# THE ROLE OF SOCIAL NETWORKS IN FOREIGN DIRECT INVESTMENTS: THE CASE OF TURKISH BUSINESS GROUPS[1] [2]

Kafkas University
Economics and Administrative Sciences Faculty
KAUJEASF
Special Issue, 2022
ISSN: 1309 – 4289
E – ISSN: 2149-9136

*Article Submission Date: 13.12.2021* *Accepted Date: 25.04.2022*

Tülay İLHAN-NAS
Prof. Dr.
Karadeniz Technical University
Faculty of Economics and Administrative Sciences,
Trabzon, Turkey
tulayco@ktu.edu.tr
tulayilhan@yahoo.com
**ORCID ID: 0000-0002-6264-7948**

Şengül DURAN
Res. Asst.
Kafkas University
Faculty of Economics and Administrative Sciences,
Kars, Türkiye
sengul.duran@kafkas.edu.tr
sengul.duran_614@hotmail.com
**ORCID ID: 0000-0002-2872-2350**

ABSTRACT | This study aims to examine the effect of network structures of Turkish business groups on foreign direct investment decisions. In line with this study, social network structures (in the dimensions of centrality and betweenness) that are handled at the business group level, are evaluated in the context of overlapping boards of directors. The scope of the study consists of 13 business groups determined according to the deliberate sampling method and 83 affiliates operating as affiliated companies of these business groups. In the study, the data about 96 enterprises (13 holdings and 83 affiliates) is obtained between 1997-2019, and their network structures (degrees of centrality and betweenness) are revealed. Afterward, the hypotheses, which are developed within the scope of the study, are tested through panel regression models. Research results show that degree centrality at the enterprise group level positively affects FDI decisions and activities. Another significant finding obtained within the scope of the study shows that there is no effect of betweenness at the enterprise group level on FDI activities.

***Keywords:*** *Social networks, foreign direct investments, Turkish business groups*
***JEL Codes:*** *M10, M16, F23*

***Scope:*** *Business administration*
***Type:*** *Research*

**DOI: 10.36543/kauiibfd.2022.ozelsayi13**

**Atıfta bulunmak için:** İlhan-Nas, T. & Duran, Ş. (2022). The role of social networks in foreign direct investments: the case of Turkish business groups. *KAÜİİBFD,* 13(Kongre Özel Sayısı), 280-304.

[1] Compliance with the ethical rules of the relevant study has been declared.
[2] The summary of the study was presented at the 29th National Management and Organization Congress. Although there are some differences in the research design (research model, variables, sample, and analysis findings) of this study, in some parts of the literature part of the study, it was derived from the master's thesis titled "The Role of Social Network Structures in Foreign Direct Investment Activities of Turkish Business Groups" presented at Karadeniz Technical University Social Sciences Institute in 2021.

# DOĞRUDAN YABANCI YATIRIMLARDA SOSYAL AĞLARIN ROLÜ: TÜRK İŞLETME GRUPLARI

Kafkas Üniversitesi
İktisadi ve İdari Bilimler Fakültesi
KAÜİİBFD
Özel Sayı, 2022
ISSN: 1309 – 4289
E – ISSN: 2149-9136

*Makale Gönderim Tarihi:13.12.2021* *Yayına Kabul Tarihi: 25.04.2022*

Tülay İLHAN-NAS
Prof. Dr.
Karadeniz Teknik Üniversitesi
İktisadi ve İdari Bilimler Fakültesi,
Trabzon, Türkiye
tulayco@ktu.edu.tr
tulayilhan@yahoo.com
**ORCID ID: 0000-0002-6264-7948**

Şengül DURAN
Arş. Gör.
Kafkas Üniversitesi
İktisadi ve İdari Bilimler Fakültesi,
Kars, Türkiye
sengul.duran@kafkas.edu.tr
sengul.duran_614@hotmail.com
**ORCID ID: 0000-0002-2872-2350**

ÖZ | Bu çalışmanın amacı, Türk işletme gruplarının sahip oldukları ağ yapılarının doğrudan yabancı yatırım kararları üzerindeki etkisini incelemektir. Bu doğrultuda işletme grubu düzeyinde ele alınan sosyal ağ yapıları (merkezilik ve arasındalık boyutlarında) örtüşen yönetim kurulları bağlamında değerlendirilmektedir. Çalışmanın kapsamı, kasıtlı örneklem yöntemine göre belirlenen 13 işletme grubundan, bu işletme gruplarına bağlı şirketler olarak faaliyet gösteren 83 bağlı işletmeden oluşmaktadır. Çalışmada öncelikle toplamda 96 işletmenin (13 holding ve 83 bağlı şirket) 1997-2019 yılları arasında elde edilen verileri ile ağ yapıları (merkezilik ve arasındalık dereceleri) ortaya konulmaktadır. Sonrasında da çalışma kapsamında geliştirilen hipotezler, panel regresyon modelleri aracılığıyla test edilmektedir. Çalışmanın bulguları, işletme grubu düzeyinde derece merkeziliğinin işletme gruplarının DYY karar ve faaliyetlerini olumlu yönde etkilediğini ortaya koymaktadır. Çalışma kapsamında elde edilen diğer önemli bulgu ise işletme grubu düzeyinde arasındalığın işletme gruplarının DYY faaliyetleri üzerinde herhangi bir etkisinin olmadığını göstermektedir.

***Anahtar Kelimeler:*** *Sosyal ağlar, doğrudan yabancı yatırımlar, Türk işletme grupları*
***JEL Kodları****: M10, M16, F23*

***Alan:*** *İşletme*
***Türü:*** *Araştırma*

## 1. INTRODUCTION

With the phenomenon of globalization, the issue of internationalization of organizations has become important in terms of their competitiveness and survival, and growth. Today, impressive expansion in the number of exporting companies, FDIs, and global outsourcing reveal that companies respond to globalization by developing internationally oriented strategies. Internationalization process, which is critical and risky, is an important strategic decision for organizations. So, what motivates multinational companies in this critical process and moves them to choose different international markets and entry modes? In this regard, what motivates multinational to choose a different international market and entry mode in this crucial process? This question is often answered through theories such as institutional theory (DiMaggio & Powell, 1983), the transaction cost approach based on internalization theory (Klein, 1989; Williamson, 1979), and resource dependence (Beckman et al., 2004). However, considering that almost all economic behaviors in modern life are embedded in social relations networks (Granovetter, 1985), the need for network approaches that address theoretical ideas and questions different from traditional views arises in explaining internationalization (Gummesson, 2007; Quatman & Chelladurai, 2008). It is seen that the importance of network structures (Udomkit & Schreier, 2017, p. 6), organizations' strategies, companies' sustainable growth achievement, and competitive advantages are emphasized in many studies. It is seen that the importance of network structures, which have become a critical asset in minimizing resource constraints (Udomkit & Schreier, 2017), in the strategies of organizations, sustainable growth, and competitive advantage of companies, is emphasized in many studies.

