A social network analysis of interlocking directorates in the accommodation sector

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Abstract

Purpose

By adopting network analytic techniques, this paper examines interlocking directorates among firms operating in the hospitality services sector in seven major Italian tourism destinations.

Design/methodology/approach

We collected information for all the hotel corporations whose headquarters are located in the seven top Italian destinations: Florence, Milan, Naples, Rimini, Rome, Turin, Venice. Data come from the AIDA database by Bureau Van Dijk. And were used to build a network where the nodes are board members (People) and corporations (Hotels) and the links represent the membership of individuals in the boards. From this, with a one-mode projection, we obtain two networks: people and corporations. The overall networks' structures are analysed by assessing their connectivity characteristics.

Findings

The findings indicate a relatively low number of interlocks that signals a high degree of fragmentation, showing that the interconnections (both within and between destinations) are scarce. This suggests that in absence of formalized cooperation arrangements, corporations might collaborate informally.

Research implications

This work extends previous research on complexity in business settings; focusing specifically on service companies whose output depends on multiple interactions and helps clarifying coopetition practices of hospitality service firms. Policy making perspectives are discussed as well as managerial viewpoints.

Originality/value

Not many studies of the interlocking directorates in the hospitality domain exist. This paper uses network analysis for a better understanding of the cooperative practices and the formal social structures of the Italian hospitality industry and derives a series of implications important for both researchers and practitioners and while also looking at potential future studies.

Keywords: social network analysis; network science; business ecosystems; interlocking directorates; hospitality and tourism firms; quantitative study; tourism destinations.

1. Introduction

Economic actors, be them individuals or organizations, must navigate an increasingly dynamic and complex business environments whereby socio-political, environmental, and technological change repeatedly undermine any competitive advantage created, rendering it temporary and transient (D'Aveni et al., 2010). Growing uncertainty can induce firms to devise strategies to recreate a competitive advantage once it has been eroded (D'Aveni, 1995). These strategies also embrace alliances, joint ventures, and more generally inter-organizational relationships that might be conducive to mutual benefits for the business partners involved (Palmatier et al, 2007) in the form of: pooling (financial and non-financial) resources and capabilities to achieve shared goals (e.g., Dacin, et al., 2007); innovation adoption (e.g., Powell et al., 1996); minimization of resource dependences from third parties (e.g., Pfeffer and Salancick, 2003); opportunities for a mutual exchange of good and best managerial practices (Rao and Sinakumar, 1999); achievement of a superior cooperative advantage (Lavie, 2006). All of the aforementioned elements can be conducive to higher levels of performance.

In other terms, the hypercompetitive business arena today can be seen as a complex business ecosystem (Tsujimoto et al., 2018) or even a collection of business ecosystems, where a multiplicity of economic actors can decide to compete, cooperate or even to simultaneously compete and cooperate through forms of coopetition (Brandenburger & Nalebuff, 1996; Czakon et al., 2020; Wang

& Krakover, 2008). However, in many industries it is not clear how and to what extent economic actors actually compete, collaborate or coopete. Shedding light on inter-firm relationships therefore is of paramount importance to make sense of how economic actors within a specific sector or geographic area interact with each other to deal with increasing uncertainty and complexity. In several industries such as automotive, consumer electronics, military defence and tourism, the complexity of the products or services being produced demands different companies with similar and/or complementary resources to interact by cooperating or coopeting (Depeyre & Dumez, 2010; Wang & Krakover, 2008). Furthermore, entire geographical areas, regions, and destinations have been progressively described as ecosystems of organizations that coexist (Tsujimoto et al., 2018). Interestingly, there are areas with a high concentration of businesses that are apparently highly interdependent as they have to contribute to create a complex product. This is the case of tourism destinations, where a high number of interdependent firms apparently cooperate to generate benefits in the form of regional and local destination development, attraction of tourism flows, and increase of tourism receipts. So far, in the hospitality management literature there is a virtual absence of research capturing quantitatively - by means of network analytics techniques - the presence of interlocks in the hospitality and tourism sector. To fill this research gap, in this work we dig in depth about the presence and role of inter-organizational relationships and more specifically interlocking directorates (i.e., shared board members) to understand if and to what extent companies operating in the same geographic area and interested in enhancing the competitiveness of that region by means of the conjoint generation of complex products, factually cooperate with each other. Shared board members in a tourism destination across companies can facilitate information flows and the achievement of strategic objectives in terms of tourism destination planning and tourism destination marketing planning (Morrison, 2019). We tackle this issue by means of a quantitative social network approach applied to the Italian hospitality industry by investigating the formal linkages among Italian accommodation corporations. Compared to other hospitality management studies, our study is distinctively different and novel for three reasons: (1) it is the first to capture quantitatively the presence of interlocks; (2) it is the first to use network analytics techniques to do so; (3) it examines a large sample of firms. These distinctive features of the study contribute to extend the few extant study on interlocks in tourism (see e.g. Beritelli et al., 2016; Keiser, 2002) which only leveraged an exploratory descriptive analysis of the boards of five companies.

