

Why do corporate elites form cohesive networks in some countries, and do not in others? Cross-national analysis of corporate elite networks in Latin America *

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Abstract

This paper analyzes, compares, and explains the corporate elite networks formed by interlocking directorates across five Latin American economies in order to comprehend why corporate elites are interconnected by cohesive networks in some countries and not in others. Results show cohesive elite networks in Mexico, Chile, and to some extent in Peru, but not in Brazil and Colombia. After testing and rejecting the hypotheses from existing theories, I identify complementarities among cohesive corporate elite networks, state-business relations through strong encompassing business associations and market openness. In economies where state-business relations are mediated by strong encompassing business associations and open up to free trade with developed economies, corporate elites form cohesive networks, whereas in economies with weak encompassing business associations and low trade openness, corporate elites do not form cohesive networks. These novel explanations are suitable to figure out corporate elite networks in emerging economies, and a benchmark for future studies on corporate elites.

Keywords: corporate elites, interlocking directorates, elite networks, emerging economies, Latin America

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Introduction

Why are corporate elites interconnected by cohesive networks in some countries and not in others? Empirical research, mostly concentrated on developed economies, has showed corporate elites vary in their networking patterns across countries.

Explanation for similarities and differences between countries is grounded on varieties of capitalism theory (van Veen and Kratzer, 2011; Windolf, 2002). Market economies based on coordination principles, such as Germany or Spain, give rise to cohesive corporate networks, whereas dispersed corporate networks complement liberal market economies, such as the United Kingdom and the USA. However, this hypothesis seems not to fit in Latin America, since the economic system (capitalism) is similar (Phillips, 2004; Schneider, 2009), but corporate elite networks differ between countries: for instance, cohesive networks in Mexico and Chile, and dispersed networks in Brazil and Colombia.

Drawing on an original dataset of interlocking directorates among the largest corporations, this paper analyzes, compares, and explains the corporate elite networks in five Latin American economies in order to comprehend why corporate elites are interconnected by cohesive networks in some countries and not in others. Whereas theories on formation of interlocking directorates concur that factors such as financial structure, ownership structure, location of corporations, and size of board of directors affect the corporate network configuration (Kono et al., 1998; Mariolis, 1975; Pfeffer, 1972; Windolf, 2002), this research states that the specificities of emerging economies require novel hypotheses to expound cohesiveness of corporate elite networks. Local large corporations from emerging economies depend excessively on two main aspects: state-business relations (Khanna and Yafeh, 2007) and trade with developed economies (CIA, 2013; World Bank, 2014). How these dependences are regulated and how

corporate elites deal with these challenges influence corporate elite networks. When state-business relations are mediated by encompassing business associations, and emerging economies open up to free trade with developed economies, cohesive corporate networks are reinforced.

This work represents the first comparative study of corporate elite networks among several Latin American economies. One of the reasons for which studies of corporate elites in Latin America are insufficiently developed has been the lack of reliable and comparable data, which discourages new insights about business elites. Most of the theories about corporate elites are based on the analysis of North American and European nations: power elite (Mills, 1956), inner circle (Useem, 1984), corporate community (Domhoff, 2009), corporate political action (Mizruchi, 1992), and transnational capitalist class (Sklair, 2001). The results of this paper provide fresh data and novel hypotheses to motivate research on corporate elites.

Cohesiveness of corporate elite networks

One of the foremost defining network features of the corporate elite is the maintenance of multiple positions and the formation of inter-corporate ties. Interlocking directorates (or board interlocks) occur when directors sit simultaneously on two or more corporate boards. Board interlocks have become the primary measure of elite social capital (Nicholson et al., 2004) and corporate ties (Mizruchi, 1996). Interlocking directorates are relational indicators to analyze how corporate elites are interconnected and form networks among themselves.¹ In general, studies highlight interlocking directorates as sources of information and control, and in this sense cohesive corporate

networks facilitate coordination and a sense of community, whereas dispersed corporate networks stress autonomy (Cárdenas, 2012; Mizruchi, 2013).

