

BOARD INTERLOCKS' REPORTED BENEFITS AND DRAWBACKS: A SUSTAINABILITY PERSPECTIVE

ROSA CODINA (PhD)

OXFORD SCHOOL OF HOSPITALITY MANAGEMENT
OXFORD BROOKES UNIVERSITY

MIGUEL CÓRDOVA (PhD)

DEPARTAMENTO ACADÉMICO DE CIENCIAS DE LA GESTIÓN
PUCP

Abstract

Current global sustainability concerns call for urgent solutions through the collective effort of government and organizational actors, since they are at the front of sustainable policy and strategy development. Within a corporate context, board interlocks may represent an innovative way to overcome some of the traditional constraints associated with the incorporation of sustainability practices within firms. Nevertheless, the efficiency of these efforts depends on the sustainability objectives set out by firms. This paper argues that interlocking directorates can be a valuable governance mechanism for disseminating and implementing sustainability practices within organizations as well as for achieving strategic sustainable development goals. However, this capacity is limited by the size and diversity of board members, as well as by the sectors in which interlocked directors operate.

Keywords: board interlock, interlocking directorate, corporate network, sustainable development goal (SDG), sustainability, climate action, clean energy.

NOTAS ACADÉMICAS

Introduction

According to the World Economic Forum (WEF; 2019), a holistic perspective is required to tackle key societal concerns such as climate change and sustainable development. As a result of increasing international sustainability duties, the United Nations developed 17 Sustainable Development Goals (SDGs; United Nations, 2015a). Nevertheless, despite this formal global commitment, differing local interests and individual priorities among countries have driven them to postpone or abandon their initiatives in regard to SDGs, resulting in minor interventions or no changes occurring at all (Gonzalez-Perez, 2016). These individual agendas are constraining the opportunities for global integration, preventing the achievement of SDGs, as well as undermining governments and organizations' readiness for an unsettled global landscape (WEF, 2020).

Since the behaviors of large organizations shape the local business environment (Carroll & Fennema, 2002; Hambrick, 2007) and have an extended influence due to their multi-level relationships (Barringer & Harrison, 2000; Durand, 2018), their top leaders as well as their governance structures play a key role in building countries' responses to sustainability challenges. In this regard, interlocking directorates (IDs) represent a key governance mechanism that is created when a director sits on the board of directors of two or more companies (Mizruchi, 1996). IDs perform differently according to the context in which they operate. As reported by Schneider (2013), regions vary in the type of capitalism they develop, such as competitive in North America, cooperative in Asia and Europe, or hierarchical in Latin America. IDs then create local business structures following those regional patterns, extending their influence over each country's organizational elites and adopting the local institutional boundaries (DiMaggio & Powell, 1983). This trend was identified by Windolf (2009) in regards to the European and North American context, and by Durand (2019) in relation to Latin America.

In addition, IDs connect firms at an informal level through their presence in different corporate governance mechanisms (Dooley, 1969; Mizruchi, 1996). According to Pettigrew (1992), IDs also provide key political, social, and business ties for firms since they are usually connected to influential

NOTAS ACADÉMICAS

stakeholders in political and business spheres. Furthermore, existing research has indicated that IDs are capable of exerting influence over other firms' decisions (Carroll & Fennema, 2002), accessing strategic resources (Mizruchi, 1996), and facilitating the diffusion of managerial practices among them (Shropshire, 2010).

Literature has also accounted for IDs as knowledge spreaders (Ginesti et al., 2017), channels for the imitation of managerial practices (Shipilov et al., 2010), and key actors for disseminating corporate policies (Cai et al., 2014). However, there is limited evidence of studies examining the involvement of IDs in strategic decisions oriented toward the achievement of the SDGs (Cerver & Fenner, 2020; Cordova, 2018; Van der Waal & Thijssens, 2020).

This paper aims to explore this gap in the literature by examining the role of IDs in the accomplishment of SDG 7 (Affordable and clean energy) and/or SDG 13 (Climate action), which are considered “global enablers” in this paper.