In order to fill the aforementioned research gap, the paper is organized as follows. In section 2 we review the relevant literature related to (a) complex systems and services (and embed it into the tourism management literature); (b) interlocking directorates and (c) methods used to represent complex systems whereby there is a presence of interlocking directorates. Section 3 elucidates the methodology adopted. Section 4 illustrates the findings. The fifth section discusses the findings and presents managerial and theoretical implications. The last and concluding section portrays the limitations of the study, advancing an agenda for future research.

2. Literature review

2.1 Inter-firm relationships and interlocking directorates

Inter-firm relationships have been a main topic for management studies for a long time and many scholars have focused their attention on both formal and informal forms of cooperation between firms, including trade associations, voluntary agency federations, joint ventures, joint programs, corporate interlocks, and agency-sponsor linkages (Oliver, 1990). Moreover, scholars have studied strategic alliances (e.g., Doz, 1996) and collectives of organizations (e.g., Astley and Fombrun, 1983). The aforementioned arrangements display differing degrees of formalization. For instance, collectives of organizations might be less formalized than corporate interlocks but despite it, they could be equally effective for cooperation and especially operative coordination (Gulati et al., 2012) among organizations.

The object of this paper is one of the most formalized forms of inter-organizational relationship: corporate interlocks. Corporate interlocks, also known as interlocking directorates, are situations where a person is simultaneously a member of the board of directors of two or more organizations (Mizruchi, 1996). They have received an increasing scholarly interest over the last five decades.

Extant literature has investigated both antecedents (e.g., collusion, co-optation, monitoring, legitimacy, social cohesion) and consequences (e.g., corporate control, network embeddedness, profitability, board structure, takeover and acquisition strategies, joint ventures, innovation adoption, etc.) of interlocking directorates (e.g., Burt, 1983; Shropshire, 2010).

Interlocking directorates have been found to be relevant in sectors such as finance (Fowler & Fronmueller, 2014), retail (Shaw & Alexander, 2006), health (Goodstein & Boecker, 1991), especially at a national level (Heemskerk et al., 2013). However, sectors such as hospitality and tourism have been relatively neglected so far in corporate interlocks studies, even though a relevant research stream in hospitality and tourism claims that collaboration inside the tourism industry is relevant despite high competition (Wang & Krakover, 2008) because firms active in a destination have to interact to produce complex services (Naipaul et al., 2009), and are highly interdependent despite their competitive orientation. Interestingly, several studies in the hospitality sector have underlined the importance of inter-organizational relationships or friendships between competing hotels (and their managers) for individual performance and reputation (Ingram & Baum, 1997), and for network performance through the mechanisms of enhanced collaboration, mitigated competition, and better information exchange (Ingram & Roberts, 2000).

Overall, the literature listed above could point to the idea that inter-firm relationships play a crucial role in the analysed sector, and this might lead us to guess that cooperation at the company level might be explained in terms of ties at the board-of-directors level. The only examination of interlocks within the hospitality sector leverages an exploratory descriptive analysis of the boards of five large US corporations in three industries: lodging, restaurant, and airlines (Keiser, 2002). The study finds that communications, financial and holding companies, law firms, manufacturing, and paper and printing were represented on the boards of all the three industries. However, the presence of interlocks appears negligible, and the author concludes that despite the rhetoric of integration within the hospitality and tourism sectors (Walker, 1996), there is scarce evidence that this holds at the management boards' level. While this study has some merit, as it is the only one that has tried to describe the presence of interlocks in the hospitality and tourism sector, so far virtually no study has been conducted on large samples of services firms and embracing appropriate network analytics techniques.

Furthermore, the question whether interlocks among hospitality and tourism corporations are actually leveraged to enhance cooperation and improve information exchange and knowledge transfer inside the hospitality sector remains unaddressed. To deal with this question, we adopt a network science perspective and examine interlocking directorates among a large sample of hospitality firms' management boards located in seven major Italian tourism destinations: Florence, Milan, Naples, Rimini, Rome, Turin, and Venice. All these are characterized by a well-developed and mature tourism infrastructure, and they well represent complex systems bringing together a multiplicity of economic actors (entrepreneurs and companies) addressing the needs and wants of tourists.

