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Speed of International Expansion: The Mediating Role of Network Resources Mobilisation

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Abstract

Multinational Enterprises (MNEs) are often under pressure to expand at the highest possible speed in international markets. They therefore embed themselves in networks of alliances where they can access resources in the form of relational assets, information, and learning to facilitate swifter internationalisation whilst circumventing the risks of time-compression diseconomies. Hence, drawing from the network theory of international business and the perspective of structural embeddedness of interorganisational relationships, this study aims to determine the relationship between access to and mobilisation of network resources in relation to the speed of international expansion among MNEs. For this purpose, we assembled a sample of 131 global-reach MNEs from the airline industry and observed their international expansion activities over a 5-year period. Partial-Least-Squares Structural-Equation Modelling (PLS-SEM) was applied to capture the multidimensionality of internationalisation speed, under the commitment-breadth-intensity framework, as well as the multidimensionality of both embeddedness and mobilisation; similarly, we employ Necessary Condition Analysis (NCA) to identify the necessary antecedent variables in our research model. As a result, understanding was gained of the position of each firm within an international alliance network, in terms of how it creates value by obtaining access to resources for international expansion; furthermore, we learned that access is as necessary as mobilisation to increase internationalisation speed, and that, mobilisation is required to mediate the capture of network opportunities. Consequently, the study provided insights for managerial practice: MNEs should pursue centrality in their networks at the same time as planning their resources mobilisation strategies.

Keywords Internationalisation speed · Network resources mobilisation · Network resource access · International alliances · Embeddedness · Mediation analysis

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1 Introduction

Even though internationalisation is conceptualised as a dynamic process, its "time" factor has either been considered in an implicit way or it has barely been studied in an explicit way, in comparison with other factors such as location and entry mode decisions (Casillas and Moreno-Menéndez 2014). Likewise, the literature that was previously centred on the time factor has, since the move towards international entrepreneurship, shifted its focus onto the analysis of "speed of entry", whose fundamental focus has been on SMEs and born-global firms. Consequently, Autio et al. (2000, p. 909) noted that 'research has not sufficiently distinguished between two closely related but distinct issues: first, the time lag between the founding of a firm and its initiation of international operations; and second, the speed of a firm's subsequent international growth'. Thus, the post-entry speed of the internationalisation process is conceptualised as the relationship between the internationalisation process and time (Casillas and Acedo 2013; Jones and Coviello 2005). In the analysis of post-entry speed, it is more habitual to employ Multinational Enterprises (MNEs) as the unit of analysis (Casillas and Moreno-Menéndez 2014; Jain et al. 2019; Mohr and Batsakis 2017), whereby a fundamental question remains regarding how to analyse the factors that determine the different speeds of internationalisation of a firm.

The reasons for the differing post-entry speeds of internationalisation among Multinational Enterprises remain highly debated, in view of the multiplicity of determinants (Cheng et al. 2020; Chetty et al. 2014). The central idea proposes that firms expand internationally to the extent that they learn and accumulate knowledge to understand market peculiarities and to overcome distances and/or the liability of foreignness/outsidership (Yamin and Kurt 2018). Nevertheless, a higher speed of international expansion is commonly associated with mixed performance outcomes: there is evidence that speed has a sigmoidal relationship with performance (Contractor et al. 2003; García-García et al. 2017); rapid internationalisation will have a positive impact on firm performance by increasing the scope of first-mover advantages and the speed with which they exploit and acquire valuable resources (Mohr and Batsakis 2017); and the international expansion process is subject to time-compression diseconomies (Jiang et al. 2014). Multinational Enterprises face continual pressure to achieve rapid growth and are expected to implement actions, such as increasing their international presence for market-related growth and business relocation, to raise efficiency levels (Tan et al. 2020). They are therefore often on the lookout for alternatives to expand their international business activities at the fastest speed whilst avoiding risks of diminishing performance. For this reason, the international-business-network theory argues that firms may overcome their expansion constraints by embedding into networks of relationships with insiders from target markets (Johanson and Vahlne 2009; Yamin and Kurt 2018). Accordingly, Vahlne and Johanson (2020) pointed to the importance of networks in international industrial markets to overcome such obstacles as the liability of foreignness.

However, there remain certain limitations in the study of the relationship between alliance networks and the speed of international expansion. On the one

hand, from a theoretical perspective, ties with insider partners are often seen as the source of resources and learning, but recent evidence has shown that ties also involve resources mobilisation and not just access, which provides benefits for performance (Casanueva et al. 2014; Chou 2016). It also holds true that, while the structural properties of an alliance network signify the creation of value for the firm, in terms of access to resources, information and opportunities (Iurkov and Benito 2018), the firm's ability to capture such value is essential through mobilisation for experimentation in foreign markets and thus also for learning for further growth (Casillas and Moreno-Menéndez 2014; Johanson 2003).

However, from a methodological perspective, MNE networks other than dyadic networks are often difficult to observe and measure. Hence, the underlying process is seldom studied at the MNE level using indicators of the structural properties of a network of interorganisational alliances, but instead research has remained limited to case studies and egocentric networks (Cuypers et al. 2020). For this reason, most of the internationalisation literature on networks has been limited to the study of Small and Medium-sized Enterprises (SMEs) (Musteen et al. 2010), International New Ventures (INVs), and Born-Globals (Bembom and Schwens 2018; Coviello 2006), whereby the pre-internationalisation period is considered more than the internationalisation growth process, that is post-entry speed (Casillas and Acedo 2013), which has resulted in a gap in the understanding of network effects on MNE expansion speeds operating in mature markets. Therefore, the remaining question is whether *access to* and *mobilisation of* resources through a network of interorganisational alliances constitute determining factors of increased international expansion speed at the MNE level. This knowledge carries major implications for international strategic management of the interorganisational relations of MNEs, because it contributes towards our understanding of the ways in which higher speeds of internationalisation are achieved, which, as certain studies have pointed out, is converted into more efficient business performance; and this has proved critical for the survival and indeed the success of the business (Jain et al. 2019; Mohr and Batsakis 2017). International business operators may especially consider that, if network centrality is not accompanied by an actual mobilisation of network resources, then the simple establishment of cooperative agreements may be insufficient to increase speed.

The objective of this study is, therefore, to understand how both the structural embeddedness of firms within a network of international alliances and the network resources mobilisation of firms impact the speed of international expansion at the MNE level. In particular, the direct relation between MNE alliance network position and internationalisation speed is analysed, as is the mediating role of network resources mobilisation on the decision of MNEs to expand into new international markets, to commit further resources to foreign countries, and to intensify their commercial activity (Casillas and Acedo 2013; Chetty et al. 2014). It is also analysed how the embeddedness of firms in a network of interorganisational relations and the prominence of their alliance portfolios provide access to partner resources and learning, which in turn influence the speed of MNE international expansion. Furthermore, at the same time, we study how such access is achieved through a mediating mechanism. Hence, the mediating role of network resources

mobilisation is studied as a mechanism for experimentation and engagement that materialises through knowledge and resource utilisation to secure a faster pace of internationalisation.

