networks. *Strategic Management Journal*. v. 19, 293-317.
- Hagedoorn, J.; Lokshin, B. & Zobel, A. (2017). Partner type diversity in alliance portfolios: Multiple dimensions, boundary conditions and firm innovation performance. *Journal of Management Studies*. v. 55, no.5, 809-836.
- Haider, S. & Mariotti, F. (2016). The orchestration of alliance: The role of alliance portfolio capability. *Scandinavian Journal of Management*. v. 32, 127-141.
- Hamel, G.; Doz, Y.L. & Prahalad, C.K. (1989). Collaborate with your competitors and win. *Harvard Business Review*, Boston, p. 133-139, Jan./Feb.
- Hitt, M.A.; Ireland, R.D. & Hoskisson, R.E. (2012). *Strategic Management*. São Paulo: Cengage Learning.
- Hoffmann, W.H. (2005). How to manage a portfolio of alliances. *Long Range Planning*. v. 38, 121-143.
- Hoffmann, W.H. (2007). Strategies for managing a portfolio of alliances. *Strategic Management Journal* v. 28, 827-856.
- International Air Transport Association. (2020). Montreal: IATA, 2020. Available at: <https://www.iata.org/>. Accessed on: 30 sep. 2020.
- International Air Transport Association. (2020). Economic Impacts of COVID-19 on Civil Aviation. Montreal: ICAO. Available at: <https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>. Accessed on: 30 sep. 2020.
- Ireland, R.D.; Hitt, M.A. & Vaidyanath, D. (2002) Alliance management as a source of competitive advantage. *Journal of Management*. v. 28, no. 3, 413-446.
- Jiang, R.j.; Tao, Q.T. & Santoro, M.D. (2010). Alliance portfolio diversity and firm performance. *Strategic Management Journal*. v. 31, 1136-1144.
- Kale, P. Dyer, J. & Singh, H. (2002). Alliance capability, stock market response, and long-term alliance successes: the role as the alliance function. *Strategic Management Journal*. V. 23, 747-767.
- Kale, P. & Singh, H. (2009). Managing strategic alliances: what do we know, and wher do we got from here? *Academy of Management Perspectives*. v. 23, No. 3, 45-62.
- Kale, P.; Singh, H. & Perlmutter, H. (2000). Learning and protection of proprietary assets in strategic alliances: building relational capital. *Strategic Management Journal*. v. 21, 217-237.
- Kasim, K. & Mahmut, B. (2020). Evaluation of airlines performance using an integrated critique and codas methodology: The case of Star Alliance member airlines. *Studies in Business and Economics*, [s. l.], v. 15, p. 83-99.
- Kohtamäki, M.; Rabetino & Möller, K. (2018). Alliance capabilities: A systematic review and future research directions. *Industrial Marketing Management*. v. 68, 188-201.

- Kwok, F.; Sharma, P.; Gaur, S.S. & Ueno, A. (2018). Interactive effects of information Exchange, relationship capital and environmental uncertainty on international joint venture (IJV) performance: An emerging markets perspective. *International Business Review*, Article in Press.
- Mohr, A. Wang, C. & Goerzen, A. (2016). The impact of partner diversity within multiparty international joint ventures. *International Business Review*. v. 25, 883-893.
- Mohr, J. & Spekman, R. (1994). Characteristics of partnership success: partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal*, Hoboken, vol. 15, p. 135-152.
- Nielsen, B.B. & Gudergan, S. (2012). Exploration and exploitation fit, and performance in international strategic alliances. *International Business Review*. v. 21, 558-574.
- Osborn, R.N. & Hagerdoorn, J. (1997). The institutionalization and evolutionary dynamics interorganizational alliances and networks. *The Academy of Management Journal*. v. 40, no. 2, 261-278.
- Pangarkar, N.; Yuan, L. & Hussain, S. (2017) Too much of a good thing? Alliance portfolio size and alliance expansion. *European Management Journal*. v. 35, 477-485.
- Parkhe, A. (1991). Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of International Business Studies*, 4th, 579-600.
- Penney, C. (2018). Alliance portfolio diversity, and dominant logic theory. *Journal of Business Strategies*. v. 35, n.1, 31-47.
- QSR International. (2020). NVivo. [S. I.]: QSR International. Available at: <http://www.qsrinternational.com/nvivo-portuguese>. Accessed on: 20 Sept. 2020.
- Rossmannek, O. & Rank, O. (2019). Internationalization of exploitation alliance portfolios and firm performance. *Management Decision*. v. 57, n.1, 86-99.
- Schilke, O. & Goerzen, A. (2010). Alliance management capability: an investigation of construct and its measurement. *Journal of Management*. v. 36, No. 5, 1192-1219.
- Sekaran, U. & Bougie, R. (2013). *Research methods for business: the skill-building approach*. 6th ed. Chichester: John Wiley.
- Stuart, T.E. (2000). Interorganizational alliances and the performance of firms: a study of growth and innovation rates in a high-technology industry. *Strategic Management Journal*. v. 21, 791-811.
- U.S. Department of Transportation. (2020). Department Action on Application re: Delta Airlines, Inc. and LATAM Airlines Group, S.A. dba LATAM Airlines Group. Washington: Department of Transportation. Available at: <https://beta.regulations.gov/document/DOT-OST-2019-0170-0012>. Accessed on: 30 Oct. 2020.
- Williamson, O.E. (1991). Comparative Economic Organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*. v.36, p. 269-296.