One more observation needs to be made. In Europe, and especially in Italy, the public sector - typically governmental bodies at the different levels - influences profoundly the tourism and hospitality sector via laws, decrees, and regulations. Moreover, the public sector can also shape policies and incentives that can modify not only the operations, but also the very structure of the sector (e.g. Marino, 2010; Mariani, 2018). In this work, we look at a snapshot of the situation at the time of data collection that clearly reflects the past government policies in the sector. However, since public sector induced changes can take a relatively long time to be detected, the impact of public intervention cannot be directly addressed by our "static" approach.

2.3 Making sense of interlocking directorates through social network analysis

The formation of inter-firm relationships, their structure, and the issues connected with their governance, maintenance, and outcomes, are important matters in the study of any kind of sector (Tsujimoto et al., 2018). This holds at both the company and the board of directors' level. Many qualitative and quantitative methods have been employed to capture inter-firm relationships (see section 2.1) and network science techniques have been also adopted to characterize and measure interlocking directorates.

Thus far, the links generated at the level of corporate governance structures such as management boards have been operationalized in a number of different ways and examined at the regional, country, or international level, in multiple domains (Heemskerk et al., 2013; Sapinski & Carroll, 2018) but largely neglected in domains such as hospitality and tourism services sectors (Beritelli et al., 2016; Keiser, 2002 are the only exceptions).

Inter-organizational connections are vital for the role that cohesive groups of companies can have in the economic performance of a region and/or for their capability to influence policy making and business strategizing (Huggins & Thompson, 2017). Even if several critical voices have warned about the risks of anti-competitive effects, as strong inter-firm ties can enable firms to collude and be less transparent on the market (Petersen, 2016), the benefits of smooth and efficient information and knowledge exchanges for a system and its individual actors is well recognized (Baggio, 2011; Mwesiumo & Halpern, 2019).

Network science offers a wealth of possibilities to reveal both the general and the local structure of the interlocking directorates' network and to assess roles and functions in these systems: accordingly, it is a natural and straightforward approach for this type of studies. In fact, intensity and density of relationships, fragmentation or cohesion, formation of alliances or elite communities can be directly highlighted by using network analytic measures and procedures (Heemskerk et al., 2013).

In this paper we leverage on a network analytic approach to understand if and to what extent interlocks among companies in the complex hospitality and tourism sectors actually exist to support formally the manifested operational informal collaboration that some authors have observed qualitatively at the company level (Beritelli et al., 2016; Ingram & Roberts, 2000). In the next section we illustrate the empirical setting and describe the steps for the data collection and the methods used for the analysis.

3. Empirical setting, data collection and analysis method

To examine the presence and role of corporate interlocks in the accommodation sector, we focus on tourism city destinations in Italy. We situate our study in Italy because the country and its cities are among the most visited destinations worldwide, with the country ranking fifth and seventh respectively in terms of international tourism arrivals and receipts (UNWTO, 2018). We select 7 top Italian destinations accounting for 34% of tourists' overnights sold (ISTAT, 2020) and 7,503 out of 26,759 accommodation establishments (28% - CCIAA, 2022).

3.1 Data

The data used for the network analysis were collected from the database *Analisi Informatizzata delle Aziende Italiane* (AIDA) owned by Bureau Van Dijk (a leading European information and business intelligence company) that gathers all the data related to corporations (not mere operational units) with an annual turnover of at least 100K Euros. It includes 12,385 corporations belonging to the accommodation sector (Ateco code 55.1). Out of these 12,385 corporations only 9,631 included data on their boards. The former ones represent 40.4% of the overall accommodation corporations' population active in Italy (ISTAT, 2020). The representativeness increases if we limit the national data to companies with over 100K sales.

We collected information for all the accommodation corporations (ATECO 55.1) whose headquarters are located in the seven top Italian destinations: Florence, Milan, Naples, Rimini, Rome, Turin, Venice.

The query returned 3,128 corporations and 9,713 board members. The accommodation properties are mainly concentrated in these cities. As our data relate to accommodation companies at the corporate level and not to operational units, each accommodation corporations could potentially control operational units in different destinations, but they are headquartered in the selected destinations.

The decision to focus on a selected sample of destinations has been taken based on the fact that they are well represented in the database as the coverage is in fact 47.1% in the selected destinations. Our purposive rather than casual sampling ensures high representativeness as it addresses the need of detecting and measuring formal ties among corporations that display the highest likelihood to be interlocked. In fact, extant research shows that interlocks are a spatial phenomenon (see for instance Greeny, 1981; Kono et al., 1998) and that they are more frequent among large firms (see Mizruchi and Steams, 2006). The selected cities are also the destinations with the highest density of accommodation chains, as 79% of the chains have here a legal headquarter and at least a hotel. Incidentally, these destinations are among the 10 most visited in Italy (ISTAT, 2020).