A sample of 131 multinational airline-industry enterprises was used to achieve these objectives, through the application of Partial-Least-Squares Structural-Equation Modelling (PLS-SEM), to capture the multidimensionality of the constructs, together with a Necessary Condition Analysis (NCA) technique to identify the necessary antecedent variables in the research model. As a consequence, this work provides multiple contributions. First, it extends a recent theoretical claim from the interorganisational networks literature (Bolivar et al. 2021; Capaldo et al. 2015) by presenting access and mobilisation of network resources as constructs that have separate, yet complementary roles on firm internationalisation, and in particular in the post-entry speed of internationalisation. The role of mobilisation is clarified accordingly as the theoretical mechanism through which the alliance-network embeddedness of an MNE generates international expansion at a greater speed. Second, the uniqueness of the secondary data, along with the PLS-SEM technique used in this study, contribute towards an analysis of the multidimensionality of interrelated constructs that might otherwise remain unexplored in an integrated fashion (Casillas and Acedo 2013; Chetty et al. 2014). Examples are provided by the structural properties of the position of a firm in the entire network of alliances and the formative construct of internationalisation speed, which have hitherto not been empirically amalgamated. It is therefore hypothesised that a more prominent position in an alliance network is likely to provide access to network resources, which, in turn, increase internationalisation speed, a construct comprising the foreign commercial intensities of a firm, its foreign resource commitment, and the breadth of its international markets. Third, since post-entry rapid internationalisation of MNEs is analysed in contrast to early internationalisation of SMEs, light is shed on a common concern among practitioners (Zhao et al. 2021) in already internationalised organisations that has been overlooked in recent literature.

2 Theory and Hypotheses

2.1 Speed of International Expansion

Internationalisation speed has been defined as the rate at which firms adopt internationalisation behaviours (Chetty et al. 2014). There are different ways in which the speed of international expansion may be observed, since it has been conceptualised as a formative construct composed of at least three dimensions based on how firms change or expand their international presence. These result from the following aspects: (1) commitment of resources abroad; (2) international commercial intensity; and (3) breadth of international markets (Casillas and Acedo 2013; Chetty et al. 2014; Hilmersson et al. 2017). In the first place, resource commitment abroad has been defined as the increase in the allocation of proprietary resources to serve international markets; secondly, international commercial intensity is defined as the intensification of the relative importance of foreign business as compared to the

overall business of the company; while breadth of international markets refers to the expansion of market diversification and the widening of the geographic scope of the firms' international presence (Casillas and Acedo 2013). All three dimensions comprising internationalisation speed require the firm to find sufficiently attractive international opportunities to overcome the uncertainty of foreign business. It has therefore been proposed that the lack of knowledge that leads to uncertainty over succeeding in entering a new market, or regarding the allocation of a firm's own resources, and/or over increasing foreign commercial intensity may all be circumvented through operations and interactions within a network of partners (Johanson and Vahlne 2009; Lindstrand and Hånell 2017).

In International Business (IB) theory, there are multiple perspectives on internationalisation speed and its drivers. On the one hand, the resource-based view argues that it is the ownership of resources that drives the growth of the MNE, and therefore firms that control resources, such as assets, exclusive knowledge, and intellectual property, are those that can exploit the competitive advantage attached to those resources in foreign locations (Barney 1991; Narula et al. 2019). On the other hand, the network perspective argues that relationships are the key determinant for internationalisation speed because they provide information and knowledge to overcome both the liability of foreignness and the uncertainty of foreign operations (Hadley and Wilson 2003; Johanson and Vahlne 1990). These perspectives have since been reconciled in that connections have been theorised as constituting the key determinant not only of learning from partnering and experimenting with endowed and insider allies, but also of accessing specific network resources, that is, the resources, both physical and intangible, that are controlled by such partners (Lavie 2006; Zaheer et al. 2010). In essence, international expansion speed in MNEs is determined by the amount and the quality of the resources that the firm can access through their alliance network, which provide a learning mechanism for the minimisation of the risk involved in decision-making in market selection, entry modes, and international strategy in general (Casillas and Moreno-Menéndez 2014; Hadley and Wilson 2003).

2.2 Network Resources Access and Speed of International Expansion

This work examines the premise that international expansion decisions of multinational enterprises are not just the result of internal capabilities and resources; instead, the network of interorganisational relationships in which firms are embedded also plays a significant role in such decisions and outcomes (Kanter 1994). In this respect, access to network resources is defined as the availability of valuable resources that are controlled by the firm's partners in the network of interorganisational relationships; and these resources are essential for the configuration of a competitive advantage in a particular market space abroad (Das and Teng 2000). In turn, resources access is only possible when the firm is embedded in a prominent position in the network of international alliances. Such embeddedness in international alliance networks provides resources access through a value creation process in which firms take advantage of their relational capabilities to establish ties in the form of

alliances, agreements, transactions, and interactions with one or multiple partners (Dyer et al. 2018; Wassmer and Dussauge 2012). Gulati et al. (2000) proposed that such a network constitutes a resource in itself: one that is unique and difficult to imitate, given that each firm composes its own alliance portfolio based on its specific needs, purposes, and relationships of trust. It is therefore unfeasible that two firms would achieve the same position in the network by having the same alliance portfolio configuration. Furthermore, the quantity and quality of the resources controlled by the set of partners also constitute a unique set of possibilities, among others, in terms of information flows, asset complementarity, and knowledge transfer (Lavie 2009).

Moreover, this value creation process in the form of resources access is enabled by a prominent position of the firm in the network structure. Hence, the need to observe the structural embeddedness dimension, represented in the centrality of the company in the overall network comprised of all the firms located in the same relational space (Castro and Roldán 2015; Iurkov and Benito 2018). The concept of centrality refers to the importance, prestige, and/or degree of relative influence of the focal firm within the network as a whole. This importance or prominence is represented by certain properties, such as: the amount and value of incoming (prestige) or outgoing connections (degree); the way in which a node-firm connects the other actors in the network (intermediation or betweenness); the ease or speed with which a node can reach others through its connections (proximity or closeness); and prestige based on the status or quality of the actor's connections (Katz index or Bonacich index) (Wasserman and Faust 1994). Centrality in the network generates the perception of reliability of the actor, which promotes a more robust relationship of trust; in turn, trustworthiness allows the partners to commit and make their resources available to the focal firm (Gulati et al. 2000).