When the literature is examined, network relations between companies or individuals have been evaluated as the determining motivator of internationalization, especially in research on small and medium-sized companies. It is also considered as a critical asset in accessing resources (Chetty & Stangl, 2010; Johanson & Vahlne, 2006; Coviello & Munro, 1995; Zhou et al. 2007; Batas & Liu, 2013; Chetty & Wilson, 2003; Udomkit & Schreier, 2017; Zain & Ng, 2006; Coviello, 2006). However, the role of networks that provide connections between different actors (Tseng & Kuo, 2008, p. 24; Wasserman & Faust, 1994, p. 24; Zhou et al. 2007, p. 685) in creating foreign direct investment (FDI) have been discussed in a limited number of studies. In other words, it seems that its role in this context has not been examined in detail (Chen & Chen, 1998; De Masi & Ricchiuti, 2018, p. 16). There is limited number of studies examining the effects of actors' positions and advantages on FDI strategies through networks (Güler & Guillén, 2010; Chen & Chen, 1998; De Masi & Ricchiuti, 2018).

Network connections that actors have or will have have a significant impact on internationalization processes, and the qualities of these connections can explain the differences in strategies between organizations. It is important to examine the organizations of developing countries where deep institutional transformation is experienced to be able to address and explain these differences more clearly. Because factors such as asymmetric information problems, poorly functioning market mechanisms, rapid political, economic, and institutional changes, and the structure of ownership concentration (Musteen et al., 2010; Wright et al., 2005; Lin et al., 2009; Yiu et al., 2005; Selekler-Gökşen and Karataş, 2008) in these contexts cause the network structures established within business groups to differ from industrial network structures and increase the critical role of network connections(Wright et al., 2005; Zhao et al., 2005). Considering that foreign direct investments from developing economies have become an important field of study for international trade and that businesses operating in these contexts develop different FDI patterns, the importance of examining the strategies of businesses in these contexts from a different perspective will be understood (Tan & Meyer, 2010). As a result, explaining FDIs by associating them with both the dominant organizational form in developing countries (Tan & Meyer, 2010) and the network perspective will contribute to the understanding of the dynamics behind FDI from developing economies.

Turkey, a country with great potential for FDI (Hadjit & Browne, 2005, p. 336), is seen as one of the key developing countries with high economic growth rates (Tatoglu & Glaister, 1998). The recent increase in outward investments from Turkey (Erdilek, 2003, p. 81), makes it crucial to examine the effects of the positions and advantages that Turkish business groups have gained from their network mechanisms through the ties between their affiliated businesses on outward FDI strategies. Diversified business groups, known as "holding" in the country, are identified with poorly functioning market mechanisms, and are under the ownership and control of families (Çolpan & Hikino, 2008, p. 25; Guillen 2000; OECD, 2003, p. 146; Selekler- Gökşen & Üsdiken, 2001; Buğra, 2010, p. 241) joint board memberships formed among affiliated companies are of great importance. These groups are crucial for understanding FDI, as groups are considered important actors for many emerging economies (Tan and Meyer, 2010). In this direction, it is thought that it would be appropriate to examine the business groups in Turkey, which include the underdeveloped corporate environment features, in which intense network relations are created, especially through joint boards of directors.

The main question addressed in this study is whether the network connections of Turkish business groups and their affiliates affect foreign direct investment activities and decisions. In this direction, the findings of the study, which will be obtained by considering Turkish business groups and their affiliates, will provide a better definition of foreign direct investment activities and decisions of companies originating from developing countries. In addition, it is thought that the findings will contribute to revealing the important dynamics behind FDI decisions. Thus, it is intended to expand the previous studies on FDI by focusing on the advantages specific to the business group in light of the network structures of the groups.

The next part of the research includes the conceptual framework of the study and the hypotheses developed within the framework of the research model are presented. Later parts of the research; continue with research design and findings. The study concludes with the conclusion and discussion sections.

## 2. CONCEPTUAL FRAMEWORK AND HYPOTHESES

The recent increase in foreign investments from Turkey (Erdilek, 2003, p. 81) makes it significant to examine the positions and advantages that Turkish business groups obtain from their network mechanisms through the ties of the board of directors they have established among their affiliates. This can be explained based on two important reasons. First of all, from the point of view of an underdeveloped institutional context, the significant impact of joint board memberships created among affiliates in diversified business groups under family ownership and control on decisions can be demonstrated (Çolpan & Hikino, 2008, p. 25; Guillen 2000; OECD, 2003, p. 146; Selekler- Gökşen & Üsdiken, 2001; Buğra, 2010, p. 241). In the country, it is seen that family member managers and professional managers who own the holding take part in the board of directors of more than one group company (Ataay, 2008, p. 26). In this context, joint boards of directors are a crucial mechanism used to ensure control and coordination over group companies. It also emerges as an internal corporate governance mechanism (Yurtoğlu, 2003, p. 84; Maman, 1999; Selekler-Gökşen & Karataş, 2008). In this context, joint boards of directors are a crucial mechanism used to ensure control and coordination over group companies. Networks created through joint boards of directors can form an information channel between organizations and provide intense information flow (Mizruchi, 1996; Barringer & Harrison, 2000). In addition, FDI can have a significant impact on decisions and strategies. The second reason is that overlapping board memberships are often emphasized as a link in social networking and social capital studies (Grandori & Soda 1995, Mizruchi, 1996; Mahmood, 2011; Sözen

& Gürbüz, 2015, p. 325; Wasserman & Faust, 1994; Kenis & Oerlemans, 2007). These memberships are accepted as a crucial indicator of network connections between organizations.

Social network theory emphasizes the role of ties and social interactions among actors (individual, group, organization). According to this theory, the economy is embedded in social relations, namely the economy as a whole cannot be an autonomous field separate from social relations (Machado, 2011, p. 119). It is a mechanism that ensures inter-organizational coordination, connections, and cooperation (Grandori & Soda, 1995, p. 184). Furthermore, for organizations, taking part in social network mechanisms can be very important for the survival of organizations (Sözen & Gürbüz, 2015, p. 324). The network perspective, which offers the ability to include multiple levels of analysis of relational data at the same time (Quatman and Chelladurai, 2008, p. 348), is crucial because it is argued that almost all economic behavior in life is embedded in networks of social relations (Granovetter, 1985). This perspective can provide a utility perspective on how social connections and ties shape economies and organizations in countries.

Social networks, relations, and connections between actors are considered as a kind of bridge at the point of internationalization for the transfer of resources (Wasserman & Faust, 1994, p. 17). However, at this point, the quality of the relations between the actors is critical in benefiting from the relations.