3.2 *Methods*

Data was used to build a network where the nodes are board members and corporations and the links (or ties) represent the membership of individuals in the corporations' boards. We therefore obtain a bipartite network containing two sets: People and Corporations.

In graph theory, a bipartite graph (or network) is a graph where the nodes can be divided into two disjoint and independent sets (People and Corporations in our case). Every edge connects a vertex in one of the sets to one in the other, but no connections exist between the nodes belonging to the same set. Bipartite networks often arise naturally when considering certain type of relationships such as, for example, those between authors and papers, actors and movies, football players and clubs.

To show the relation structure among the elements of a specific set of nodes, bipartite networks can be compressed by one-mode projection (Latapy et al., 2008).. In this, two nodes are considered linked if they have a common neighboring node. In our case two individuals are linked if they are on the board of the same corporation and two corporations are linked if their boards have at least one individual in common. In this work we need to show the connection structure among the elements of the Corporations set, so we compress the resulting network by a one-mode projection.

The overall structure is rendered through the connectivity characteristics, in particular the density of links, the ratio between the number of existing connections and the maximum possible number, and the statistical distribution of the links for both components. This is known to be a signature of the organization in a system; in particular long tail forms (stretched exponential, lognormal or power-law) show strong self-similarity characteristics, typical of a complex system (Barabási, 2016).

The network is then analyzed to assess its internal structure. To do so, we list the connected components that is the subgraphs in which any two nodes are connected to each other by a path (a continuous series of links) and not connected to any other node in the global network.

All network analyses have been performed by using the NetworkX Python library (Hagberg et al., 2008). Statistical calculations were done by using Python based statistical libraries (NumPy, SciPy, StatsModels: Seabold and Perktold, 2010). Network figures were drawn with Pajek (Batagelj and Mrvar, 1998).

4. Findings

The network constructed considering as nodes the board members (People) and the corporations (Accommodation corporations) is bipartite (see Figure 1a) with a low density (0.04%) and a clear power-law degree distribution for both components (Figure 1b).

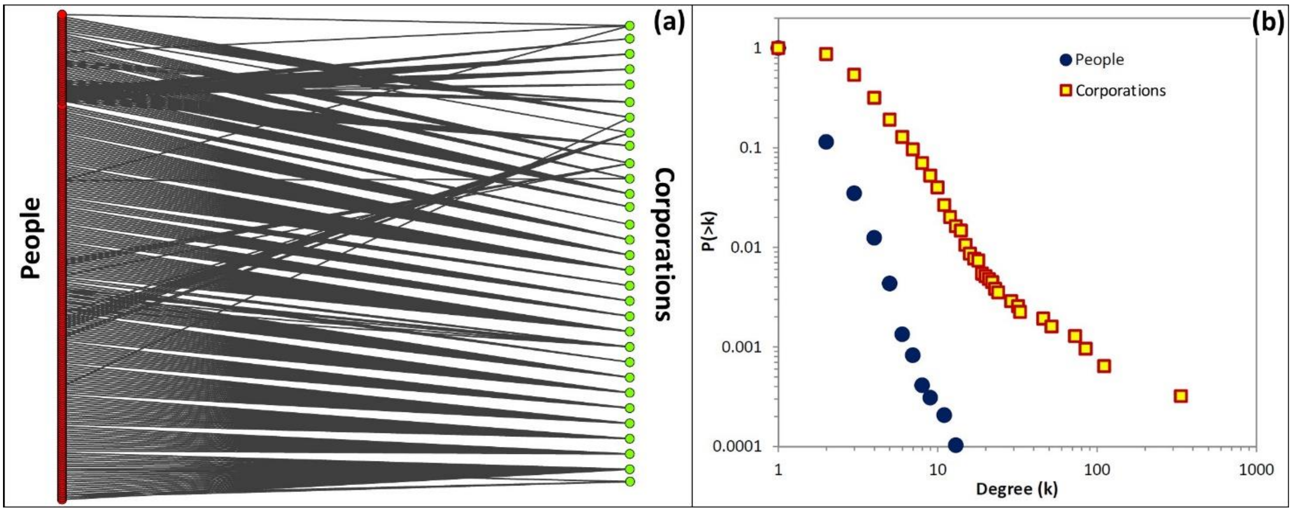

Figure 1: The bipartite network (a) and the cumulative degree distributions of its components (b)

When considering the accommodation corporations' projected component, the main objective of this study, a structural analysis reveals a large number of disconnected nodes (2,421), typically composed of a limited number of members (4.7±0.2). These components are spread and fragmented (Figure 2a), with a concentration in the seven cities. The distribution of accommodation corporations' projected component follows a power-law. The same is true for the distributions of accommodations' revenues and size (gauged as number of employees), thus signaling a highly heterogeneous structure of the industry (Figure 2b). Although with a different approach, these results are consistent and reconfirm the outcomes of other studies (Provenzano, 2014).