A vast number of studies have analyzed the cohesiveness of corporate elite networks at a national level, especially in developed economies from North America and Western Europe. Studies on emerging economies are rapidly growing across Africa (Durbach et al., 2013), Asia (Zang, 2000) and Latin America (Cárdenas, 2015). Cross-national comparisons have focused on North Western economies and illustrate major differences between European and Anglo-Saxon economies (Stokman et al., 1985; Windolf, 2002). Whereas European and North American studies reveal that the configuration of the corporate network reflects the national varieties of capitalism, i.e. cohesive networks emerged in coordinated market economies and did not emerge in liberal market economies (van Veen and Kratzer, 2011; Windolf, 2002), I notice that this hypothesis is not suitable for Latin American cases.

Research on varieties of capitalism cluster larger Latin American economies into a single model, labeled hierarchical market economy, given the similarity of economic organization based on hierarchical relations: pyramidal business groups controlled by families, high presence of North Western multinational corporations, low-skilled labor, atomistic labor relations, presidentialist political system, and high social inequalities (Phillips, 2004; Schneider, 2009). Nevertheless, the few studies of corporate elite networks in Latin America reveal different structures across countries: cohesive elite networks in Mexico (Salas-Porras, 2006), dispersed networks in Argentina (Salvaj and Lluch, 2012), and a high number of isolated boards in Brazil (Santos et al., 2012). Hence, similar models of capitalism also give rise to different corporate elite networks.

A cross-national analysis of corporate elite networks between several Latin American countries provides an excellent opportunity to test existing theories on the factors that relate to cohesiveness of corporate networks – which were formulated analyzing developed economies – and create new ones adapted to emerging economies. Studies on Latin America have described networks of interlocking directorates within national borders, but a cross-national analysis is lacking. Before testing existing theories and formulating novel hypotheses, I uncover and analyze the corporate networks of Latin American economies to identify where corporate elites interconnect through cohesive networks and where they do not.

Methods and data

This research studies corporate board networks in Mexico, Chile, Peru, Brazil and Colombia. I aimed to include Argentina and Venezuela, the two other largest economies in the region, but data on board of directors was not available. I select the 100 largest firms for each country studied. This medium sample size is decided after assessing significance, confounding effects, and data availability. The N=100 sample is comprised of the 75 largest non-financial corporations ranked by revenues and the 25 largest financial corporations ranked by assets in 2012. *América Economía* business magazine ranks the largest firms. Annual reports of each firm provide data on the board of directors. After cleaning missing data, checking for data consistency, and equaling network size, I work with the 90 largest firms in each country. Data on directors corresponds to 2013.

Social network analysis is employed to measure to what extent corporate elite networks are cohesive (Scott, 1991). Structural properties of connectedness, inclusion,

compactness, centralization, multiplicity, and robustness are evaluated using network indicators: density, average degree, proportion of isolated nodes, size of the main component, average distance, diameter, compactness score, global degree centralization, reachability of the most central actor, proportion of multiple ties, and percentage of cutpoints (see Table 1 for definitions and interpretations).

Table 1. Network indicators to measure cohesiveness

Dimension	Indicator	Definition	Interpretation *
Connectedness vs disconnectedness	Density	Proportion of existing ties over all possible ties	↑ Density ↑ Cohesiveness
	Average degree	Total number of ties over total number of nodes	↑ Average degree ↑ Cohesiveness
Inclusion vs fragmentation	% of isolated nodes	Proportion of nodes without ties, unreachable	↑ Isolated ↓ Cohesiveness
	% nodes in the main component	The main connected component is the maximum subgraph in which all nodes are reachable from every other.	↑ Nodes in the main component ↑ Cohesiveness
Compactness vs looseness	Average geodesic distance	The average geodesic distance among all reachable nodes. Geodesic distance is the shortest path between two nodes.	↑ Average geodesic distance ↓ Cohesiveness
	Diameter	Length of the largest geodesic distance	↑ Diameter ↓ Cohesiveness
	Compactness score	The mean of reciprocal distance	↑ Compactness ↑ Cohesiveness
Centralization vs decentralization	Global degree centralization	Indicator that reflects the extent to which a network is organized around a central point. Varies from 1 to 0, and it achieves its maximum score in star networks	↑ Centralization ↑ Cohesiveness
	% reachability of the most central actor	Percentage of reachable actors at one-step by the actor with the highest degree	↑ Reachability of the most central actor ↑ Cohesiveness
Multiplicity	% of multiple ties	Percentage of ties that connect the same pair of nodes. Denotes strength of ties	↑ Multiple ties ↑ Cohesiveness
Robustness vs fragility	% of cutpoints	Cutpoints are nodes whose removal disconnects the graph into components	↑ Cutpoints ↓ Cohesiveness