Accordingly, the position of the firm in the network determines the quantity and diversity of the information flows, as well as the availability of complementary assets; all observable through multiple network indicators (Heidenreich 2012). A first component of the embeddedness in the network structure is centrality, in terms of the number of partners for both incoming and outgoing transactional and resource-sharing ties. A higher number of partners implies a higher likelihood of accessing externally controlled resources to obtain more market information, and of approaching to establish mutually beneficial operations. In turn, more market information facilitates learning about market opportunities and market access of a less uncertain nature (Zaheer et al. 2010).

Other components of embeddedness in the international network structure may reflect how close the MNE is to the other network members, how powerful and central the partners are, and how the firm serves as an intermediator between nodes (Gulati 1999; Iurkov and Benito 2018). These positional characteristics enable the firm to observe market opportunities and to mitigate uncertainty; for instance, an intermediary role in the network may reveal expansion opportunities into markets that remain unseen by otherwise unconnected members of the network (Lin 2003). Furthermore, greater closeness to the other network members and betweenness amongst them implies better information flowing through the node, which therefore indicates better possibilities for knowledge acquisition and better-informed

decision-making, for access to new markets, prioritisation of foreign operations, and allocation of resources abroad. In addition, a central company, close to the overall network members, is seen as a trusted member that is approachable and commendable to work with in the international arena, thus attracting opportunities to reinforce the commercial segment of the foreign business portfolio. Likewise, a company that is embedded in a region of the network with powerful and prominent international partners is also acknowledged as a reputable firm, which facilitates the willingness of partners to trust, share information, exchange resources, and allocate relational assets (Castro and Roldan 2013).

In summary, the position of the firm in the network may be defined in terms of the number of international partners, closeness with other network members, the degree of intermediation between third parties, and accessibility to other prominent and central members of the network, among other positional characteristics (Everett and Borgatti 2005). In turn, the centrality and prominence of a firm in the entire network could lead to richer experiences, better information, learning practices of a more diverse nature, and deeper knowledge acquisition, all of which facilitate decision-making for further engagement in foreign markets (Johanson 2003). As a consequence, each firm creates value by developing relationships that place it in a specific network position: information and resources that are accessible through that position in the network therefore indicate that the MNE can learn to create value for foreign markets, thereby enabling faster international expansion. These steps can be summarised in the following hypothesis:

Hypothesis 1 The greater the ACCESS of MNEs to resources in a network of organisational alliances, the faster their SPEED of international expansion.

2.3 The Mediating Role of Network Resources Mobilisation

We have posited that resources access through MNE embeddedness in an interorganisational network is a value creation process, since it provides companies with a set of opportunities to increase their international presence. However, there is evidence that access to network resources and information is only one part of the equation since firms need to be able to mobilise the available resources in the right amounts (Bolivar et al. 2021; Capaldo et al. 2015). In particular, network resources mobilisation has been defined as the organisational ability and willingness to capitalise on the opportunities offered by the firm's set of partners in an alliance network setting, which in this case translates into the utilisation of assets owned and controlled by partners in the net (Bolivar et al. 2021; Lavie 2009). This requires both the capability of the focal firm to grasp such resources and the willingness of the partner to admit the use of its resources and the focal firm's strategy (Casanueva et al. 2014; Lin 2003).

Nevertheless, access to resources has traditionally been used as a proxy for their mobilisation (de Graaf and Flap 1988; Koka and Prescott 2002; Marsden and Hurlbert 1988; Tsai 2001), even though a distinction has been drawn between access and utilisation. However, despite the various conceptual uses

of mobilisation in the field of management, there has been no clear distinction between access to external resources and their mobilisation in empirical research (Gadde et al. 2012; Gayle 2007; Lind et al. 2012; Villanueva et al. 2012). This empirical distinction is a key factor because when firm A establishes relations with firm B, both firms generate the potential to access the resources of the other partner; however, what in reality happens is that A will not use all the resources available from B but may only use one part or, in practice, none at all. The reasoning is that these resources are not considered necessary at that time or because they may be obtained from other sources. Access therefore implies a necessary but not a sufficient condition to determine the real exploitation of the resources of firm B by partner A. In essence, compared to resources access development, which depends on both the focal firm and the members of the network, resources mobilisation is driven primarily by the willingness and capability of the focal firm to exploit external resources, information, and knowledge (Clough et al. 2019). For instance, firms may decide to take advantage of external assets, utilise a partner's knowledge for new operations abroad, and/or obtain information to decide on the best entry mode for a specific market. Consequently, differentiation can be made between the value creation represented in positional resources access and the value capture represented in the resources mobilisation strategy (Lavie 2009).

In the process of internationalisation and foreign expansion, firms require more than just access, they require actual mobilisation of the many resources embedded in the network (e.g., information, knowledge, reputation, and tangible resources) (Drogendijk and Hadjikhani 2009; Lo et al. 2016). This is especially true in global industries where competition is highly intense (Castro and Roldan 2013). It is worth noting that the literature has paid attention to network resources when they are principally linked to information and knowledge (Dyer and Nobeoka 2000; Phelps et al. 2012). However, in general, other external resources linked to physical, operative, and/or market aspects have received much less attention, even though they lie at the epicentre of cooperative strategies in many industries. Among the most important resources for internationalisation, Oparaocha (2015) points out that they may be obtained in networks for assessment, information, business contacts, the search for partners and market information, and funds for innovation. Consequently, several authors have analysed the importance of networks to access resources for internationalisation, as it has been noted that networks can even be considered as a means of overcoming resource shortages (Lo et al. 2016; Meschi and Wassmer 2013).

This indicates that network resources mobilisation fulfils the role of mediator between resources access and speed of internationalisation. As depicted in Fig. 1, the greater the materialisation of the value captured, the greater the level of knowledge and resources appropriation, and, therefore, the faster the process of internationalisation.