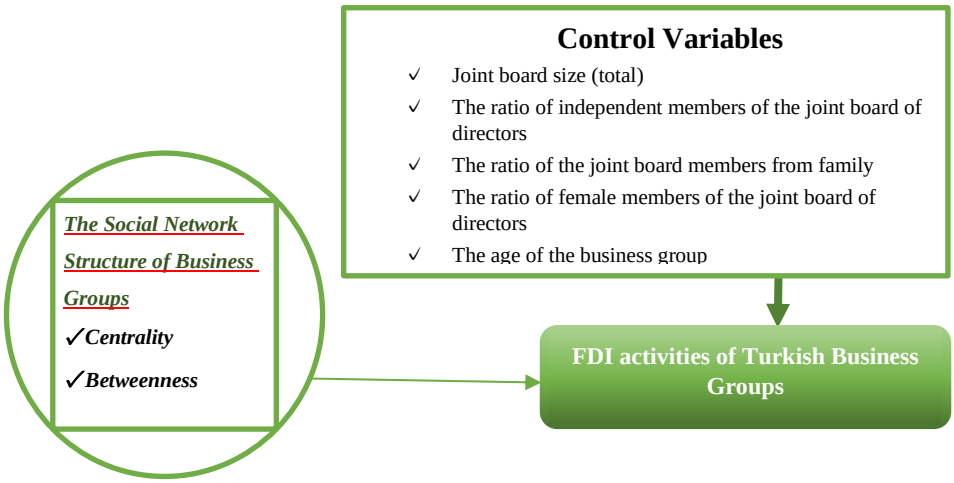


**Figure 1:** The Research Model: The Impact of the Social Network Structure on the Internationalization (FDI) of Turkish Business Groups

### 2.1. The Impact of Centrality on FDI Activities

Reflecting a significant structural feature of social networks, centrality, expresses the position within the network (Freeman, 1979, p. 217). It is an important indicator showing the degree of centrality of the actors on the network mechanisms. The actor with the most connections in a network is the actor located in the center (Sözen and Gürbüz, 2015, p. 325). While the concept of centrality characterizes the number of direct connections that the actor has obtained within the network, a centralized actor is seen by others as the main information channel, has the potential to retain control of resource flows, combine and exchange them with other actors (Tsai & Ghoshal, 2008). 1998). In addition, it can provide superiority in many aspects, such as gaining power, providing advantages in change, controlling the network mechanism compared to less centralized actors (Freeman, 1979; Gargiulo & Benassi, 1998; Koka et al., 2006). An actor with a central position in a social interaction network is also likely to be perceived as trustworthy (Tsai & Ghoshal, 1998, p. 465). Therefore, the situation related to central positioning in networks (Podolny, 1993) will positively affect the centrally located organizations in the future cooperation point. Consequently, firms in central positions will have information advantages that increase their tendency to form new partnerships (Freeman, 1979).

Since social relations are effective in economic actions, the actors in the network mechanisms do not carry out their activities in a disconnected and independent manner from their context (Granovetter, 1985). Therefore, the ability of firms to take advantage of their central location in business group networks will also adhere to the characteristics of the corporate environment (Peng et al., 2008; Peng, 2003). As a result, the strategies of firms may have to be adapted to institutional conditions that vary not only between countries but also in the host country's economy (Peng et al., 2009, pp. 65-66; Wright et al., 2005). Given the importance of the corporate environment and the growing interest in developing countries (Hoskisson et al., 2000; Kim et al., 2010, p. 1145), it becomes substantial to examine to what extent different institutional environments influence market functions in these contexts and shape firm strategies (Peng et al., 2009). The business environment in a sophisticated corporate environment provides adequate legal protection for market behavior. In addition, the reliability of market monitoring mechanisms helps to benefit from the relationships obtained for the central organizations, minimizing the cooperation costs (Lin et al., 2009, p. 1117). In these contexts, institutions and market dynamics work efficiently (Ar and Fıcıcı, 2017, p. 57), which reduces their opportunistic behavior. On the other hand, in underdeveloped institutional environments, where the business environment is fragile and legal protection is insufficient, the central

position of the actor in the network mechanism can reduce the reliability of relations between firms for the central organization. (Li and Atuahene-Gima, 2002). This situation may cause them to face a high threat of opportunism by their partners (Lin et al., 2009). However, considering the importance of network connections in developing country contexts (Wright et al., 2005, p. 26; Zhao et al., 2005), it will be seen that the network structures, established within business groups that emerge as a common organizational form, differ from industrial network structures. In these contexts, business groups, centrally located in networks, may be inclined to take advantage of their central location to achieve better control of resources and strategic gains (mergers, acquisitions, joint ventures, etc.).

The central location of local networks and actors is a substantial factor due to reasons such as asymmetric information problems, poorly functioning market mechanisms (Lin et al., 2009, pp. 1116-1119; Yiu et al., 2005), rapid political, economic, and institutional changes (Musteen et al., 2010, p. 197; Wright et al., 2005), and the structure of ownership concentration (Selekler-Gökşen and Karataş, 2008, p. 132) in developing economies where institutional transformation is experienced. In underdeveloped corporate environments, companies located at the center of their networks can take advantage of their central location to achieve better control of resources and strategic gains (Lin et al., 2009). Moreover, the situation regarding central positioning in the network also reflects a substantial aspect of resilience.

In countries with underdeveloped institutional contexts, such as Turkey, groups that emerged as a way of coping with the problems of underdeveloped market institutions (Ataay, 2012, p. 75; Yiu et al., 2005, p. 183), try to take advantage of their central location in networks. They tend to use these advantages in the international arena. Business groups are often defined as a specific type of organizational network composed of legally independent companies, often controlled by families, linked by economic (such as property, intercompany transactions) and social (such as family, friendship) ties (Chang & Hong, 2000; Chung, 2001; Granovetter, 1995; 2005; Hsieh et al., 2010; Khanna & Rivkin, 2001 ; Yiu et al., 2005). Groups are also seen as multi-company firms combining transactions in different markets under joint venture and financial control (Leff, 1978). Affiliated companies are collections of companies linked by ownership ties such as family, friendship, cross ownership, joint board memberships, credit dependency, and social and economic ties (Chung, 2001; Khanna &Rivkin, 2001). Business groups, which are considered as a collection of companies that cooperate with each other (Granovetter, 1995: 94), have an important place in the development of many developed and developing countries (Granovetter, 2005:

429). The emphasis in the study with the concept of network centralization is the creation of a network for each business group (with its subsidiaries) and the centrality value of the network calculated specifically for each business group.

Considering that the position of the firms in the national network determines the ability to use the resources within the network and thus shapes the internationalization process (Johanson & Vahlne, 1977), the advantages of the central actors gain unique importance. Güler and Guillén (2010) argue that companies with a high degree of centrality in-country networks have higher foreign market entry rates and emphasize the significant impact of the advantages of centrality on foreign investment decisions. In addition, the companies that do not have a central location for foreign direct investment do not go abroad or try to enter with a different method (Nas et al., 2019) because of increasing the importance of centrality for business groups operating in underdeveloped corporate contexts such as Turkey. Turkish business groups can achieve the strategic goals they desire for international markets thanks to the centrality position achieved in line with the ties established between the affiliates. As a result, it is expected that network mechanisms will be effective in the activities of business groups and their affiliates in Turkey, and the advantages of the central location they have achieved with overlapping board networks will positively affect the decision of a new FDI.