* ↑ high values of the indicator indicates either ↑ high cohesiveness or ↓ low cohesiveness

Analysis and comparison of corporate elite networks

The network analysis reveals similarities and differences among Latin American economies. Table 2 displays network measures, and Figures 1.1 to 1.5 show the corporate elite networks in the five countries. Corporate elite networks in Mexico and Chile have high connectedness, inclusion, compactness, centralization, multiplicity, and robustness, whereas Brazilian and Colombian corporate networks present disconnectedness, fragmentation, looseness, decentralization, low multiplicity, and high fragility. The Peruvian corporate network is in an intermediate position, although closer to Chile.

In sum, corporate elites in Mexico form the most cohesive board network. Chilean corporate elites are well integrated by networks of interlocking directorates, and Peruvian business elites organize in a similar way. On the other hand, corporate elites in Brazil and Colombia do not form cohesive networks, and interlocking directorates are not widely practiced to connect the leading corporations.

The very limited number of corporate network studies on Latin America and the different sample sizes utilized hamper the possibility to elucidate whether differences are historical or contemporary, nevertheless some prior structures can be identified. The Mexican corporate network was denser than the Brazilian one in 1909 (Musacchio and Read, 2007). While the density of the Mexican corporate network decreased (from 0.08 to 0.06) between 1981 and 2001 (Salas-Porras, 2006), the present research finds a higher connectedness in 2013 (density = 0.07). Although each country's particular historical legacy influences corporate elite networks, I focus on identifying the structures or institutions that reinforce the cohesiveness of corporate networks and explain the cross-national similarities and differences.

Table 2. Network indicators of corporate board networks †

	MEXICO	CHILE	PERU	BRAZIL	COLOMBIA
N	86	90	90	90	90
Density*	0.084	0.04	0.028	0.018	0.015
Average Degree*	7.12	3.53	2.47	1.64	1.36
Standard Dev. Degree*	7.14	2.78	2.83	1.72	1.41
% of isolated	19.77	16.67	32.22	32.22	35.00
% n in main component	77.91	78.89	52.22	58.89	25.56
Average Distance*	2.30	3.47	3.60	4.71	3.10
Standard Dev. Distance*	0.77	1.25	1.62	1.89	1.63
Diameter*	5	8	9	10	8
Compactness*	0.3	0.22	0.1	0.1	0.04
Centralization Degree*	0.24	0.1	0.121	0.07	0.07
% reachability of the most central actor (degree)*	31.8	13.5	14.6	9.0	7.9
% multiple ties	38.68	30.87	50.45	28.85	31.46
% cutpoints	2.33	5.56	7.78	22.22	21.11
Number of interlocks*	306	159	111	74	61
Cohesiveness	Very high	High	Medium	Low	Low

† Network indicators are significantly correlated, exception compactness, centralization degree and % multiple ties. * Calculated with dichotomized matrix

 Figures 1.1 to 1.5

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Existing theories that explain cohesiveness of corporate elite networks

Since varieties of capitalism theory was not suitable to explain diversity of corporate networks in Latin America, I review theories on formation of interlocking directorates. These studies highlight institutional and structural factors, specifically focusing on the financial structure (where funds come from) (Mariolis, 1975), ownership structure (who owns the firms) (Windolf, 2002), the geographic location of corporations (where firms are headquartered) (Kono et al., 1998), and the boards' size (how many potential shared directors firms have) (Pfeffer, 1972).²

Financial structure

Financial structure refers to the way the firms are financed. Financial structures are classified into either bank-based or capital market-based, depending on the main sources and intermediation of finance capital (Demirgüç-Kunt and Levine, 2001). Bank control theory interprets interlocking directorates as strategies to gain access to funds (Mariolis, 1975). When banking is the main intermediary between finance capital and

firms, interlocks are developed to ensure access to financial corporations and control investments. In economies where financial assets come predominantly from capital markets (larger stock exchange markets), interlocks are not as necessary in obtaining funds from other corporations. Previous research shows that in bank-based economies, e.g. Spain, corporate board networks are more cohesive whereas in capital market-based economies, e.g. United Kingdom, are dispersed (Cárdenas, 2012; Windolf, 2002).