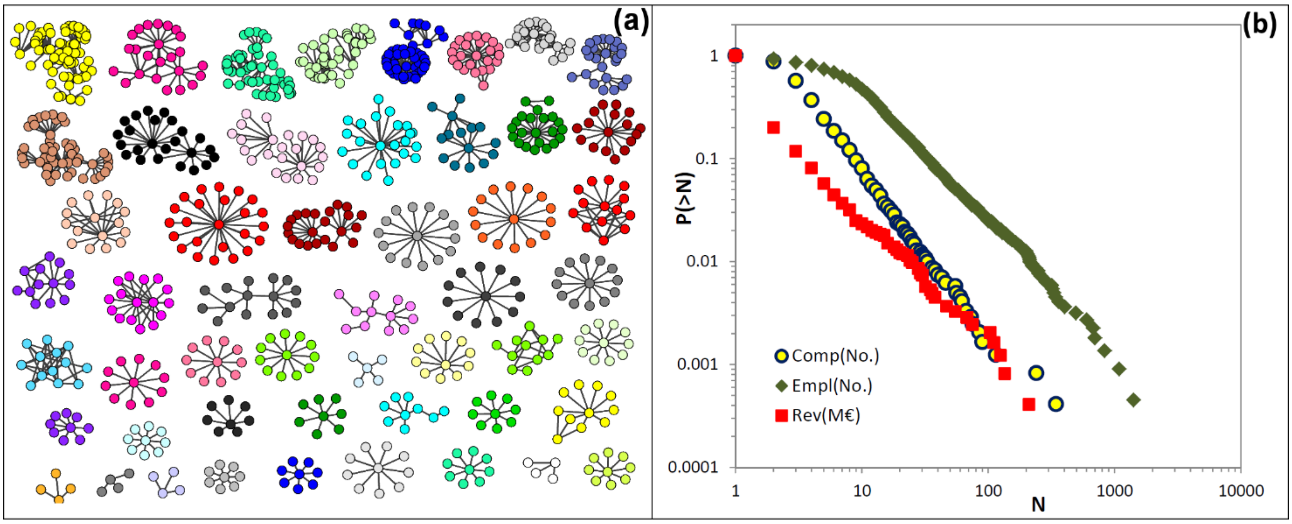

Figure 2: Structure of the components (a) and statistical distributions of components, company size (no. of employees) and revenues (b)

Nevertheless, these results are quite unexpected if we contextualize them in the Italian economic context. In fact, since the 1980s, the networks of small, specialised firms in adjacent geographical areas, have been regarded as the Italian model of industrial development (see Becattini, 1990). Due to the localized nature of tourism, tourism destinations have been – more recently - explained by diagonal clustering, i.e., by the colocation of complementary businesses providing accommodation, hospitality, transportation, and activities creating an overall tourism experience (Lee et alt. 2020). However, our findings clearly show that the Italian hospitality landscape is a very fragmented one with few formal ties between corporations.

Companies and companies' managers are very loosely connected with each other and networks among accommodation companies are small when they exist. This picture is coherent with result in the consolidated entrepreneurial networking literature (e.g. Dodd and Patra, 2002) and is tipical in nations with a highly collectivist perspective (like Italy), where the stronger-tie networks are likely to be developed within members of the in-group (to use Hofstede's terminology).

This is also a reason that motivated us to look at multi-product cities, specialized in different tourism segments (cultural, leisure, business, seaside, ...) where seasonality is lower compared to other Italian destinations. The relatively homogeneous tourist flow over the year guarantee more stable cash flows and a more developed/stable input market (labour force and intermediate goods), resulting in greater interest to participate to the market for large groups and chains (79% of the accommodation chains active in Italy have the legal headquarter in the seven cities considered).

It is worthwhile noticing that the likelihood of forming an interlocking directorate of noticeable size is higher the higher the firm's size in terms of revenues and employees (see Figure 2.b). Therefore, as the sector under analysis is characterized by a high share of small companies, it seems that this might prevent them to formalize their cooperation as this could generate higher costs than simply using the market and transacting informally (Williamson, 2002). Accordingly, we find that many of the analysed firms are too small to make formal cooperation work or to embark in formally structured cooperative arrangements.