**Hypothesis 1**: The centrality degree is positively associated with the internationalization (FDI) of Turkish business groups.

### 2.2. The Impact of Betweenness on FDI Activities

While important aspects of centrality are revealed in some studies, there are also studies examining the effect of actors or intermediaries that act as bridging structural gaps on network mechanisms (Jensen, 2008; Xiao & Tsui, 2007; Lin et al., 2009; Güler & Guilén, 2010). This point of view differs from the centrality approach, as it focuses on the intermediation in network mechanisms rather than the nature of network connections (Sözen et al., 2009; Sözen & Gürbüz, 2015). When considered within the framework of network mechanisms, it is seen that there are gaps in providing connections between actors in the social structure, and these gaps act as a bridge between groups (Burt, 2000). The scope and contents of the information held by the actors are very different from each other. Information that can overcome this gap and reach the parties will be critical new information. Furthermore, if the actors (business groups and affiliates in this study) can hold the connections that can mediate the gap, they can gain an advantage. Thanks to this crucial and different information, businesses can have a competitive position and control advantages (Brass et al., 2004, p. 805; Burt, 2002, p. 338; Sargut, 2006, p. 5; Zaheer & Soda, 2009). Companies that can act

as intermediaries between groups can become information centers by connecting different network clusters (Sözen et al., 2009, p. 27). They can learn faster than others, take control, and be more creative (Burt, 2004, p. 357; Nahapiet & Ghoshal, 1998; Zaheer & Soda, 2009, p. 8). Therefore, organizations that assume the role of intermediary have a better learning capacity than their competitors and are more innovative in production. It can also create opportunities for entrepreneurial behaviors and be in a stronger position (Adler & Kwon, 2002; Burt, 1997, 2004). Also, Burt (2002) argues that betweenness is more dynamic.

Institutional transitions and the institutional environment, defined by Peng (2003, p. 275) as a crucial situation for developing economies, affect the advantage of the intermediary position, just like the centrality position. Significant institutional differences between developing and developed economies can create different benefits and constraints for different contexts (Peng et al., 2009, p. 66). In a context where market mechanisms work well and sound business laws encourage and reward market competition, it may be desirable for firms to act as intermediaries in structural gaps to use these control and information advantages to gain strategic benefits (Lin et al., 2009, p. 1118). The structural gap between unaffiliated firms helps brokerage firms in these contexts to provide access to private information by creating effective bridges, thus increasing the chances of intermediaries to achieve their goals. However, in underdeveloped institutional contexts, reasons, such as insufficient legal regulations and ineffective market mechanisms may hinder market functions (Smallbone & Welter, 2001; Park et al., 2006). The advantages of the intermediary position can turn into disadvantages (Lin et al., 2009). In addition, brokerage firms are considered unreliable in an underdeveloped corporate environment.Due to the hostile attitude they face, they cannot carry out their effective intermediation activities. They cannot carry out active intermediation activities. Therefore, it cannot fully benefit from the advantages of its intermediary position (Kovacic, 1998). As a result, although a company in an underdeveloped corporate environment may enjoy the temporary benefits of the betweenness position, it may face higher risks, costs, and longer-term consequences to change its brokerage position (Wright et al., 2005).

Some researchers argue that the contributions made by the betweenness position developed in the home country have not been carried over to international contexts. Therefore, they emphasize that it is used less in international decision-making activities (Güler & Guillén, 2010, p. 394; Shi et al., 2014). In their study, Güler and Guillén (2010, p. 394) state that companies that benefit from the advantage of betweenness in their own country are less likely

to invest abroad by using these advantages. The reason for this is that betweenness activities are local (Burt, 2007). It is argued that the betweenness advantage is concentrated within an actor's close network. It is also stated that the betweenness value between indirect ties is less (Burt, 2007). For this reason, it is argued that intermediary advantages may lose their substantial strategic worth outside the local network (Shi et al. 2014, p. 342; Burt, 2007;). Therefore, the intermediary position is considered context-specific (Burt 2007; Güler & Guillén, 2010, pp. 394-395; Xiao & Tsui, 2007), more dynamic and temporary (Burt, 2002). The information and control benefits provided by this position can quickly disappear (Sargut, 2006, p. 9; Soda et al., 2004). Furthermore, the presence of intermediary advantages may cause the firm to be seen as an opportunistic and less desirable potential partner in the new network. Indeed, recent studies show that betweenness advantage is concentrated within an actor's close network and betweenness between indirect ties has little value (Burt, 2007). This may adversely affect business groups with a high degree of intermediation in making a new FDI decision. It is expected that the effects of the advantages of the betweenness position in local networks in the new FDI decisions to be taken by the groups in foreign expansions will be less in this sense. Therefore, it is seen that business groups in Turkey, which operate under underdeveloped institutional context, are less likely to use the advantages of being a betweenness in the internationalization process.

**Hypothesis 2:** The high degree of betweenness of Turkish business groups in their networks negatively affects the number of foreign direct investment activities.

## 3. RESEARCH DESIGN

### 3.1. Sampling Process of the Research

The analysis unit will be composed of organizations, the judgemental (purposive/selective) sampling method was used within the framework of the purpose of the study. In the selection of the business groups that can be included in the study, the list of Top 50 Economic Actors in Turkey, The Old and New Business Groups list, and the lists prepared jointly by Kadir Has University (KHU), DEİK, and VCC (2009, 2011, 2014)[3] were examined one by one. These lists were used in sampling selection (Çolpan & Hikino, 2008; KHU-DEİK-KPMG-VCC, 2011; KHU-DEİK-VCC, 2009, 2014; Özkara et al., 2008). A different business group, which is not mentioned in these studies, but carries the specified criteria and has a significant number of FDI, is also included in the

[3] KPMG Turkey company also took part in the study conducted in 2011.

study. Within the framework of the judgmental (purposive/selective) sampling method, the group;

- ✓ Having done at least 8 (outward) FDI since its establishment
- ✓ At least one company is listed in BIST,
- ✓ At least one of its affiliates has been included in one of Turkey's Top 500 Industrial Enterprises, Turkey's Second Top 500 Industrial Enterprises, or Fortune Turkey's Top 500 Enterprises lists for five years (2015-2019) prepared by the Istanbul Chamber of Industry,
- ✓ Business groups with family business characteristics were selected.

13 business groups determined by considering these criteria and 83 affiliated businesses operating as affiliated companies of these business groups constitute the sample of the research. The following steps were followed in determining the companies affiliated to the business groups to be evaluated within the scope of the sample: First of all, the annual consolidated financial statements, footnotes and independent auditors' reports, annual reports, company websites, and internet-based information resources of all identified business groups and their affiliates were examined one by one for all available years. In the second stage, the database of the Turkish Trade Registry Gazette issued by the Union of Chambers and Commodity Exchanges of Turkey was used. All advertisements related to business groups and affiliated companies in this database were examined one by one, starting from the year the companies were first established until 2019. By examining the announcements registered in the relevant database throughout all years, the years of inclusion of the enterprises in the business groups as affiliates were determined. Then, by comparing all the information obtained, affiliate lists were revealed for each business group from the establishment years to 2019. If sufficient data could not be obtained from all these sources or there was doubt about some of the data obtained, interviews were made with authorized persons via telephone using the contact numbers available on the websites of the holding and affiliated companies. In the last stage, the affiliates of all business groups and the years when the business groups gained control of these businesses as affiliates were brought together and examined as a whole. To compare the data of all business groups over the years and to minimize the disadvantages that may arise from time differences, an optimal time interval covering all business groups has been tried to be determined. When all the data obtained is examined, it has been determined that the most appropriate optimal time interval in terms of the number of affiliates for all business groups is between 1997-2019.