Hypothesis 2 The relationship between network resources ACCESS and SPEED of international expansion is positively mediated by the MOBILISATION of network resources.
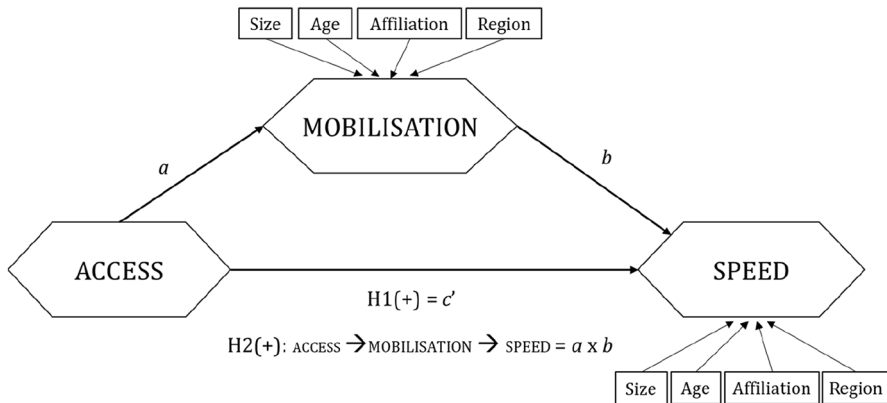
Fig. 1 Research model

3 Method

3.1 Data Collection

The multinational company was selected as the unit of analysis. In particular, the global airline passenger industry was selected as the research setting to test the hypotheses proposed in this study. The suitability of the airline industry for this research is proven in the international business literature (Chiambaretto and Dumez 2016; Gimeno 2004) and is reflected in the fact that its global network of interorganisational relationships is openly observable through codeshare agreements. These agreements can reflect the cooperative behaviour of firms that are seeking to achieve their international expansion objectives when the network structure and their web of relationships are analysed. For instance, codeshare agreements have been widely used in the literature to observe the determinants of establishing alliances (Flores-Fillol and Moner-Colonques 2007), the dynamics of inter-firm relations (Chiambaretto and Fernandez 2016; Goetz and Shapiro 2012), and both the results and the performance of the companies that enter into such agreements (Wassmer et al. 2017).

In consequence, in order to arrange our sample, a list of the top 100 airlines worldwide was first selected, as listed by the Airline Business Journal, and the sample was completed with all the companies affiliated to the three major multi-partner global alliances: Sky Team, Star Alliance, and One World. The resulting selection of 164 companies from all continents and regions of the world covered most international air travel worldwide. From this list, domestic airlines with all routes departing and landing in the same country were excluded, which resulted in a final selection of 131 multinational companies.

Data on firm operations was obtained from the Official Aviation Guide (OAG), which was complemented with financial and general data from the International Civil Aviation Organization (ICAO). Our timeframe started in 2010, and the characteristic changes and the expansion of the MNEs were observed over the subsequent 5-year timeframe from 2011 to 2015, thereby using the cumulative growth expansion actions and the average firm-level data. In Table 1, our final sample is described.

Table 1 Sample description

	Freq	Freq. %
Age range		
< = 9	13	9.9
10–19	21	16.0
20–29	29	22.1
30–39	12	9.2
40–49	4	3.1
50–59	9	6.9
60–69	13	9.9
70–79	10	7.6
80–89	14	10.7
90–99	6	4.6
Affiliation		
SkyTeam	24	18
Star Alliance	40	31
One World	20	15
Not affiliated	47	36
Region		
Asia and oceania	56	43
Africa	5	4
Europe	41	31
The Americas	29	22
Size by fleet		
< = 24	40	31
25–49	36	27
50–74	21	16
75–99	13	10
100–124	7	5
> = 125	14	11
Size by revenue passenger Km (million)		
< 10	27	21
[10–20)	37	28
[20–30)	14	11
[30–40)	20	4
[40–50)	5	15
[50–60)	5	4
[60–70)	3	2
[70–80)	3	2
[80–90)	4	3
[90–100)	2	2
> = 100	11	8
Top 100 global		
Ranked	96	73
Not ranked	35	27

3.2 Measurements

In this study, our aim was to review the interplay between network resources access, network resources mobilisation, and the speed of international expansion, whilst controlling for the variables MNE size, age, group affiliation, and region. All the key variables of analysis are composites, in so far as they measure multidimensional concepts drawn from theoretical constructs that have been broadly justified in the literature and applied in management scenarios (Henseler 2017). Sarstedt et al. (2017) claimed that the presence of artifacts is more common when secondary and archival data are analysed, since they lack a full substantiation based on measurement theory. As a result, network resources access, network resources mobilisation and the speed of international expansion (including its dimensions) have been modelled as composites, which are made up of linear combinations of their indicators and dimensions (Henseler 2017). All these concepts are measured by multiple indicators: for example, SPEED has been theorised as a formative construct, and it is subsequently composed of three composite constructs that are also employed in the international business literature (Casillas and Acedo 2013; Chetty et al. 2014; Eden 2009). Hence, a series of indicators was calculated for each constituent construct following the method in Casillas and Acedo (2013), as detailed in Table 2, in order to define our dependent variable SPEED of international expansion as a second-order construct. First, the changes in commercial INTENSITY over the timeframe of the study were captured: to this end, two indicators were used which combine to reveal the importance of the international activity of the company in relation to the overall business of the firm. These indicators measure both the proportion of foreign markets or destinations and the proportion of passengers from foreign operations. Second, for foreign COMMITMENT, indicators were calculated that show the various ways in which the company can allocate its resources or increase interdependency abroad, thereby acquiring further commitment within foreign markets: incremental ownership of foreign operations, allocation of the firm's own resources abroad, and the switch from cooperative to competitive modes of operation. Third, the increases in the BREADTH of international presence were accounted for with an indicator that reflects the changes in the geographic scope and the number of both city markets and country markets.

The network of alliances in which the focal firm was embedded was measured to build the resources ACCESS variable, using the codeshare agreements network. In this network, each company is a node that is able to access the resources controlled by a partner. This multilateral network means that firms obtain resources access based on their position or structural dimension in the overall network, which signals centrality and the prominence of firms reflected in different measures of the structural characteristics of the network position, such as degree centrality, closeness centrality, betweenness, eigenvector, and Beta centrality (Everett and Borgatti 2005; Hanneman and Riddle 2005; Wasserman and Faust 1994). We calculated the network indicators using UCINET® (Borgatti et al. 2002). On the other hand, to build our 'network resources MOBILISATION variable', multiple indicators were calculated that account for the number of partners the company mobilises, and for the number of foreign operations achieved under a mobilisation strategy, which in

Table 2 Variables and indicators

Variable	Construct	Indicators	Source
Independent variables			
ACCESS	ACCESS: Embeddedness position in the network [Undirected, valued, normalised] (Casanueva et al. 2015; Capaldo et al. 2015; Musteen et al. 2010; Everett and Borgatti 2005)	Beta centrality: Index of centrality weighted by the centrality of the partners. Betweenness: The number of actors in the network to which the firm serves an intermediary. Closeness: The number of minimum steps needed to reach all actors in the network. Degree centrality: Number of total ties weighted by tie strength. Eigenvector: Index of the overall closeness to every other member of the network	Authors' calculation using UCINET® (Borgatti et al., 2002) based on OAG data
MOBILISATION	MOBILISATION: Network resources mobilisation (Casanueva et al. 2015; Clough et al. 2019; Villanueva et al. 2012)	Mobilised partners. Mobilised operations (routes). Operations mobilised (routes) / Partners	Authors' calculation based on OAG data
Dependent variables			
SPEED	INTENSITY: International Commercial Intensity (Autio et al. 2000; Casillas and Acedo 2013; Cheng et al. 2020)	Proportion of foreign destinations / total destinations. Proportion of foreign users / total users (passengers)	Authors' calculation based on OAG and ICAO data
	COMMITMENT: Foreign Commitment (Johanson 2003; Casillas and Acedo 2013)	Increased commitment: Changes to proprietary modes (from third-party operations to own-resource operations). Total New operations abroad with own resources. Total foreign operations with own resources	Authors' calculation based on OAG data
	BREADTH: Breadth of International Markets (Casillas and Acedo 2013; Chetty et al. 2014; Prashantham and Young 2011)	Total distance to new markets (km). New countries accessed. New foreign cities accessed	Authors' calculation based on OAG data