Some literature has pointed out that the presence of Online Travel Agencies (OTAs) such as Booking and Expedia and the advance booking phenomenon might push nearby small firms to mimic their rivals in their pricing decisions and this can bring to the emergence of informal communities of hotels (Guizzardi et al., 2019). However, this phenomenon does not translate into neither stable relationships nor formal cooperations as a high degree of fragmentation is present both inside and between destinations: this contradicts the rhetorical assumption of several tourism policy makers and tourism scholars (Walker, 1996), as well as scattered empirical evidence (Naipaul et al., 2009) that hotels try to cooperate at the destination level. The finding is also in line with the only exploratory small sample study conducted in the US context that shows how the number of interlocking directorates involving the five largest hospitality and tourism corporates is negligible (Keiser, 2002).

A further inspection relates to the connectivity characteristics of the two projected components (People and Corporations). By plotting the degrees of the nodes vs. the average degree of their neighbours we find a positive correlation (see figure 3).

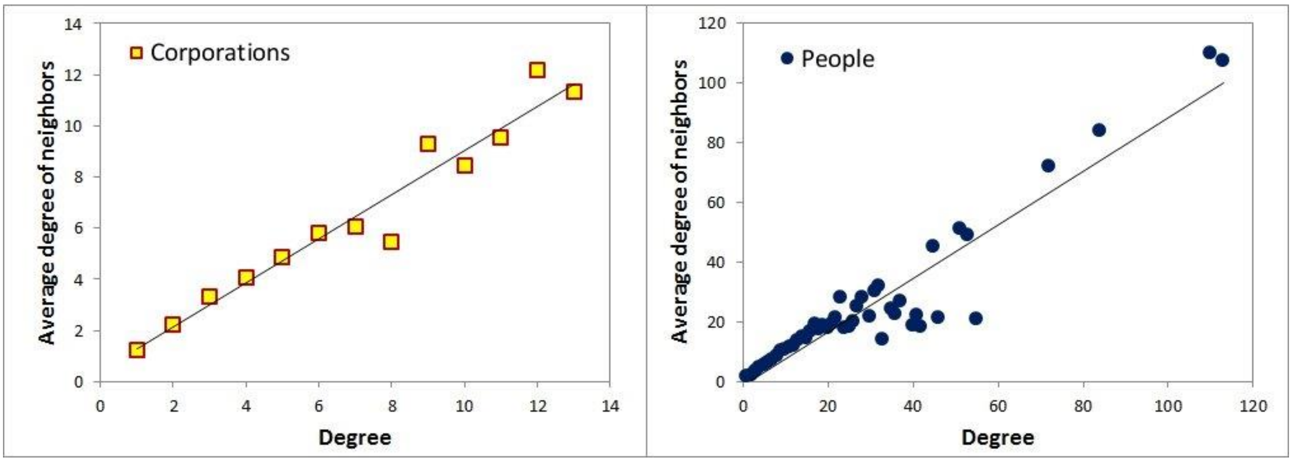

Figure 3. Assortative mixing for the two projected components

This characteristic, called assortative mixing (or assortativity) signals the tendency of the most connected elements to link to high degree nodes (Noldus and Van Mieghem, 2015). In other words there seems to be a kind of 'popularity' mechanism that forms little elite groups of both directors and companies, similarly to what happens in similar settings (Battiston and Catanzaro, 2004). This might be the consequence of the transformation of informal ties among small and medium accommodation corporations at the local level into more formalized professional associations that actually can trigger the formation of interlocks. Accordingly, the strength of informal ties is partially mirrored at the local level by a measurable, though limited, presence of formal connections.

The outlined picture: few formal relationships, in-group relations, small and sparse (local) networks, limits the attractiveness of Italy as a tourism destination - especially regarding the inbound segment searching for an experience that can be hardly offered by a single city. Instead, almost in every Italian municipality there is an overabundance of tourist attractions leading entrepreneurs, unions, and policy makers to parochialism (the great weight that administrative regions and even municipalities have in tourism government and planning clearly demonstrate this). This overabundance paradoxically limits the creation of supra-regional efficient tourism infrastructures, leaving (inbound) tourism flows far away from the peripheral areas (not connected to the more known destinations) creating a vicious circle. In fact, without supra-regional efficient infrastructures is difficult to marketing the peripheral areas except for a short stays or excursions and, consequently, there is no drive to broaden the spatial width of formal collaborations among business.

We believe however that the findings should be triangulated with qualitative evidence and observation of the operational processes that seem to show that at a local level nearby accommodation companies tend to cooperate locally during high season or when they are overbooked, redirecting guests to hotels that are in the vicinity (see Kylänen and Rusko, 2011). Therefore, while the scarcity of interlocks might be interpreted as a proxy of weak operational cooperation, operational cooperation and coordination might still happen in an informal and emergent way.