SDGs: The Global Agenda Toward Sustainability

According to the United Nations (2015a), the establishment of the 17 SDGs represents an operational platform for commitments to good living standards for people, well-being for the planet, and prosperity for global systems, thus creating an environment of collaboration and peace. Table 1 lists the SDGs and their relationship with goals 7 and 13, both considered global enablers in this paper.

Table 1
The SDGs and Their Relation with Goals 7 and 13

Nº	Goal	Relation with SDGs 7 and 13
1	No poverty	Natural disasters caused by climate crises emphasize poverty.
2	Zero hunger	Climate shocks, locust crises, infectious diseases, and other disasters derived from climate crises affect food producers.

NOTAS ACADÉMICAS

3	Good health and well-being	Climate crises encourage the emergence of communicable diseases, causing high death rates in developing countries.
4	Quality education	Electricity may represent one main constraint for the implementation of remote learning systems.
5	Gender equality	No specific or direct relation found.
6	Clean water and sanitation	Reduction of water pollution and halting of hazardous water-related ecosystems. Both are drivers of climate crises.
7	Affordable and clean energy	Identified as a global enabler.
8	Decent work and economic growth	Electricity and clean energy sources are indispensable for technological innovation and job creation.
9	Industry, innovation, and infrastructure	Electricity and clean energy sources are indispensable for R&D activities as well as Internet access.
10	Reduced inequalities	No specific or direct relation found.
11	Sustainable cities and communities	Reduction of air pollution (a driver of climate crisis) to prevent premature deaths.
12	Responsible consumption and production	Reduction of the use of fossil fuels and other natural resources. Reduction of waste and increase of recycling facilities for electronics.
13	Climate action	Identified as a global enabler.

NOTAS ACADÉMICAS

14	Life below water	Protection of marine environments threatened by ocean acidification as a consequence of climate crises.
15	Life on land	Land degradation affects billions of people and drives several species to extinction, intensifying climate crises.
16	Peace, justice, and strong institutions	Energy plays a key role in the diffusion of information and laws by institutions.
17	Partnerships for the goals	Energy plays a key role in knowledge sharing, tax control, and worldwide investment information.

Note. Own creation based on United Nations (2015a).

As may be noted from Table 1, even when the SDGs are presented as a list of different commitments, all of them conform to an interrelated network of synergies and trade-offs regarding alliances, energy, poverty, and food (Philippidis et al., 2020). Through said network, the accomplishment of one specific goal instantly leads to the accomplishment or failure of other goals. This intense connectivity among the SDGs allows for the emergence of several forms of collaborative systems that address more than one SDG at a time. Hence, collaboration-oriented alliances between organizations from different factions of society, such as governmental, business, and civil-society, are a reliable strategy for obtaining resources, minimizing uncertainty (Barringer & Harrison, 2000), and transferring knowledge from one firm to another (Mowery et al., 1996).

However, Govindan et al. (2020) found that the most critical barrier undermining the formation of these collaborative systems is the lack of trust. The same was found by Günzel-Jensen et al. (2020) when they explained how

NOTAS ACADÉMICAS

trust turns into a reliable determinant in the relationship between the United Nations and social entrepreneurial ventures toward SDG execution. Given the interdependence of the SDGs and the need to limit the scope of this paper, the focus of the discussion is on SDG 7 (Affordable and clean energy) and SDG 13 (Climate action). The rationale for this choice relates to SDG 7 acting as an enabler for the creation of multiple development opportunities in most nations, and SDG 13 being a major global constrainer for several industries (United Nations, 2015c). Table 2 presents the main issues tackled by both SDGs.

Table 2
Main Issues Addressed by SDGs 7 and 13

Nº	Goal	Main issues
7	Affordable and clean energy	There are still 789 million people in the world who lack access to electricity (2018). The increase of renewable energy sources, which only represent 17% of the total energy consumption (2017).
13	Climate action	Reduction of global temperatures. Prevention of natural disasters and encouragement of countries to develop risk-reduction strategies for such events. Achievement of a more favorable balance between investment in fossil fuels and investment in climate activities, which remains negative for the latter (2016).