UCINET® is a software package for the analysis of social network data in which every bilateral relationship between firms is accounted for and processed in a matrix to produce the centrality indicators and the network structural properties (Borgatti et al. 2002; Hanneman and Riddle 2005; Wasserman and Faust 1994)

the case of the airline industry corresponds to the number of routes operated using third-party resources, such as planes and scheduled flights.

Furthermore, four control variables were introduced. First, we used firm size, for which the fleet size was calculated, thereby accounting for the key industry assets that the firm is capable of handling, and which indicates the size of the operations and the volume of resources required (Cobeña et al. 2016). Second, we used the firm age, based on the years since the founding of the company. In addition, a categorical variable was introduced to identify whether the firm was affiliated to one of the three main airline multi-partner alliances, thus reflecting both the collaborative orientation and the willingness to conform with the particular multilateral business policies from such alliances (Lazzarini 2007). Another categorical variable was introduced to identify the region/continent of origin, thereby indicating the location of the companies' headquarters in one of four major regions of the world: Europe, the Americas, Asia/Oceania, and Africa.

Finally, since the main variables in this study are composites, the relationships between the indicators and their constructs "are not cause-effect relationships but rather a prescription of how the ingredients should be arranged to form a new entity" (Henseler 2017, p. 180). In parallel, PLS-SEM, the chosen analysis technique, creates proxies of conceptual variables as weighted composites (Rigdon 2012), which consist of one or more variables. Therefore, the key is to select the appropriate estimation algorithm to weight indicators. There are two basic estimation modes, Mode A based on correlation weights, and Mode B based on regression weights. Mode A is appropriate when indicators are highly correlated, in order to prevent collinearity problems (Rigdon 2016).

For this reason, Confirmatory Tetrad Analysis (CTA) (Gudergan et al. 2008) was carried out. This analysis provides a foundation for the empirical assessment of whether the data support Mode A or Mode B estimation in the PLS-SEM context. Following Hair et al. (2021), we applied CTA analysis to constructs with at least four indicators. As a result, ACCESS was suitable for estimation in Mode A. The selection of the estimation mode for the rest of the constructs with fewer than four indicators (or dimensions) was based on the potential collinearity of the indicators.

3.3 Analytical Approach

The partial least squares structural equation modelling technique (PLS-SEM) (Hair et al. 2019a, b, c) is employed to estimate the causal-predictive relations included in this study. There are several reasons for selecting PLS-SEM. First, the application of this method is especially required when dealing with composite variables such as those analysed in this study (Sarstedt et al. 2016). Second, the use of secondary or archived data requires PLS-SEM, as this type of data often fails to meet the conditions for covariance-based SEM (CB-SEM) analysis (Gefen et al. 2011; Rigdon 2013). Third, this study uses a moderately sized sample size due to the small population (Richter et al. 2016a, b). Fourth, this research requires component scores for modelling a higher-order construct (i.e., SPEED) (Hair et al. 2019a, b, c) using the disjoint two-stage approach (Sarstedt et al. 2019). Finally, one of the goals of the

study is to put a theoretical framework to the test in terms of prediction (Hair et al. 2019a, b, c), which is a research purpose fundamentally unsuited for factor-based methods (e.g., CB-SEM) (Rigdon 2012). Furthermore, PLS-SEM features as a suggestion in international business and marketing research (Richter et al. 2016a, b). We consequently applied the Smart PLS 3.3.3 software (Ringle et al. 2015). Additionally, the logic of strict necessity advised in favour of a Necessary Condition Analysis (NCA) (Richter et al. 2020) from the construct scores generated by PLS-SEM. This analysis will assist us in identifying necessary determinants, that is, those necessary causes that are constraints that must be managed for the desired result to exist. Since no other determinants can compensate for the absence of a necessary condition, its inexistence has no outcome (Dul 2016). Necessary Condition Analysis was used with R and the NCA package (Dul 2018) in the same way.

4 Results

4.1 Measurement Model

Our research model comprises two variables, ACCESS, and MOBILISATION, which directly, or by mediation, influence SPEED. All variables are estimated following a composite measurement model. SPEED is a higher-order construct composed of three dimensions. SPEED was modelled and estimated using the embedded two-stage approach (Sarstedt et al. 2019). Based on a Confirmatory Tetrad Analysis (CTA) (Gudergan et al. 2008) and the evaluation of potential multicollinearity between indicators, the estimation mode (A or B) was determined as applicable to the different variables (Table 3). Consequently, a first-stage model was estimated that delivered the scores of the dimensions of the higher-order construct, SPEED, namely INTENSITY (Mode A), COMMITMENT (Mode A), and BREADTH (Mode A). In a second stage, the scores from the previous stage were then used as indicators to form the multidimensional construct SPEED (Mode B) and to estimate both the direct and indirect effects of the exogenous variables.

Constructs estimated in Mode A were assessed by applying traditional measures of internal consistency, reliability, and validity (Henseler et al. 2016). As a result, most of our indicators and dimensions met the reliability requirement, since most loadings exceeded 0.7, as shown in Table 3. In addition, the composite reliability measure indicated that all constructs are reliable given that all were above 0.7; all constructs reached convergent validity since their average variance extracted (AVE) values were over 0.5 (Hair et al. 2019a, b, c). On the other hand, the discriminant validity test, in particular the heterotrait-monotrait ratio of correlations (HTMT), is presented in Table 4. All HTMT values remained below the 0.9 threshold (Hair et al. 2019a, b, c).