5. Discussion and Conclusions

5.1 Concluding remarks

In line with a previous exploratory and descriptive small sample study (Keiser, 2002), we found that interlocks between companies in selected Italian destinations are at best rare in the hospitality sector. This might be a consequence of the fact that most of the Italian accommodation companies are small family-led and controlled firms where boards consist typically of the firm's president, some relatives, or managers (and the presence of banks on the boards is not a rule). However, the limited empirical evidence from the North American landscape, dominated by large hospitality firms, seems consistent with our quantitative findings, and suggests that there is a sector-related issue: hospitality services companies seem not as interesting as other companies when it comes to having access to relevant formal decision-making entities such as boards of directors.

If we embrace the idea that network centrality, as reflected in interlock ties, is a form of social capital that provides access to information that flows through the network (Davis and Greve, 1997), then we might be tempted to hypothesize that the amount of information shared is minimal. However, this hypothesis should be of course tested in further research. We therefore conclude that interlocks between hospitality companies are extremely rare and that this depends also on the fabric of the industry that is characterized by SMEs with limited attractiveness for external managers.

5.2 Theoretical Implications

This study makes several theoretical contributions. First, it contributes to the corporate interlocks literature by analysing inter-organizational relationships in complex systems whereby the high interdependence of economic actors is sometimes given for granted or even exaggerated given the territorial nature of these systems (Scaringella and Radziwon, 2018) that are hooked to a specific geographical area, region, destination. As such, the study extends previous research on complexity in business settings (e.g., Vasconcellos and Ramirez, 2011). Second, this is one of the few studies on corporate interlocks focusing specifically on services companies whose output is a) complex and b) the by-product of the interaction of a number of firms (providers) as well as with the customers (Vargo and Lusch, 2008). Accordingly, we contribute to extend traditional corporate interlocks studies (Burt, 1983; Mizruchi, 1996; Shaw and Alexander, 2006; Shropshire, 2010) by analysing in depth service industries that have been largely underexplored, thus implicitly capturing the external validity of corporate interlocks conceptual apparatus. Third, it represents one of the first attempts to deploy network science approaches to the study of interlocking directorates of a large sample of firms operating in the highly complex domain of tourism (Baggio, 2020; Leiper, 1981; Gunn, 1979). Indeed, destination management literature has often pointed out the relevance of collaboration both within and between destinations (Fyall et al., 2012; Mariani et al., 2014; Mariani and Giorgio, 2017; Wang, 2008). Fourth, this work also contributes to clarify if and to what extent coopetition – namely the simultaneous presence of competitive and cooperative interactions among hospitality service firms (Brandenburger and Nalebuff, 1986; Mariani and Belitski, 2022) – is a phenomenon that stems from episodic coordination efforts on operational activities (not driven by formalized decision taken at the board level). Indeed, it might well be that coopetition is not an intentional strategy designed by managers but rather a set of emergent operational processes (Whittington, 2004) that are triggered by middle and operational managers through cooperative day-to-day practices. This is an important conceptual and theoretical extension of the research strand revolving around coopetition in tourism (Czakon et al., 2020; Mariani, 2016; Kylanen and Mariani, 2012; Wang and Krakover, 2008) which is becoming of paramount importance given the multi-faceted business relationships in tourism and hospitality settings. Fifth, this study provides an extension to extant tourism destination competitiveness models (e.g., Crouch, 2011; Crouch and Ritchie, 1999; Enright and Newton, 2004; Gomezelj and Mihalič, 2008; Mariani et al., 2021; Ritchie and Crouch, 2003) that have generally emphasized the relevance of the hospitality industry to enhance destination competitiveness. The empirical analysis conducted shows that competition among destinations is even more relevant as interlocks are virtually absent and this contributes to further increase competition between destinations.

5.3 Practical Implications

This works generates multiple practical implications for both policy makers and hospitality managers. First, from a policy making perspective, the low number of interlocks among accommodation companies might suggest that the sector is quite dispersed and is closer to a competitive arena (with accommodation corporations being price takers) rather than to an industry where companies collude to make prices. Interestingly, Burt (1983) found an inverted U-shaped function, in which intra-industry interlocks were highest in industries with intermediate levels of concentration. He suggested that concentration facilitates intra-industry ties but that the most concentrated industries (because of their small number of producers), have little need for interlocking because they can set prices. Our study seems to support Burt’s (1983) findings as it suggests that industries with very low and very high level of concentration display paradoxically a similarly low presence of interlocks.

Second, the low number of interlocks reveals that the hospitality sector in Italy is highly fragmented. For this reason, it could significantly suffer in a globalized competitive market where size and scale matter. Tourism policy makers and destination marketers should therefore encourage small and medium-sized hospitality companies to collaborate more and share services and interact even more with a variety of stakeholders operating in different sectors (transportation, accommodation, etc.), and differentiated by size and ownership arrangements (Fyall and Garrod, 2005).