Note. Own creation based on United Nations (2015a).

NOTAS ACADÉMICAS

Despite the relevance of these SDGs to sustainable development, many organizations do not include them as a part of their strategic commitment. According to Van der Waal and Thijssens (2020), stock-listed firms tend to use SDGs as a symbolic instrument more than a committal guide toward global benefit. Many firms do not yet disclose sustainability reports to their stakeholders, or they are unsuccessfully deployed, even when Global Compact membership seems to be important to them. This phenomenon could be related to the idea that the establishment of SDGs is often taken for granted, or the idea that simply linking SDGs to organizational behavior—without concrete action plans—is sufficient for accomplishing sustainable development (Günzel-Jensen et al., 2020). However, not addressing SDGs, or more importantly, not understanding the interdependence among them, could lead to major global risks and catastrophic worldwide consequences (Cernev & Fenner, 2020). Given the critical role of IDs as knowledge spreaders (Ginesti et al., 2017) and their influence on the dissemination of corporate policies, further examination of their involvement in the achievement of SDGs is necessary.

Board Interlocks: Reported Benefits and Drawbacks

Board interlocks occur when a corporate director sits on the board of directors of two or more companies (Bazerman & Schoorman, 1983; Haunschild & Beckman, 1998; Kang, 2008, Mizruchi, 1996). IDs have been described as a type of interorganizational linkage that enable interaction between organizations over time (Pfeffer & Salancik, 1978), and also as a form of social capital that creates opportunities for innovations that yield sustainable competitive advantages (Carpenter & Westphal, 2001; Gulati & Westphal, 1999). Empirical studies have found that interlocking boards impact several organizational practices, including governance practices (Davis, 1991), organizational structures (Palmer et al., 1993), mergers and acquisitions (Haunschild, 1993), and ISO quality systems (Chua & Petty, 1999). Numerous studies have also highlighted the benefits of board interlocks for uncertainty reduction (Carpenter & Westphal, 2001; Geletkanycz & Hambrick, 1997).

Following this line of thought, Ostrower and Stone (2006, p.612) noted that interlocks serve as a key channel for “connecting individual institutions to

their larger context.” Numerous empirical studies have reported the importance of board interlocks for knowledge sharing and interpersonal information flows, which may lead top-level managers to develop effective innovative corporate practices (Bouwman, 2011; Chiu et al., 2009; Horton et al., 2012; Ortiz-de-Mandojana et al., 2012). This is associated with the additional experience and access to valuable information that IDs provide from the simultaneous links between different firms (Ortiz-de-Mandojana & Aragon-Correa, 2015). These are thought to increase interlocked directors’ capacity to participate in companies’ strategic decision-making processes (Carpenter & Westphal, 2001; Ruigrok et al., 2006). Furthermore, board interlocks are thought to be more influential in corporate control and decision-making compared with other external information sources (Borgatti & Foster, 2003; Braam & Borghans, 2014). This is largely due to the fact that interlocked directors convey information from first-hand experience and observations made in the other firm’s board on which they sit, making this information more trustworthy, credible, and persuasive (Rogers, 2003).

Notwithstanding the aforementioned evidence, research also indicates that the opportunity to create value resulting from the presence of IDs varies according to the size and diversity of the board (Ortiz-de-Mandojana & Arragon-Correa, 2015). The diversity of interlocked director ties particularly affects the generation of value resulting from increased social capital (ibid). Firms that possess either a low or high level of diversity of interlocking board directors appear to be more efficient than those with a medium level (ibid). On the other hand, board size is closely related to the external environment’s characteristics, conditioning IDs’ exchange and diffusion capabilities to what the context allows (Pfeffer, 1972). A further limitation of IDs relates to time constraints that interlocked directors’ experience compared with those who serve on a single board (Bazerman & Schoorman, 1983). Relatedly, interlocked directors may lose their independence when they experience conflicts of interest among the firms whose board they sit on (Ruigrok et al., 2006).