### 3.2. Variables and Measures

*Dependent variable*

The dependent variable of the research is the total outward FDI numbers made by the business groups between 1997-2019.To determine the number of FDI of the business groups, the annual consolidated financial statements, footnotes and independent auditor reports, annual reports, company websites, and internet-based information resources of the Turkish business groups were examined. The cumulative FDI number generated by examining all sources formed the observations of each dependent variable.

*Independent variables*

The independent variable of the research is the social network structure. The social network structure is discussed in terms of degree centrality and betweenness (Prell et al., 2009; Otte & Rousseau, 2002; O'Malley & Marsden, 2008). The degree of centrality and betweenness values were measured with symmetric matrices, which are frequently seen in Turkish business groups and were weighted according to the relationships between the members of the board of directors established among the subsidiaries. For each business group, the relationships between the members of the board of directors were weighted according to the number of relationships and matrices were created. In this way, social network matrices were revealed and these matrices were measured. Weighted symmetric matrices were created using the Turkish Trade Registry Gazette Archives and the Public Disclosure Platform (KAP) database. Independent variable observations of the research were created by analyzing each symmetric matrix created for each holding with the UCINET 6 program (Borgatti et al. 2002), which is a network analysis measurement method, one by one for each year. Between 1997 and 2019, a total of 598 analyzes (299 analyzes for centrality, 299 analyzes for betweenness) were conducted to obtain the centrality and betweenness values of Turkish business groups. according to the number of relationships and matrices were created.

*Control Variables*

Control variables consist of the age of the business group, the size of the joint board of directors (total), the ratio of independent members of the joint board of directors, the ratio of female members of the joint board of directors and the ratio of members of the joint board of directors from the family.

- *Age*: The age of the business group has been calculated separately for the years 1997-2019, based on the year of establishment.
- *Joint board size (total):* It is defined as the total number of people serving as members of the joint board of directors in the business group.

- *The ratio of independent members of the joint board of directors:* It is obtained by dividing the number of independent members in the joint board of directors by the number of all other members in the board of directors.
- *The ratio of female members in the joint board of directors*: It is obtained by dividing the number of female members by the number of all other members in the joint board of directors.
- *The ratio of members of the joint board of directors from the family*: It is obtained by dividing the number of members from the family in the joint board of directors by the number of all other members.

## 4. FINDINGS

Table 1 displays the descriptive statistics and correlations table of the study.

**Table 1:** Descriptive Statistics and Correlations Table

| | **Mean** | **Std. Dev.** | **Min** | **Max** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Total FDI Number | 13.137 | 17.896 | 1 | 133 | | | | | | | |
| 2.Centrality | .206 | .097 | 0 | .583 | 0.035 | | | | | | |
| 3.Betweenness | .125 | .169 | 0 | .833 | -0.0779 | 0.437** | | | | | |
| 4.Board Size | 4.327 | 1.882 | 1 | 10 | 0.116* | 0.272** | -0.0550 | | | | |
| 5.Female Member Rate | .117 | .111 | 0 | .444 | -0.1351* | -0.031 | -0.090 | 0.338* | | | |
| 6.Independent Member Rate | .009 | .032 | 0 | .181 | 0.183** | 0.015 | 0.147* | 0.129* | 0.061 | | |
| 7.Family Member Rate | .337 | .280 | 0 | 1 | -0.144* | -0.414** | -0.217** | -0.086 | 0.278** | -0.151** | |
| 8.The age of business group | 30.15 | 11.426 | 0 | 56 | 0.439** | 0.152** | 0.192** | 0.226** | -0.033 | 0.380** | -0.514** |
| **Number of observations** | 299 | 299 | 299 | 299 | 299 | 299 | 299 | 299 | 299 | 299 | 299 |

****p<.01 *p<.05**

In the study, the number of business groups included in the sample is 13, and a panel containing 299 observations was created for these businesses as of 23 years of data. Total FDI variable as the dependent variable, degree centrality, and betweenness variables as independent variables were included in the panel regression model. The panel regression model was analyzed using the STATA 13 program. Before testing the panel regression model, the classical model was tested with the F test against the two-way model. As a result of the test, the primary hypothesis was rejected and it was determined that the one-way model with only unit effects was valid F (12, 279) = 40.92, p<0.01). Hausman's (1978) test was applied to decide whether the unit-effect one-way model is a fixed-effect or random-effect model. As a result of the Hausman test, the assumptions of the random effects model were not met. In this context, it was decided to continue the analysis with the fixed effects estimator (chi2(7) = 27.11, p<0.01).

In the fixed effects method, since the basic assumptions must be met to be able to estimate parameter estimates consistently and effectively, it has been tested whether there are autocorrelation, cross-sectional dependence, and heteroscedasticity problems. First of all, the "Modified Wald Test" (Tatoğlu, 2018), which is suggested as a suitable method for the fixed effects model, was used to determine whether there is a heteroscedasticity problem. According to the modified Wald test results, H0, which represents constant variance, was rejected in the tested model, so it was concluded that there was a heteroscedasticity problem in the model (chi2 (13) =2212.31, p<0.01). Bhargava, Franzini, and Narendranathan's (1982) Durbin-Watson Test and Baltagi-Wu's (1999) Locally Best Invariant test were used to detect autocorrelation. Since the critical value is less than 2 in both rates, it is concluded that there is autocorrelation in the model (DW= 0.18, LBI= 0.41). Finally, Friedman FR (1937), Pesaran CD (2004), and Frees's FRE (1995, 2004) tests were performed to determine the inter-unit correlation in the model, and it was determined that there was a correlation between units according to all tests (CD= 4.530, p< 0.05; FR= 50.445, p<0.05; FRE= 1.639, p<0.05). The model was analyzed by using the Driscoll and Kraay estimators (Tatoğlu, 2018), which were suggested as standard error estimators resistant to autocorrelation, heteroscedasticity, and cross-sectional dependence problems, which were determined as deviations from the basic assumptions in the model. Table 2 shows the model analysis results.