On the other hand, the variable estimated in Mode B, SPEED, was assessed at the indicator level (multicollinearity and weight assessment). The analysis was started by testing potential multicollinearity between items (Hair et al. 2019a, b, c). The size and importance of each weight were then examined (Table 3). The

Table 3 Measurement model results

Construct/Dimension/Indicator	VIF	Weight	Loading	Composite reliability	AVE
ACCESS (Mode A)				0.956	0.816
Beta		0.233	0.963		
Betweenness		0.217	0.835		
Closeness		0.165	0.749		
Degree centrality		0.252	0.983		
Eigenvector		0.232	0.962		
MOBILISATION (Mode A)				0.844	0.646
Mobilised partners		0.539	0.834		
Mobilised routes		0.439	0.898		
Routes/partner		0.237	0.661		
SPEED (Higher-order construct, Mode B)				n.a.	n.a.
INTENSITY (Mode A)	*1.281*	*0.105*	*0.513*	*0.825*	*0.707*
Proportion foreign destinations		0.739	0.953		
Proportion foreign passengers		0.344	0.712		
COMMITMENT (Mode A)	*3.343*	*0.196*	*0.877*	*0.909*	*0.771*
Increased commitment		0.397	0.935		
Total new owned Ops.		0.314	0.738		
Total owned Ops. abroad		0.420	0.946		
BREADTH (Mode A)	*3.814*	*0.781*	*0.991*	*0.946*	*0.854*
Total distance to new markets		0.333	0.850		
New countries accessed		0.372	0.954		
New cities accessed		0.375	0.963		

n.a.: non-applicable; VIF: Variance Inflation Factor; AVE: Average Variance Extracted

Table 4 Measurement mode: discriminant validity (Heterotrait-Monotrait ratio – HTMT)

	ACCESS
ACCESS	
MOBILISATION	0.813 [0.717–0.947]

weights indicated how much each indicator contributed to the overall composite (Hair et al. 2019a, b, c). As a result, this enabled indicators to be prioritised in terms of their contribution. A significance level of at least 0.05 also indicated that a measure was relevant to the composite construct and its construction.
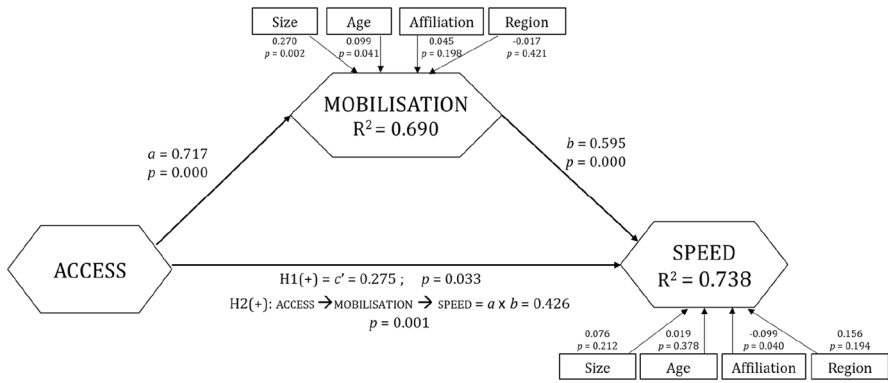
4.2 Structural Model

The results of the PLS-SEM model shown in Table 5 reflected a positive direct effect exerted by 'network resources ACCESS' on both MOBILISATION and SPEED. All antecedent variables of dependent constructs presented VIF values below 3.3. This result indicated that there were no multicollinearity problems (Hair et al. 2019a, b, c). Bootstrapping using 10,000 subsamples showed that the hypothesised path coefficients were statistically significant. Therefore, this result provides support for H1. The results also confirmed that the combined effect of ACCESS and MOBILISATION delivered a considerable in-sample explanatory power over SPEED ($R^2 = 0.738$). Moreover, ACCESS had a direct positive and significant effect on MOBILISATION, while at the same time, MOBLISATION exerted a positive and significant effect on SPEED.

The guidelines followed are those described by Nitzl et al. (2016) to test the mediation hypothesis (H2). The indirect effect of ACCESS on SPEED is specified

Table 5 Direct and mediating effects

	VIF	Direct effect	t-value	p-value	Explained variance (%)	f^2
Direct effects on the endogenous variable						
MOBILISATION ($R^2 = 0.690$)						
ACCESS (a)	1.557	0.717	7.226	0.000	55.9	1.066
CV: Size	1.056	0.270	2.966	0.002		0.223
CV: Age	1.447	0.099	1.737	0.041		0.022
CV: Affiliation	1.308	0.045	0.847	0.198		0.005
CV: Region	1.054	− 0.017	0.199	0.421		0.001
SPEED ($R^2 = 0.738$)						
H1(+): ACCESS (c')	3.216	0.275	1.841	0.033	20.2	0.090
MOBILISATION (b)	3.229	0.595	3.889	0.000	48.9	0.418
CV: Size	1.291	0.076	0.800	0.212		0.017
CV: Age	1.479	0.019	0.312	0.378		0.001
CV: Affiliation	1.315	− 0.099	1.746	0.040		0.028
CV: Region	1.055	0.156	0.865	0.194		0.088

	Total effect on SPEED (c)			Indirect effect on SPEED (Via MOBILISATION) H2(+)= ab				
	Path	p-value	t-value	Path	p-value	t-value	C.I	VAF
Mediating effect								
ACCESS	0.702	0.000	10.082	0.426	0.001	3.137	[0.259; 0.710]	60.7%

Bootstrapping based on n = 10,000 subsamples. Hypothesised effects resulted from a one-tailed test for a t Student distribution. Effects from control variables are assessed by applying a two-tailed test. Total and indirect effects are estimated considering Age, Size, Region, and Affiliation as control variables on MOBILISATION and SPEED

Fig. 2 Structural model results. Note: Significance based on t(10.000), one-tailed test, except control variables Size, Age, Affiliation, and Region, for which significance is based on t(10.000), two-tailed test

through MOBILISATION (*ab*) (Table 5). With age, size, region, and affiliation as control variables on MOBILISATION and SPEED, we also studied the total (*c*) and direct (*c'*) effects of ACCESS on SPEED. These parameters were tested using a bootstrapping approach. As Table 5 shows, ACCESS exerted a significant total effect on SPEED. When MOBILISATION was introduced, ACCESS continued to have a significant direct effect on SPEED (*c'*). In addition, the indirect effect of ACCESS on SPEED via MOBILISATION was positive and significant. This outcome meant that H2 (*ab*) could be supported. Furthermore, this implied that there was a complementary partial mediation. Therefore, MOBILISATION partially mediated the ACCESS – SPEED link. Using the Variance Accounted For (VAF) indicator, it can be observed that 60.7% of the total effect of ACCESS on SPEED was delivered through MOBILISATION (Fig. 2).