Demirgüç-Kunt and Levine (2001), in a broad cross-national study with data from the 1990s, classify financial structures in Mexico, Chile, Peru, Brazil, and Colombia as underdeveloped. I collect data from 2000 to 2013 on domestic credit provided by the financial sector (% of GDP) and the market capitalization of listed companies (% of GDP) to account for the current development of financial systems in Latin American economies (see Table 3). Although domestic credit provided by the financial sector (% of GDP) increased from 2000 in all Latin American economies except for Peru, they are below the world mean and far from the level of bank-based economies such as in Spain or Portugal. The market capitalization of listed companies (% of GDP) also augmented in the last decade in Latin American economies, but is below the world mean, with Chile as the exception at slightly over the mean. Neither the banking sector nor capital markets have developed enough in Latin American countries to affect the formation of cohesive national business elites. The lack of developed financial markets explains the emergence of business groups (Leff, 1978), but not the differences in corporate elite networks.

Table 3. Domestic credit provided by financial sector (% of GDP) and market capitalization of listed companies (% of GDP)

	Domestic credit provided by financial sector (% of GDP)				Market capitalization of listed companies (% of GDP)			
	2000	2005	2010	2012	2000	2005	2010	2012
Mexico	29	31.4	44.4	46.7	18.3	27.6	43.2	44.3
Chile	78.1	79.5	104.8	112.6	76.1	109.7	157.0	117.7
Peru	27.3	18.1	18.7	18.4	20.8	48.5	67.2	50.3
Brazil	71.9	74.5	96.3	110.8	35.1	53.8	72.1	54.7
Colombia	30.4	49.5	66.0	69.4	9.6	31.4	72.6	70.8
Spain	115.3	159.2	235.2	210.3	86.9	84.9	84.6	75.2
Portugal	127.9	144.0	208.9	189.4	51.7	34.9	35.8	30.9
World mean	---	158.5	163.2	165.5	---	93.7	85.1	74.2

Source: World Bank 2014

Ownership structure

Ownership structure refers to the number, size, and type of shareholders in a corporation. The influence of ownership structure in corporate board interlocks arises from the capacity of large owners to control directors' selection and nomination. Interlocks are mechanisms of controlling and monitoring firms owned, and corporate networks reflect to some extent ownership ties (Windolf, 2002). Large shareholders assume board positions to protect their investments and become nexus between firms owned by them (Auvray and Brossard 2013). Studies on emerging economies dominated by business groups, such as Taiwan and Israel, show that board interlocks are primarily used to control firms within the business groups (Brookfield, 2010; Maman, 1999). Building on that, economies where ownership concentration is high would have more interlocks, and in consequence, cohesive corporate networks.

Results, however, reject this hypothesis. In Latin American economies, ownership of corporations is highly concentrated. Table 4 presents data on ownership concentration (Lefort 2005) and shows strong similarities in the proportion of ownership held by the largest shareholders. The ultimate controlling shareholders are mostly families: out of the 26 largest business groups in Chile, 18 are family owned

Table 4. Ownership concentration of corporations

	Sampled firms	% ownership held by the largest shareholder	% ownership held by the 3 largest shareholders	% ownership held by the 5 largest shareholders
Mexico	27	52	73	81
Chile	260	55	74	80
Peru	175	57	78	82
Brazil	459	51	65	67
Colombia	74	44	65	73

Source: Lefort 2005

(Lefort, 2005); in Mexico, 19 out of the 20 largest business groups are controlled by a local family (Hoshino 2010); in Brazil, 48% of the largest 225 listed firms have a family controlling shareholder (Carvalho da Silva, 2004). Cross-national diversity in corporate networks cannot be explained by ownership structures, which in Latin American countries are almost identical.

Geographic location of firms

Geographic location of corporations is pointed out as important factor shaping networks of interlocking directorates. As Kono et al. (1998) claim, interlocking is a spatial phenomenon, and the location of headquarters affects interlocks' creation. I analyze the geographic distribution of corporations – on basis of the location of headquarters – to find out whether the geographic concentration of firms might explain the similarities and differences of corporate networks. Collecting data on the city locations of corporate headquarters, I examine to what extent the largest corporations are concentrated in

capital cities. Significant concentration in capital cities might either facilitate corporate elite networks within the nations, or it might discourage corporate ties since elites meet in other city spaces, such as exclusive clubs.