Influence of Board Interlocks on Firms’ Adoption of Proactive Environmental Practices

Despite the lack of studies of IDs’ effects on the SDGs, board interlocks have

NOTAS ACADÉMICAS

been examined in various business contexts, notably the environmental one (Ortiz-de-Mandojana & Arragon-Correa 2015). As previously stated, this paper argues that IDs have the potential to support an SDG-oriented strategy in companies. The rationale behind this proposal is that the additional resources and experience obtained by interlocked directors from sitting on different boards might have a positive impact on firms' environmental performance. Studies have argued that complementary resources and capabilities already owned by firms can significantly shape their environmental orientation (Aragón-Correa, 1998; Aragón-Correa and Sharma, 2003; Christmann, 2000; Hart, 1995;). In addition, extant research has suggested that the procurement and exploitation of knowledge are easier for those who work in organizations with higher levels of social capital (McFadyen & Cannella, 2004; Yli-Renko et al., 2001), such as firms with IDs. Empirical findings suggest that experienced directors who sit on several boards may use their social networks to help firms gain critical connections to resources that they may otherwise have difficulty accessing (Berrone & Gomez-Mejia, 2009). This may lead firms to obtain greater profits through an overall increased performance (Larcker et al, 2013). Ortiz-de-Mandojana and Arragon-Correa (2015) proposed that the value generated by IDs' social capital may improve a firm's environmental performance for numerous reasons. This was echoed by Tsai and Ghoshal (1998), who noted that social ties (e.g., extra-firm networks) aid innovators moving across their firm's formal lines to secure required resources. The simultaneous access to different networks provides IDs with greater experience in different industries, contexts, and firms. Moreover, managing environmental issues in different situations and applying their knowledge to diverse contexts may provide IDs with an increased capacity for analyzing socially complex problems, as well as a greater appreciation of the flexibility required for the implementation of proactive environmental practices. As stressed by Ortiz-de-Mandojana et al. (2012), the espousal of a proactive environmental strategy entails an evaluation of complex and diverse benefits (e.g., cultivating better relationships with stakeholders and improving the legitimacy of the firm) as well as a consideration of the short- and long-term implications of such strategies on the part of managers. Thus, IDs may not only facilitate access to valuable information but also increase a firm's ability to interpret and integrate information, thereby expediting its use (Carpenter

NOTAS ACADÉMICAS

& Westphal, 2001; Davis, 1991).

IDs are usually also well informed of strategic changes occurring within the sector or companies. This allows IDs a greater opportunity to regularly update a firm's environmental strategy with more accurate and comprehensive information, which may be unavailable to competitors without direct access to interlocking circumstances (Carpenter & Westphal, 2001). Direct access to knowledge and information related to environmental practices, standards, technologies, and regulations improves managers' capacity to implement proactive environmental practices (Sharma, 2009). For instance, IDs who work with firms that supply green equipment may provide valuable links to experts who can help managers acquire new technological systems and encourage their use for pollution prevention (Ortiz-de-Mandojana et al, 2012). This supports the product resource combinations and exchange required to drive environmental innovation (Ortiz-de-Mandojana et al., 2012). Thus, IDs may have a significant influence in the managerial decisions of the companies where they hold a board position (Carpenter & Westphal, 2001; Ruigrok et al., 2006), encouraging investments in new green equipment and the adoption of a proactive environmental strategy, among other impacts.

Even if emerging knowledge is available in the market, IDs are likely to share this knowledge without additional costs to the firm such as the use of external consultants, thus increasing the value of the board's social capital (Darnall & Edwards, 2006; Haunschild & Beckham, 1998). Overall, IDs may create an internal source of environmental experience that is more comprehensive, credible, flexible, and up to date as well as cheaper than the knowledge found in the market.

Nonetheless, the capacity of IDs to encourage the adoption and implementation of proenvironmental strategies in the firms where they sit on the board may be dependent on the nature of the sectors in which they operate. For instance, Ortiz-de-Mandojana et al. (2012) found that the presence of IDs in the boards of fossil fuel suppliers was negatively correlated with the adoption of proactive environmental strategies. In the case of IDs working for fossil fuel provider firms, they tended to sway other firms to continue to provide traditional fuel since IDs represented the interests of traditional fuel suppliers with whom they had developed enduring and irreversible commitments (ibid). Similarly, IDs within the fuel sector may

NOTAS ACADÉMICAS

restrict the search for external information on renewable energy production for the other firms whose boards they sit on, resulting in the adoption of nonoptimal solutions for renewal energy generation (Bazerman & Schoorman, 1983).