**Table 2:** Fixed Effects Estimator (Robust Standard Errors)

| Variables | β | SE[a] | t | P |
|---|---|---|---|---|
| Degree Centrality | 31.162 | 7.824 | 3.98 | 0.001 |
| Betweenness | 10.145 | 9.808 | 1.03 | 0.312 |
| Board Size | -.720 | .563 | -1.28 | 0.214 |
| Independent Member Rate | 12.166 | 6.376 | 1.91 | 0.070 |
| Female Member Rate | -33.154 | 11.062 | -3.00 | 0.007 |
| Family Member Rate | 34.150 | 5.645 | 6.05 | 0.000 |
| The age of business group | 1.780 | .195 | 9.13 | 0.000 |
| Constant | -52.845 | 7.554 | -7.00 | 0.000 |
| F Value | 90.34 *** | | | |
| R-sq | 0.551 | | | |

Robust standard errors have been reported. (***<.01).

When the results of the analysis are evaluated in general, Hypothesis 1 (β=31.162, p<0.01), developed as "The high degree of centrality of the Turkish business group positively affects the number of foreign direct investment activities", is accepted. Hypothesis 2, which states that the betweenness degree is negatively associated with the internationalization (FDI) of Turkish business groups, was not supported (β=10.145, p>0.05). Among the control variables, the ratio of female members of the joint board of directors (β=-33.154, p< 0.01), the ratio of members of the joint board of directors from the family (β=34.150, p<0.001), and the age of the business group (β= 1.780, p<0.001) have significant results. The variable of the ratio of independent members of the joint board of directors, on the other hand, has a positive effect at a lower significance level (β= 12.166, p<0.10).

## 5. CONCLUSION AND DISCUSSION

This research has been shaped around the question of whether the network connections of Turkish business groups and their affiliates have an impact on foreign direct investment activities and decisions. The study, which seeks to answer this research question, aims to contribute to the understanding of the important dynamics behind the headquarters' FDI decisions and activities of Turkish business groups. The findings of this research, which was carried out by considering Turkish business groups and their affiliated businesses, show that the

increase in degree centralization positively affects the FDI decisions and activities of business groups. In other words, groups are seen as a way of coping with the problems of poorly functioning market institutions in countries with underdeveloped institutional contexts such as Turkey (Wright et al., 2005, p. 3; Ataay, 2012, p. 75; Yiu et al., 2005, p. 183). It is seen that the central position they have achieved with overlapping board networks has positive reflections on the new FDI decisions. This finding may be related to the advantages of the centrality position to the actors (Tsai & Ghoshal 1998; Freeman 1979; Ibarra 1993; Gargiulo & Benassi 1998; Thomas et al., 2007; Koka et al. 2006). It is seen that this finding also overlaps with the evidence of the study conducted by Güler and Guillén (2010). According to these researchers, centralized actors can gain superiority in many aspects such as obtaining the information needed in internationalization, controlling their network, controlling resource flows at the enterprise group level, and the potential to combine and exchange them with other actors (affiliated enterprises). It is seen that these advantages of the degree centrality have positive reflections on the internationalization of business groups.

Another important finding obtained within the scope of the research shows that the betweenness at the level of the business group does not have any effect on the FDI activities of the business groups. In support of this finding, Güler, and Guillén (2010, p. 394) state that companies that benefit from intermediation advantage in their own countries are less likely to invest abroad by using these advantages. It can be said that this situation is closely related to the fact that the contributions of the intermediary position developed in the parent countries cannot be transferred to international contexts and are used less in international decision activities (Güler & Guillén, 2010, p. 394; Shi et al., 2014). The reason for this is the idea that intermediary activities are local (Burt, 2007) and can be applied in existing networks of actors. Firms that have the advantages of intermediation in their local networks cannot have regular information flow and control advantages in foreign investments. Therefore, it is seen that this advantage is not effective in making a new foreign direct investment decision for Turkish business groups.

This research, like every research, has some limitations. The first of these limitations can be shown as examining the social network structure (in the dimensions of centrality and betweenness) by considering only overlapping boards of directors. By examining the social network structure from many aspects, such as commercial relations networks, supplier networks, international cooperation networks, it will be possible to comment on FDI activities from a broader perspective. Another limitation of the study is the use of only a quantitative research method. In examining the effects of different network

characteristics of business groups on internationalization decisions, it is thought that studies using qualitative research methods can make remarkable contributions to the field.

## 6. CONFLICT OF INTEREST STATEMENT

There is no conflict of interest between the authors.


## 7. FUNDING ACKNOWLEDGEMENTS

No funding or support was used in this study.


## 8. AUTHOR CONTRIBUTIONS

TIN: The idea;
TIN, ŞD: Design;
TIN: Supervision;
ŞD: Collection and/or processing of resources;
ŞD: Empirical Analysis and/or interpretation;
ŞD: Literature review;
TIN, ŞD: Writing of Article;
TIN: Critical review

## 9. ETHICS COMMITTEE STATEMENT AND INTELLECTUAL PROPERTY COPYRIGHTS

Ethics committee principles were complied with in the study and necessary permissions were obtained in accordance with the intellectual property and copyright principles.

## 10. REFERENCES


Adler, P. S., & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Perspectives*, *27*(1), 17–40.

Ar, A., & Fıcıcı, A. (2017). The emerging market manufacturing business groups (embgs) and the interplay between innovation in environmental sustainability, Digitalization, Internationalization and Corporate Governance Structures: The Case of Turkish Holding Companies. *Turkish Economic Review, 4(1),* 55–65.

Ataay, A. (2012). Türk aile işletme gruplarının uluslararasılaşma deneyimleri. In T. Koçel (Ed.), *5. Aile İşletmeleri Kongresi Kongre Kitabı*. İstanbul Kültür Üniversitesi Yayınları.

Baltagi, B. H., & Wu, P. X. (1999). Unequally spaced panel data regressions with AR(1) disturbances. *Econometric Theory, 15(6),* 814–823.

Barringer, B. R., & Harrison, J. S. (2000). Walking a tightrope: Creating value through interorganizational relationships. *Journal of Management, 26(3),* 367–403. https://doi.org/10.1177/014920630002600302.

Beckman, C. M., Pamela, R. H., & Damon J. P. (2004). Friends or strangers? Firm-specific Uncertainty, Market Uncertainty, and Network Partner Selection. Organization Science, 15*(3)*, 259-275.

Bhargava, A., Franzini, L., & Narendranathan, W. (1982). Serial correlation and the fixed effects model. *Source: The Review of Economic Studies, 49(4),* 533–549.

Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47(6),* 795–817. https://doi.org/10.2307/20159624

Buğra, A. (2010). *Devlet ve iş adamları* (7.), İletişim Yayınları.

Buğra, A. (2018). *Devlet ve işadamları* (11.), İletişim Yayınları.

Burt, R. S. (1992). The social structure of competition. *Contemporary Sociology*. https://doi.org/10.2307/2075713

Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly, 42(2),* 339–365.

Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behaviour* (Vol. 22). Elsevier Science Inc.