The top firms in Peru and Chile concentrate in capital cities – 80% of the largest firms of Peru are located in Lima, and 92% of Chilean firms are headquartered in Santiago. On the other hand, the headquarter locations of the Colombian, Mexican, and Brazilian firms are decentralizing from capital cities – Bogota, Mexico City, and Sao Paulo (the largest industrial city in Brazil). The half of the 90 largest Colombian firms are headquartered in the capital Bogota (52%), more than a quarter (28%) are in Medellin, and 12% are in Cali. Interlocks do not become mechanisms to integrate Colombian elites from different cities. In Mexico, 59% of the largest corporations are headquartered in the capital, Mexico City, and 20% are situated in Monterrey. In this case, Mexican corporate elites form cohesive networks. The largest firms in Brazil are headquartered in Sao Paulo (43%), Rio de Janeiro (18%), Belo Horizonte (6%) and 20 more different cities. Brazilian corporate elites are dispersed geographically and do not form cohesive networks to connect to each other. Cohesive networks occur in geographically small countries where large firms are concentrated in capital cities, such as in Chile, and in large countries where firms are spread-out, such as in Mexico. Geographic location of corporations is not suitable to explain the cross-national varieties of corporate networks in Latin America.

Board size

Resource dependence theorists claimed that board size is not a random element. The more firms require coopting external elements of its environment, the more

members the organization have to place on its boards (Pfeffer, 1972). Some studies have showed the positive correlation between board size and interlocks, i.e. the more members in the board of directors, the more interlocks emerge (Ong et al., 2003; Santos et al., 2012). Following these results, I expected that in countries with larger boards, more interlocks would be in place, allowing for the formation of a cohesive corporate network. Nonetheless, data on boards' size, exposed in Table 5, indicates that large boards do not necessarily correspond to cohesive networks.

Table 5. Board size: Mean, standard deviation, maximum and minimum

	Mexico	Chile	Peru	Brazil	Colombia
Board size Mean	17.16	8.47	7.96	9.55	10.29
Board size Stand. Dev.	7.65	2.55	3.35	4.66	3.56
Board size Max	42	19	17	29	24
Board size Min	2	5	3	3	2

Source: annual reports of each corporation, 2013

Corporations in all Latin American economies have a single board system, but board sizes vary across countries studied. Mexican companies have large boards (mean of 17.16 members in each firm) and connect through cohesive networks, but this does not occur in Chile, where boards have a small size (mean of 8.47 members per firm) and also develop cohesive networks. Countries with dispersed corporate networks – Brazil and Colombia – have medium sized boards of 9.55 members and 10.29, respectively. Peruvian firms have the smallest amount (7.96 members), but corporate networks are more cohesive than in Brazil and Colombia. The size of the board of directors can neither explain similarities nor differences across Latin American countries.

The failure of former existing theories to figure out corporate elite networks in Latin America might reside in the application of theories based on the analysis of business elites in developed economies. Understanding corporate elite networking patterns in Latin America requires a novel approach that accounts for the specificity of emerging economies.

Explanations adapted to emerging economies

The distinguishing features of Latin American economies and corporate elites – family business groups, ownership concentration, and underdeveloped financial structures – are also the source of weaknesses. Large corporations in Latin America depend excessively on two main aspects: state-business relations and trade with the most developed economies. How these aspects are regulated might influence corporate elite networking patterns.

State-business relations through encompassing business associations

State support is a key factor in the formation and success of large corporations in emerging economies (Colpan et al., 2010; Khanna and Yafeh, 2007). The highly concentrated corporate control in developing countries limits the number of potential rent-seeking players with which government had to deal, and facilitates cooperation between state and big business (Moreck and Yeung, 2004). But the turbulent political environment of most Latin American countries – military dictatorships, unstable democracies, nationalization policies, cronyism and high levels of state corruption, – also represents a wobbly relationship between state and business. To institutionalize

state-business relations, corporate elites organize in business associations and, in some countries, the state provides them privileged access to policy formulation (Schneider, 2004).