Furthermore, the authors (ibid) uncovered a negative correlation between the adoption of proactive environmental policies and IDs sitting on the boards of financial institutions. Based on their findings, this was linked to financial organizations' aversion to investing in what they considered high-risk, uncertain business opportunities related to renewable energy. In the cases of both financial institutions and fossil fuel suppliers, the presence of IDs did not automatically encourage the espousal of proactive environmental strategies due to conflicting interests between the industries in which they operate and proactive environmental strategies.

Discussion and Conclusions

This paper argues that informal mechanisms of corporate governance, such as IDs, could be utilized as influential agents as well as transmission devices (Borgatti and Foster, 2003; Bizjak et al., 2009; Bouwman, 2011; Chiu et al., 2009; Gulati & Westphal, 1999; Haunschild, 1993; Horton et al., 2012; Ortiz-de-Mandojana et al., 2012; Rogers, 2003;) to encourage firms to embrace projects related to SDGs 7 and 13.

In addition, IDs' capacity to influence corporate decisions and control (Borgatti & Foster, 2003; Braam & Borghans, 2014; Haunschild & Beckman, 1998) as well as their ability to transmit first-hand information (Rogers, 2003) would encourage the trust required for SDG implementation (Govindan et al., 2020; Günzel-Jensen et al., 2020).

Finally, IDs could serve as conduits for the imitation or transmission of sustainable-oriented practices, such as climate change or renewable energy strategies. Table 3 presents three propositions for further research on IDs and the two "global enabler" SDGs identified in this paper.

Table 3
Propositions for further research

NOTAS ACADÉMICAS

Proposition 1	The capacity of IDs to disseminate sustainability strategies will vary according to the size and diversity of the board.
Proposition 2	IDs may represent a reliable way to deal with a lack of trust, which prevents firms from moving through alliances toward SDG accomplishment.
Proposition 3	Policy makers should be encouraged to intervene in ID formation to take advantage of their diffusion capacity. This would give them the opportunity to aim for SDGs 7 and 13.

Note. Own creation

This paper encourages further research on IDs from a wider range of contexts and lenses outside of just the corporate or capitalist perspectives. Furthermore, the study concludes that organizations may take advantage of IDs' positive features and harness them toward achieving common well-being, thus triggering widespread societal benefits. Firms should target specific SDGs, such as SDGs 7 and 13, which are considered global enablers for widespread sustainable development.

NOTAS ACADÉMICAS

Reference List

- Aragon-Correa, J. A. (1998). Strategic proactivity and firm approach to the natural environment. *Academy of Management Journal*, 41(5), 556–567.
- Aragon-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28(1), 71–88.
- Barringer, B. R., & Harrison, J. S. (2000). Walking a Tightrope: Creating value through interorganizational relationships. *Journal of Management*, 26(3), 367-403.
- Bazerman, M. H., & Schoorman, F. D. (1983). A limited rationality model of interlocking directorates. *Academy of Management Review*, 8(2), 206–217.
- Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: An integrated agency-institutional perspective. *Academy of Management Journal*, 52(1), 103–126.
- Bizjak, J., Lemmon, M., & Whitby, R. (2009). Option backdating and board interlocks. *The Review of Financial Studies*, 22(11), 4821-4847.
- Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of management*, 29(6), 991-1013.
- Bouwman, C. H. (2011). Corporate governance propagation through overlapping directors. *The Review of Financial Studies*, 24(7), 2358-2394.
- Braam, G., & Borghans, L. (2010). Board and auditor interlocks and voluntary disclosure in annual reports. *Journal of Financial Reporting and Accounting*, 12(2).
- Cai, Y., Dhaliwal, D. S., Kim, Y., & Pan, C. (2014). Board interlocks and the diffusion of disclosure policy. *Review of Accounting Studies*, 19(3), 1086-1119.
- Carpenter, M. A., & Westphal, J. D. (2001). The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*, 44(1), 639–660.
- Carroll, W. K., & Fennema, M. (2002). Is there a transnational business community? *International Sociology*, 17(3), 393-419.
- Cernev, T., & Fenner, R. (2020). The importance of achieving foundational

NOTAS ACADÉMICAS

sustainable development goals in reducing global risk. *Futures*, 115(1), 102492.