Burt, R. S. (2002). Bridge decay. *Social Networks, 24(4),* 333–363. https://doi.org/10.1016/S0378-8733(02)00017-5

Burt, R. S. (2004). Structural holes and good ideas. *American Journal of Sociology, 110(2),* 349–399. https://doi.org/10.1086/421787

Burt, R. S. (2007). Secondhand brokerage: Evidence on the importance of local structure for managers, bankers and analysts. *Academy of Management Journal*, *50*(1), 119–148. https://doi.org/10.5465/AMJ.2007.24162082

Chang, S. J., & Hong, J. (2000), Economic performance of group-affiliated companies in Korea: Intragroup resource sharing and internal business transactions. *Academy of Management Journal*, *43(3)*, 429–448.

Chen, H., & Chen, T. J. (1998). Network linkages and location choice in foreign direct investment. *Journal of International Business Studies, 29(3),* 445–467. doi: 10.1057/palgrave.jibs.8490002

Chetty, S. K., & Stangl, L. M. (2010). Internationalization and innovation in a network relationship context. *European Journal of Marketing, 44(11),* 1725–1743. https://doi.org/10.1108/03090561011079855

Çolpan, M. A., & Hikino, T. (2008). Türkiye'nin büyük şirketler kesiminde işletme gruplarının iktisadi rolü ve çeşitlendirme stratejileri. *Yönetim Araştırmaları Dergisi*, *8(1–2)*, 23–58.

Chung, C. N., & Mahmood, I. P. (2006), Taiwanese business groups: Steady growth in institutional transition, S.J. Chang (Ed.), *Business Groups in East Asia Financial Crisis, Restructuring and New* içinde, (70-93).

Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, *37(5)*, 713–731.

De Masi, G., & Ricchiuti, G. (2018). A network analysis of foreign direct investments. *Networks of International Trade and Investment*, *September 2017*, 1–20. https://vernonpress.com/book/96

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48(2)*, 147–160.

Erdilek, A. (2003). A comparative analysis of inward and outward FDI in Turkey. *Uctad/Ite/Iıt*, *12(3)*, 79–105. https://doi.org/10.3848/iif.2005.233.3044

Freeman, L. C. (1979). Centrality in social networks conceptual clarification. *Social Networks*, *1(3)*, 215–239. https://doi.org/10.1016/0378-8733(78)90021-7

Frees, E. W. (1995). Assessing cross-sectional correlation in panel data. *Journal of Econometrics*, *69(2)*, 393–414. https://doi.org/10.1016/0304-4076(94)01658-M

Frees, E. W. (2004). Longitudinal and panel data: Analysis and applications in the social sciences. In *Cambridge University Press.* (Vol. 101, Issue 473).

Friedman, M. (1937). The use of ranks to avoid the assumption of normality implicit in the analysis of variance. *Journal of the American Statistical Association*, *32(200)*, 675–701.

Gargiulo, M., & Benassi, M. (1998). Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital. *Organization Science*, *11(2)*, 183–196. https://doi.org/10.1287/orsc.11.2.183.12514

Grandori, A., & Soda, G. (1995). Inter-firm networks: Antecedents, mechanisms and forms. *Organization Studies*, *16(2)*, 183–214.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *3(3).*

Granovetter, M. (1995). Coase Revisited: Business Groups in the Modern Economy. *Industrial and Corporate Change*, 93–130.

Güler, I., & Guillén, M. F. (2010). Home country networks and foreign expansion: Evidence from the venture capital industry. *Academy of Management Journal*, *53(2)*, 390–410. https://doi.org/10.5465/amj.2010.49389027

Gummesson, E. (2007). Case study research and network theory: Birds of a feather. *Qualitative Research in Organizations and Management: An International Journal*, *2(3)*, 226–248. https://doi.org/10.1108/17465640710835373

Hadjit, A., & Browne, E. M. (2005). Foreign direct investment in Turkey: The implications of EU accession. *Turkish Studies*, *6(3)*, 321–340.

Hagedoorn, J. (2006). Understanding the cross-level embeddedness of interfirm partnership formation. *Academy of Management Review*, *31(3)*, 670–680. https://doi.org/10.5465/AMR.2006.21318924.

Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, *43(3)*, 249–267.

Hsieh, T. J. (2010). Business group characteristics and affiliated firm innovation: The case of Taiwan. *Industrial Marketing Management*, *39(4)*, 560–570. doi: 10.1016/j.indmarman.2008.12.018.

Jensen, M. (2008). The use of relational discrimination to manage market entry: When do social status and structual holes work against you? *Academy of Management Journal*, *51(4)*, 723–743. https://doi.org/10.5465/AMR.2008.33665259

Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm-a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, *8(1)*, 23–32. https://doi.org/10.1139/y89-072

Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic management journal*, *22*(1), 45-74.

Kenis, P., & Oerlemans, L. (2007). The social network perspective: understanding the structure of cooperation. In *The Oxford Handbook of Inter-Organizational Relations*. https://doi.org/10.1093/oxfordhb/9780199282944.003.0011

KHU-DEİK-KPMG-VCC. (2011). *Turkish MNEs steady on their course despite crisis, survey finds*. 1–26.

KHU-DEİK-VCC. (2009). *Survey provides the first ever ranking of Turkish multinationals investing abroad*. *Vcc*, 1–14.

KHU-DEİK-VCC. (2014). *Turkish OFDI continues to grow*. *Vcc*, 1–34. http://ccsi.columbia.edu/files/2014/03/EMGP-Turkey-Report-March-24-2014.pdf

Kim, H., Kim, H., & Hoskisson, R. E. (2010). Does market-oriented institutional change in an emerging economy make business-group-affiliated multinationals perform better? An institution-based view. *Journal of International Business Studies*, *41*(7), 1141–1160. https://doi.org/10.1057/jibs.2010.17

Klein, S. (1989). A transaction cost explanation of vertical control in international markets. *Journal of the Academy of Marketing Science*, *17*(3), 253–260. https://doi.org/10.1007/BF02729817

Koka, B. R., Madhavan, R., & Prescott, J. E. (2006). The evolution of interfirm networks: Environmental effects on patterns of network change. *Academy of Management Review*, *31(3)*, 721–737. https://doi.org/10.5465/AMR.2006.21318927

Leff, N. H. (1978). Industrial organization and entrepreneurship in the developing countries: The economic groups. *Economic development and cultural change*, *26*(4), 661-675.

Li, H., & Atuahene-Gima, K. (2002). The adoption of agency business activity, product innovation, and performance in Chinese technology ventures. *Strategic Management Journal*, *23(6)*, 469–490. https://doi.org/10.1002/smj.233

Lin, J. Z., Peng, W. M., Yang, H., & Sun, L. S. (2009). How do networks and learning drive m&as?an institutional comparison between China and the United States. *Strategic Management Journal*, *894*(June 2006), 1113–1132. https://doi.org/10.1002/smj

Majkgård, A., & Sharma, D. D. (1998). Client-following and market-seeking strategies in the internationalization of service firms. *Journal of Business-to-Business Marketing*, *4(3)*, 1–41. https://doi.org/10.1300/J033v04n03_01

Maman, D. (1999). Research Note: Interlocking ties within business groups in Israel — A Longitudinal Analysis. *Organization Studies*, *20(2)*, 323–339.