From a managerial point of view, our findings generate several insights. First, the fragmentation in the hospitality industry seems to prevent companies from carrying out coordinated strategies at the local, regional and national level. This point reinforces anecdotal evidence showing that fragmentation within the hospitality sector represent an obstacle for global strategies (Whitla et al., 2007). Second, and in light of the detrimental impacts of increasingly frequent extreme events such as climate change events or epidemics (Dedeoglu et al., 2022), the hospitality sector has proved particularly weak. The development of coordinated strategies and tactics at the local level, also via interlocks, might become a way forward to improve the cohesion and mutual support of hospitality firms in times of crisis. Third, despite the rarity of formal linkages between accommodation firms, some research (Ingram and Roberts, 2000) and anecdotal evidence seem to suggest that weak forms of collaboration are present among hospitality managers (at least in the form of information exchange). This might be further enhanced at the local level when accommodation firms have to deal with peaks of demand and seasonality.

5.4 Limitations and future research

The findings are not without limitations and should be interpreted with caution. First, our outcomes stem from a sample (though rather large) of accommodation corporations located in specific city destinations; accordingly, our results might be difficult to be generalized to other destinations or countries.

Second, like many other works in the management literature (e.g., Gulati and Westphal, 1999) our study relies on publicly available archival data from which authors advance hypotheses about the effect of interlocks or board structures. Here we consider just formalized relationships with boards that can aid the transfer of tacit knowledge (O'Hagen and Green, 2002; Shaw and Williams, 2009) which is critical to firm performance (Boyd, 1990), but we might be missing relationships (e.g., friendships and acquaintances) between managers that are not formalized and cannot be captured with available official data. Building on extant research that has examined the relevance of informal ties (Beritelli, and Laesser, 2011; Dredge, 2006), our wider ongoing research project is aiming at matching a qualitative approach with quantitative indicators (Pettigrew and McNulty, 1995). Mixing quantitative and qualitative approaches might be a more helpful way to capture the richness and complexity of inter-firm relations. However, given the high number of actors under study (more than 9,000 board members), a qualitative analysis could generate reasonable findings only if conducted over a wider timespan and with a conspicuous budget. Indeed, the costs (time and money) involved in interviewing a representative sample of individuals would be relevant. To be consistent with the scope of the quantitative part of our study, we cannot conduct interviews with a relatively small group of easily identifiable and willing-to-respond "active market players" like representatives of entrepreneurs within the local chambers of commerce as well as tourism policy makers. They are by definition among the most locally known individuals and therefore the ones with the highest number of informal relations.

Finally, a possible strategy to capture and measure missing relationships between managers (e.g., friendships and acquaintances not formalized by board membership) with quantitative methods is to focus on firms' price tactics (i.e., pricing action and reactions shared directly on platforms such as Booking, HRS, or Expedia). We acknowledge that relationship inferred from pricing decisions are neither stable nor formal but, nevertheless, they arise from quantitative public information, shared in the real-life context (Boccali et al., 2022). Price dynamics can be integrated with data from the board composition or from balance sheets. Methodological issues have to be solved (e.g., those data are not collected with the same temporal frequency), but this integration remains – in our opinion - an interesting and promising challenge.

Third, a wider representation of sectors would be needed in order to capture both informal and formal relationships between companies and businesses operating also in apparently unrelated sectors as, due to the localized nature of tourism, tourist destinations are often represented as diagonal clusters, a coordinates ensemble of activities creating an overall tourism experience (Lee et alt. 2020). Fourth, future research might examine if and how the presence of interlocking directorates might influence the probability of a tourism destination to gain a competitive advantage or the likelihood of accommodation companies to undertake mergers and acquisitions.

Last, we note that a better and deeper research work should be performed analysing the policy implications of the issues examined here and, to a larger extent, to compare what found in the present case to other countries or regions in order to check whether there are structural differences and on how these influence the strategies and the development of the tourism and hospitality domain.

In synthesis, and with the mentioned limitation - this study emphasizes the interplay between individuals (micro level) and organizations (meso-level) and their respective networks. We challenge extant tourism literature that seems to suggest that cooperation stemming from interlocking directorates is relatively common in the tourism and hospitality sector. At the same time, we raise issues for debate and investigation around the actual presence of interlocks between accommodation corporations. Our findings seem to confirm that the hospitality sector in Italy is highly fragmented and therefore support the idea that cooperation in the hospitality sector (both inside and between tourism destinations) is at best part of the rhetoric of several national tourism policy makers.

STATEMENT

All co-authors contributed equally to the manuscript

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