The out-of-sample predictive power of the four models was assessed by examining how well the model could predict unseen data (Danks and Ray 2018), as described by Sarstedt et al. (2021). The PLS*predict* procedure, developed by Shmueli et al. (2016), was applied to achieve this goal. The analysis enables the model's generalisability to other populations to be tested (Danks and Ray 2018). Following Sarstedt et al. (2021), we focused on the model's key dependent construct, i.e., SPEED. Following Shmueli et al. (2019), k-fold cross-validation was performed initially, with k = 4 subgroups, to reach the N = 30 minimum size for the holdout sample, and then this procedure was repeated one thousand times. Finally, we conducted the PLSpredict analysis using the following steps (Shmueli et al. 2019) (Table 6):

1. Indicators of ACCESS showed values of $Q^2_{predict} > 0$, indicating that all manifest variables matched the first criterion.
2. We use two prediction statistics to measure the degree of prediction error, i.e., the Root Mean Squared Error (RMSE) and the Mean Absolute Error (MAE).

Table 6 PLS$_{predict}$ results

	PLS			LM		PLS-LM	
	RMSE	MAE	$Q^2_{predict}$	RMSE	MAE	RMSE	MAE
INTENSITY	0.897	0.701	0.210	1.020	0.667	− 0.123	0.034
COMMITMENT	0.810	0.490	0.356	0.847	0.496	− 0.037	− 0.006
BREADTH	0.694	0.450	0.527	0.921	0.430	− 0.227	0.020

RMSE: Root mean squared error. MAE: Mean absolute error. PLS: Partial least squares. LM: Linear regression model. k = 4 subgroups, number of repetitions = 1,000

Table 7 NCA ceiling accuracy and effect sizes

Construct	MOBILISATION			SPEED		
	Ceiling accuracy (%)	CE-FDH (*d*)	*p*-value	Ceiling accuracy (%)	CE-FDH (*d*)	*p*-value
ACCESS	87.0	0.268	0.010	97.7	0.431	0.003
Size	90.8	0.134	0.015	96.2	0.116	0.068
Age	96.2	0.438	0.001	97.7	0.460	0.008
MOBILISATION				96.2	0.439	0.000

Considering the symmetry of the prediction error distribution, we use RMSE for INTENSITY (skewness = − 0.618) and BREADTH (skewness = 0.843), and MAE for COMMITMENT (skewness = 2.66) (grey cells). Then, the prediction error statistics of the PLS-SEM analysis were compared with naive values provided by a linear regression model (LM). In the PLS-SEM analysis, INTENSITY (RMSE), COMMITMENT (MAE), and BREADTH (RMSE) yielded smaller prediction errors than the LM, indicating a high predictive power.

Following this procedure, we performed an NCA (Richter et al. 2020). This technique assists in determining, on the one hand, which variables produce the best possible outcome (i.e., should-have variables), even if they may not be necessary. On the other hand, it helps to identify which antecedents are critical for a dependent construct (i.e., must-have variables), so as to clarify which are necessary conditions that must be satisfied to achieve a specific outcome. In our analysis, we have excluded those controls that are categorical variables.

According to the NCA results (see Table 7), ACCESS, size, and age are all necessary ($d \geq 0.1$) and significant ($p \leq 0.05$) variables for MOBILISATION. Additionally, for SPEED, ACCESS, MOBILISATION, and age are necessary and significant conditions. With the bottleneck table, each necessary condition may be evaluated in-depth (Table 8). For example, Table 8 shows that to achieve a 50% level of MOBILISATION, three necessary conditions must be met: ACCESS must be at least 39.3%, size must be at least 4.4%, and age must be at least 8.7%.

Table 8 Bottleneck CE – FDH table (percentages)

	ACCESS	Size	Age	MOBI-LISA-TION
Bottleneck MOBILISATION				
0	NN	NN	NN	
10	10.2	0.8	3.3	
20	11.2	1.3	3.3	
30	11.2	4.2	3.3	
40	11.2	4.4	7.6	
50	39.3	4.4	8.7	
60	39.3	24.3	89.1	
70	39.3	24.3	89.1	
80	39.3	24.3	89.1	
90	39.3	33.1	89.1	
100	39.3	33.1	89.1	
Bottleneck SPEED				
0	NN	NN	NN	NN
10	NN	0.8	3.3	NN
20	NN	1.3	3.3	NN
30	NN	4.4	3.3	NN
40	39.3	4.4	3.3	33.6
50	71.0	4.4	8.7	48.4
60	71.0	15.4	84.8	48.4
70	71.0	24.3	92.4	86.7
80	71.0	24.3	92.4	86.7
90	71.0	24.3	92.4	86.7
100	71.0	24.3	92.4	86.7

NN: Not necessary

Combining the results generated by PLS-SEM and NCA, we can observe that ACCESS and size are significant antecedents and necessary conditions for MOBILISATION. The same situation applies to ACCESS and MOBILISATION for SPEED. Therefore, increases in these antecedent constructs will increase the endogenous variable for both outcomes. Nonetheless, the outcomes will not be produced, unless a certain level of exogenous constructs is reached. On the other hand, according to the PLS-SEM results, for MOBILISATION, age did not have a significant impact, neither did size and age for SPEED. However, the NCA results highlighted that age is a necessary condition for both outcomes. This result appears to indicate that age represents a necessary but insufficient condition for MOBILISATION and SPEED. Therefore, a certain level of age is necessary for both dependent variables to manifest. However, a further increase is not recommended, as it will not increase both outcomes any further. For instance, in the case of SPEED (Table 8), it is necessary

to attain a critical level of age (8.7%) to achieve an appropriate level of SPEED (50%). Nevertheless, a progressive increase of age does not increase SPEED unless there is a leap and age reaches 84.8%.

5 Discussion and Conclusion

The aim of this study was to analyse the speed of the international expansion process among MNEs, by studying the relative importance of the access to resources from interorganisational relationships networks as an explanatory variable of SPEED, as well as the role of network resources mobilisation, through which external opportunities are exploited; in this way, any simplification of mere access as an explanatory element is avoided. The importance of studying this issue lies in the need to examine firm' international expansion, which is a critical objective for the success, or even the survival, of MNEs; thus, deciphering how to seize opportunities from foreign markets is essential for establishing and maintaining a competitive advantage (Yu et al. 2011). Accordingly, the post-entry speed of the internationalisation process is conceptualised as the relation between the internationalisation process and time. Nevertheless, a fundamental question is how to analyse the factors that determine the different post-entry speeds of international expansion of MNEs. In summary, this work has proposed that, as MNEs strive to increase their international expansion speed (Chetty et al. 2014), they strive to build a prominent position in a network of international alliances, so to gain access to concrete resources for internationalisation; and at the same time, both our PLS-SEM and NCA analyses proved that even though access is necessary, there still needs to be a network resources mobilisation strategy, which may be conceptualised as a separate construct that serves as a mediator. Consequently, our analyses provided support for both hypotheses. First, concerning Hypothesis 1, the data revealed that network resources ACCESS, understood as a construct comprising the positional characteristics of the firm in a network of interorganisational alliances, is an adequate predictor of SPEED of international expansion and exerts a direct and positive effect. Second, the data also lend support to Hypothesis 2, in that network resources MOBILISATION is indeed a separate construct that is necessary for further international expansion, and it is the variable that transmits a greater part of the effect of resources ACCESS towards internationalisation SPEED, thereby supporting a partial relationship of mediation.