Mizruchi, M. S. (1996). What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual Review of Sociology*, *22*, 271–298. https://doi.org/10.1146/annurev.soc.22.1.271

Musteen, M., Francis, J., & Datta, D. K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, *45(3)*, 197–205. https://doi.org/10.1016/j.jwb.2009.12.003

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Review*, *23(2)*, 242–266.

O'Malley, A. J., & Marsden, P. V. (2008). The analysis of social networks. *Health Services and Outcomes Research Methodology*, *8(4)*, 222–269.

Ojala, A. (2009). Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International Business Review*, *18(1)*, 50–59. https://doi.org/10.1016/j.ibusrev.2008.10.002

Otte, E., & Rousseau, R. (2002). Social network analysis: A powerful strategy, also for the information sciences. *Journal of Information Science*, *28(6)*, 441–453. https://doi.org/10.1177/016555150202800601

Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory and Practice*, 537–553. https://doi.org/10.1111/j.1540-6520.2005.00097.x

Özkara, B., Kurt, M., & Karayormuk, K. (2008). Türkiye'de işletme grupları: eskiler ve yeniler. *Yönetim Araştırmaları Dergisi*, *8(1)*, 59–83.

Park, S. H., Li, S., & Tse, D. K. (2006). Market liberalization and firm performance during China's economic transition. *Journal of International Business Studies*, *37(1)*, 127–147. https://doi.org/10.1057/palgrave.jibs.8400178

Peng, M. W. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, *28(2)*, 275–296. https://doi.org/10.2307/30040678

Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, *23(3)*, 63–81. https://doi.org/10.5465/AMP.2009.43479264

Peng, M. W., Wang, D. Y. L., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, *39(5)*, 920–936. https://doi.org/10.1057/palgrave.jibs.8400377

Pesaran, M. (2004). General diagnostic tests for cross section dependence in panels. In *Cambridge working Paper in Economics* (Issue 1240).

Podolny, J. M. (1993). A status-based model of market. *American Journal of Sociology*, *98(4)*, 829–872.

Prell, C., Hubacek, K., & Reed, M. (2009). Stakeholder analysis and social network analysis in natural resource management. *Society and Natural Resources*, *22(6)*, 501–518. https://doi.org/10.1080/08941920802199202

Quatman, C., & Chelladurai, P. (2008). Social network theory and analysis: A complementary lens for inquiry. *Journal of Sport Management*, *22(3)*, 338–360. https://doi.org/10.1123/jsm.22.3.338

Sargut, A. S. (2006). Sosyal sermaye: Yapının sunduğu bir olanak mı, yoksa bireyin amaçlı eylemi mi? *Akdeniz Üniversitesi İİBF Dergisi*, *12*, 1–13.

Selekler- Gökşen, N., & Üsdiken, B. (2001). Uniformity and diversity in Turkish business groups: Effects of scale and time of founding. *British Journal of Management*, *12(4)*, 325–340. https://doi.org/10.1111/1467-8551.00213

Selekler-Gökşen, N., & Karataş, A. (2008). Board structure and performance in an emerging economy: Turkey. *International Journal of Business Governance and Ethics*, *4(2)*, 132–147. https://doi.org/10.1504/IJBGE.2008.019172

Shi, W., Sun, S. L., Pinkham, B. C., & Peng, M. W. (2014). Domestic alliance network to attract foreign partners: Evidence from international joint ventures in China. *Journal of International Business Studies*, *45(3)*, 338–362. https://doi.org/10.1057/jibs.2013.71

Smallbone, D., & Welter, F. (2001). *The distinctiveness of entrepreneurship in transition economies*. 249–262.

Soda, G., Usai, A., & Zaheer, A. (2004). Network memory: The influence of past and current networks on performance. *Academy of Management Journal*, *47(6)*, 893–906. https://doi.org/10.2307/20159629

Sözen, C., Basım, N., & Hazır, K. (2009). Social network analysis in organizational studies. *International Journal of Business and Management Studies*, *1(1)*, 21–35.

Sözen, C., & Gürbüz, S. (2015). *Örgütsel ağlar* (H. C. Sözen & N. Basım (eds.). Beta Yayıncılık.

Tatoglu, E., & Glaister, K. W. (1998). Determinants of foreign direct investment in Turkey. *Thunderbird International Business Review*, *40*, 279–314.

Tatoğlu, F. Y. (2018). *Panel veri ekonometrisi / Stata uygulamalı*. Beta Yayıncılık.

Tan, D. C., & Meyer, K. E. (2010). Business groups outward FDI: A managerial resources perspective. *Journal of International Management*, *16(2)*. 154-164.

Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: a replication of 'the role of intrafirm networks 'by Wenpin Tsai and Sumantra Ghoshal. *The Academy of Management Journal, 41(2)*, 464–476. doi.org/10.11634/216796061706277

Udomkit, N., & Schreier, C. (2017). Tie the ties: The significance of the binding networks in SMEs 'Internationalization process. *Journal of Asia-Pacific Business*, *18(1)*, 4–20. https://doi.org/10.1080/10599231.2017.1272992

Wasserman, S., & Faust, K. (1994). Social network analysis in the social and behavioral sciences. *Social Network Analysis*, *May*, 275–296.

Williamson, O. E. (1979). Transaction-cost economics: The governance of contractual relations. *The Journal of Law and Economics*, *22(2)*, 233–261. https://doi.org/10.1086/466942

Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. W. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, *42(1)*, 1–33. https://doi.org/10.1111/j.1467-6486.2005.00487.x

Xiao, Z., & Tsui, A. S. (2007). When brokers may not work: The cultural contingency of social capital in Chinese high-tech firms. *Administrative Science Quarterly*, *52(1)*, 1–31. https://doi.org/10.2189/asqu.52.1.1

Yamin, M., & Kurt, Y. (2018). Revisiting the Uppsala internationalization model: Social network theory and overcoming the liability of outsidership. *International Marketing Review*, *35(1)*, 2–17. https://doi.org/10.1108/IMR-11-2014-0345

Yiu, D., Bruton, G. D., & Lu, Y. (2005). Understanding business group performance in an emerging economy: Acquiring resources and capabilities in order to prosper. *Journal of Management Studies*, *42(1)*, 183–206. https://doi.org/10.1111/j.1467-6486.2005.00493.x

Zaheer, A., & Soda, G. (2009). Network evolution: Structural holes. *Administrative Science Quarterly*, *54*, 1–31.

Zain, M., & Ng, I. S. (2006). The impacts of network relationships on SMEs ' internationalization process. *Thunderbird International Business Review*, *48(2)*, 183–205. https://doi.org/10.1002/tie

Zhao, Z., Anand, J., & Mitchell, W. (2005). A dual networks perspective on inter-organizational transfer of R&D capabilities: International joint ventures in the Chinese automotive industry. *Journal of Management Studies*, *42(1)*, 127–160. https://doi.org/10.1111/j.1467-6486.2005.00491.x

Zhou, L., Wu, W. P., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies*, *38*, 673–690. https://doi.org/10.1057/palgrave.jibs.8400282.