Chiu, P. C., Teoh, S. H., & Tian, F. (2013). Board interlocks and earnings management contagion. *The Accounting Review*, 88(3), 915-944.

Christmann, P. (2004). Multinational companies and the natural environment: Determinants of global environmental policy standardization. *Academy of Management Journal*, 47(1), 747-760.

Chua, W. F., & Petty, R. (1999). Mimicry, director interlocks, and the interorganizational diffusion of a quality strategy: a note. *Journal of Management Accounting Research*, 11(1), 93-104.

Cordova, M. (2018). The evolution of interlocking directorates studies: A global trend perspective. *AD-minister*, 33(2), 135-165.

Darnall, N., & Edwards, D. Jr. (2006). Predicting the cost of environmental management system adoption: The role of capabilities, resources and ownership structure. *Strategic Management Journal*, 27(1), 301-320.

Davis, G. (1991). Agents without principles? The spread of the poison pill through the intercorporate network. *Administrative Science Quarterly*, 36(4) 583-613.

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.

Dooley, P. (1969). The interlocking directorate. *The American Economic Review*, 59(3), 314-323.

Durand, F. (2018). *Odebrecht: La empresa que capturaba gobiernos*. Fondo Editorial PUCP.

Durand, F. (2019). *La Captura del Estado en América Latina: Reflexiones Teóricas*. Fondo Editorial PUCP.

Geletkanycz, M. A., & Hambrick, D. C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly*, 42(4), 654-681.

Ginesti, G., Sannino, G., & Drago, C. (2017). Board connections and management commentary readability: the role of information sharing in Italy. *Corporate Governance: The International Journal of Business in Society*,

NOTAS ACADÉMICAS

17(1), 30-47.

Gonzalez-Perez, M. A. (2016). Climate change and the 2030 corporate agenda for sustainable development. *Advances in Sustainability and Environmental Justice*, 19(1), 1-6.

Govindan, K., Shankar, K. M., & Kannan, D. (2020). Achieving sustainable development goals through identifying and analyzing barriers to industrial sharing economy: A framework development. *International Journal of Production Economics*, 227(1), 107575.

Gulati, R., & Westphal, J. D. (1999). Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. *Administrative Science Quarterly*, 44(3), 473-506.

Günzel-Jensen, F., Siebold, N., Kroeger, A., & Korsgaard, S. (2020). Do the United Nations' sustainable development goals matter for social entrepreneurial ventures? A bottom-up perspective. *Journal of Business Venturing Insights*, 13(1), e00162.

Hambrick, D. (2007). Upper echelons theory: An update. *Academy of Management*, 32(2), 334-343.

Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(1), 986-1014.

Haunschild, P. R. (1993). Interorganizational imitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly*, 38(4), 564-592.

Haunschild, P. R., & Beckman, C. M. (1998). When do interlocks matter? Alternate sources of information and interlock influence. *Administrative Science Quarterly*, 43(4), 815-844.

Horton, J., Millo, Y., & Serafeim, G. (2012). Resources or power? Implications of social networks on compensation and firm performance. *Journal of Business Finance and Accounting*, 39(3-4), 399-426.

Kang, E. (2008). Director interlocks and spillover effects of reputational penalties from financial reporting fraud. *Academy of Management Journal*, 51(1), 537-555.

Larcker, D. F., So, E. C., & Wang, C. C. Y. (2013). Boardroom centrality and firm performance. *Journal of Accounting and Economics*, 55(2), 225-250.