As a result, this study contributes to expand our current understanding of MNE's international expansion phenomenon in three fronts of analysis; first it contributes to the post-entry international expansion perspective in contrast to the early internationalisation research stream; second, the novelty of the data and study technique highlight new insights derived from the multidimensional nature of both internationalisation speed and networks; and third, it extends the theoretical claim on the separation of resources access and resources mobilisation to explain speed of international expansion.

First, with regard to the issue of speed of international expansion, speed is arguably the most important time-based dimension of a firm's international expansion

process (Prashantham and Young 2011); however, speed has generally been conceptualised as the time that elapses until the foundation and first international venture of the firm, focusing more on the early internationalisation process than the post-entry speed of international expansion; some authors have pointed out that this topic still remains under-investigated (Casillas and Acedo 2013). In light of this observation, Casillas and Acedo (2013) highlighted the importance of the interorganisational level as an explanatory variable of speed in the international expansion process of the firm, and, similarly, Prashantham and Dhanaraj (2010) discussed the dynamic influence of social capital on international growth. Based on this body of literature, our work contributes by confirming the multidimensional nature of the SPEED construct and reaffirming the need to incorporate the three theorised dimensions in its analysis. This empirical confirmation is reflected, as shown in Table 3, in the significant reliability of SPEED as a construct simultaneously formed by the increases in the intensity of foreign markets, the breadth and diversity of markets, and the commitment of its own resources abroad.

Second, in relation to internationalisation speed determinants, the IB literature often over emphasises resource ownership and competitive exploitation of proprietary assets and resources (Narula 2015; Tan et al. 2020); however, as found in this paper, resources access has a significant explanatory power over the increase of scope, commitment, and intensity of firms abroad. This finding reinforces the need to balance empirical research with the joint analysis of both traditional resource ownership variables and relational variables such as network resources access and mobilisation (Das and Teng 2000). In particular, as the effect of networks is often studied as a metaphor, or at best, as a self-reported variable (Cuypers et al. 2020), our secondary data base created new value by incorporating the real structural properties of the firm's network at the MNE level, thus proving that the joint effect of network resources ACCESS may exert superior explanatory power than other resource-related variables in the MNE growth scenario.

Third, this work has argued that, as MNEs face pressures to grow at the fastest speed, they are expected to implement actions that allow them to increase their international business activities abroad whilst avoiding risks for performance (Chetty et al. 2014); hence our contributions help to understand the mechanisms of network resources MOBILISATION, a construct which has often been neglected in both IB theory and interorganisational network theory. We reveal the relevance of this construct, given that it unambiguously drives the growth of the MNE following the formation of alliance networks and establishing a central and prominent position in it. In particular, interorganisational relationships or social capital become even more relevant to internationalisation processes in industries such as airlines, which are heavily regulated, or others where limits are placed on certain competitive dynamics or strategic M&A decisions due to state-regulated mechanisms (Lazzarini 2007; Oum et al. 2001). Hence, alliances have become a crucial mechanism for firms to internalise inter-firm externalities, in this case, in the form of capturing opportunities from the partners' international traffic flows. The problem is that in the literature, access to resources has traditionally been used as a proxy for their mobilisation (de Graaf and Flap 1988; Koka and Prescott 2002; Tsai 2001), thus implying that resource flows are symmetrically and bidirectionally transferred between partners at a dyadic level.

Nevertheless, our research supports the idea that this conceptualisation is not in line with reality, because resources mobilisation is not necessarily bidirectional and is completely asymmetric within the airline industry, due to the competitive positioning and bargaining power of companies. Accordingly, our results show, through NCA analysis, that both ACCESS and MOBILISATION – considered as two distinct variables – are necessary and significant conditions to explain SPEED.

The implications of this study help to reinforce the bridge between interorganisational network theory and international business theory. First, in the research stream on post-entry speed of internationalisation, the key determinants of a faster pace of international expansion are the relationships of the focal firm through which it acquires knowledge, experience, and resources (Casillas and Acedo 2013; Heidenreich 2012), an approach that has neglected the separation between access to and mobilisation of network resources. Both access and mobilisation have been addressed in so far as mobilisation, seen as a strategy and a result of the willingness and the capability of a firm to take advantage of the opportunities to access network resources, is an adequate predictor of international expansion speed (Casanueva et al. 2015). Most analyses of interorganisational alliances and their effects on internationalisation have focused on the number of alliances, focal firm centrality, and their generalised structural dimension (Cuypers et al. 2020), whilst taking for granted that access to network resources through network positioning is sufficient to cause an effect on internationalisation processes. Hence, by introducing network resources mobilisation in our work, the results have contributed to clarification of the theoretical mechanisms through which the degree of embeddedness in an alliance network can lead to faster international expansion speeds, based on increased foreign commitment, a broader geographic scope, and increased intensity of foreign commercial operations. Furthermore, it is worth noting that the use of MNE-level data can confirm the principles of network effects on a measure such as speed, providing an alternative to standard SME-level data, so ubiquitous in the international business literature.

Our study has also contributed to managerial practice in international business, through the use of PLS-SEM that captures the effects of the multidimensional constructs of our model. For instance, there is a strong emphasis on increasing the number of interorganisational alliances. However, practitioners must, on the one hand, consider the multidimensionality of network embeddedness for an understanding of resources access; different types of centrality are significant factors that can therefore increase the speed of international expansion, rather than a mere increase in the number of partners, alliance policies are key to strategic positioning for a suitable measure of betweenness, accessibility to other members, nearness with respect to powerful partners and closeness to the entire network. On the other hand, their strategic intent must be implemented through the design of mobilisation mechanisms for effective alliance strategies and policies. Therefore, as increased mobilisation implies a greater international presence, a systematic process for opportunity assessment must be implemented to take advantage of the multidimensional expansion.

Finally, both the contributions and the limitations of this study open up new research opportunities to study the particularities of alliance networks and resources mobilisation and their impact on speed of international expansion and firm performance in general. For instance, the focus of this study on the airline industry is a

natural scenario for the study of interorganisational relationships. However, there is an opportunity here to understand the nuances of this effect through multi-industry studies. Additionally, in our research, speed may be seen as a form of firm performance. Nevertheless, as the effect of speed on financial performance may be further debated, there is an opportunity to study the simultaneous effects of network resources access, network resources mobilisation, and speed of international expansion on financial performance indicators. Finally, our study is based on secondary or archival data, which were not created to conform to the usual requirements to ensure the validity of the content in multiple rounds of item refinement.

Declarations

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