NOTAS ACADÉMICAS

- McFadyen, M. A., & Cannella, A. A. (2004). Social capital and knowledge creation: diminishing returns of the number and strength of exchange relationships. *Academy of Management Journal*, 47(1), 735–746.
- Mizruchi, M. S. (1996). What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual Review of Sociology*, 22(1), 271-298.
- Mowery, D. C., Oxley, J. E., & Silverman, B. S. (1996). Strategic alliances and interfirm knowledge transfer. *Strategic Management Journal*, 17(2), 77-91.
- Ortiz-de-Mandojana, N., & Aragon-Correa, J. A. (2015). Boards and sustainability: The contingent influence of director interlocks on corporate environmental performance. *Business Strategy and the Environment*, 24(6), 499-517.
- Ortiz-de-Mandojana, N., Aragón-Correa, J. A., Delgado-Ceballos, J., & Ferrón-Vílchez, V. (2012). The effect of director interlocks on firms' adoption of proactive environmental strategies. *Corporate Governance: An International Review*, 20(2), 164-178.
- Ostrower, F., & Stone, M. M. (2006). Governance: Research trends, gaps, and future prospects. In W. W. Powell & P. Bromley (eds.), *The nonprofit sector: A research handbook* (pp. 612-628). Yale University Press.
- Palmer, D. A., Jennings, P. D., & Zhou, X. (1993). Late adoption of the multidivisional form by large U.S. corporations: Institutional, political and economic accounts. *Administrative Science Quarterly*, 38(1), 100–131.
- Pettigrew, A. M. (1992). On studying managerial elites. *Strategic Management Journal*, 13(S2), 163-182.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17(2), 218-228.
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations*. Harper & Row.
- Philippidis, G., Shutes, L., M'Barek, R., Ronzon, T., Tabeau, A., & van Meijl, H. (2020). Snakes and ladders: World development pathways' synergies and trade-offs through the lens of the Sustainable Development Goals. *Journal of Cleaner Production*, 267(1), 122147.

NOTAS ACADÉMICAS

- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed). Free Press.
- Ruigrok, W., Peck, S. I., & Keller, H. (2006). Board characteristics and involvement in strategic decision making: Evidence from Swiss companies. *Journal of Management Studies*, 43(1), 1201–1237.
- Schneider, B. R. (2013). *Hierarchical capitalism in Latin America. Business, labor, and the challenges of equitable development*. Cambridge University Press.
- Sharma, S. (2009). The mediating effect of information availability between organization design variables and environmental practices in the Canadian hotel industry. *Business Strategy and the Environment*, 18(1), 266–276.
- Shipilov, A. V., Greve, H. R., & Rowley, T. J. (2010). When do interlocks matter? Institutional logics and the diffusion of multiple corporate governance practices. *The Academy of Management Journal*, 53(4), 846-864.
- Shropshire, C. (2010). The role of the interlocking director and board receptivity in the diffusion of practices. *The Academy of Management Review*, 35(2), 246-264.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of management Journal*, 41(4), 464-476.
- United Nations. (2015a). *Transforming our world: The 2030 agenda for sustainable development*.
<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf?OpenElement>
- United Nations. (2015b). Ensure access to affordable, reliable, sustainable and modern energy for all. <https://sdgs.un.org/goals/goal7>
- United Nations. (2015c). *Take urgent action to combat climate change and its impacts*. <https://sdgs.un.org/goals/goal13>
- Van der Waal, J. W. H., & Thijssens, T. (2020). Corporate involvement in sustainable development goals: Exploring the territory. *Journal of Cleaner Production*, 252(1), 119625.
- Windolf, P. (2009). Coordination and control in corporate networks: United States and Germany in comparison, 1896-1938. *European Sociological Review*, 25(4), 443-457.
- World Economic Forum. (2019). *The Global Competitiveness Report 2019*.
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf

NOTAS ACADÉMICAS

World Economic Forum. (2020). *The Global Risks Report 2020*.

<https://www.weforum.org/reports/the-global-risks-report-2020>

Yli-Renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisitions, and knowledge exploitation in young technology-based firms. *Strategic Management Journal*, 22(1), 587–613.