Business associations are long-term, private sector voluntary organizations that usually act as intermediary between individual business action and state action in order to channel communication, gain information, influence policymaking, and achieve state support (Doner and Schneider, 2000). When business associations represent most economic sectors, including most of the large corporations, they are termed encompassing business associations (Doner and Schneider, 2000; Durand and Silva, 2000). Encompassing business associations are umbrella organizations that aggregate specific sector associations and have most of the top firms as members (Schneider, 2004). Corporate elites' participation in strong encompassing business associations offers them structural opportunities to control state-business relations.

Most corporate elites follow a double-track strategy: personal networks with the political elites, while supporting encompassing business associations. Closer, informal, and personal ties outside business associations were crucial in trade liberalization and privatization (Silva, 1996; Teichman, 2001). At the same time, corporate elites used business associations to legitimize and achieve their objectives. For instance, in Peru, large business groups joined the encompassing business association CONFIEP (*Confederación Nacional de Instituciones Privadas Nacionales*) to oppose the bank nationalization project launched during Alan García's administration in 1987. The project failed, among other things, due to CONFIEP's pressure (Durand, 2000). Mexican corporate elites, associated in the exclusive CMN (*Consejo Mexicano de Negocios*) since 1962, also co-founded the encompassing business association CCE (*Consejo Coordinador Empresarial*) in 1975 to gain business allies and legitimacy as

public activists (Schneider, 2004). The CCE, with funds from the large Mexican business groups, formed the COECE (*Coordinadora de Organismos Empresariales de Comercio Exterior*) to represent the national business private sector in the North American Free Trade Agreement (NAFTA) negotiations. The encompassing business associations, although represented the whole business sector in trade liberalization talks, favored large business groups and exporters, which exasperated other local companies and small and medium-sized businesses (Teichman, 2001).

Building on studies on state-business relations in Latin America, summarized in Table 6, I found that encompassing business associations in Mexico, Chile, and Peru are consolidated, provide access to government, have a long tradition, and corporate elites have a major role in leading the business associations (Doner and Schneider, 2000; Durand and Silva, 2000; Schneider, 2004, 2010). In Brazil, significant business associations failed to emerge, do not include all sectors, and those business associations that do gather top corporate elites, such as IEDI (*Instituto de Estudos para o Desenvolvimento Industrial*), have weak decision-making power and no direct access to the state (Schneider, 2004; 2010; Weyland, 1998). Moreover, state agencies in Brazil are dispersed geographically, which supports the fragmentation of national business interest (Weyland, 1998). In Colombia, business associations emerged and consolidated, above all in specific sectors such as coffee and industry. However, the economy-wide encompassing business association CG (*Consejo Gremial*) is not frequently used by corporate elites to channel their demands to the state, as Rettberg (2005) suggests. Top Colombian corporate elites rely on particularistic state-business relations and bypass business associations (Schneider 2004). Therefore, when encompassing business associations are strong and have privileged access to policy-making process, corporate elites collectively invest in building associations' capabilities, requiring the

establishment of cohesive elite networks to harmonize interests, and to reduce transaction costs and the fear of free riders.

Table 6. Table. Encompassing business associations

	Mexico	Chile	Peru	Brazil	Colombia
Include sectorial associations	CCE: yes	CPC: yes	CONFIEP: yes	UBE: yes IEDI: no	CG: yes
Scope	CCE: economy-wide CMN: economy-wide	CPC: economy-wide	CONFIEP: economy-wide	UBE: economy-wide IEDI: industry	CG: economy-wide
Presidents were or became directors of top firms *	CCE: yes CMN: yes	CPC: yes	CONFIEP: yes	UBE: no IEDI: yes	CG: no
Access to the state	CCE: negotiating role in social pacts and trade negotiations. CMN: privileged access through monthly luncheons	CPC: privileged access	CONFIEP: privileged access	UBE: none IEDI: none	CG: occasional consultations
Involvement of large corporations	CCE: high CMN: very high	CPC: high	CONFIEP: high	UBE: low IEDI: high	CG: low
Year of foundation	CCE: 1975 CMN: 1962	CPC: 1933	CONFIEP: 1984	UBE: 1987 IEDI: 1989	CG: 1993

CCE: Consejo Coordinador Empresarial (Business Coordinator Council)

CMN: Consejo Mexicano de Negocio, before Consejo Mexicano de Hombres de Negocio (Mexican Council of Business)

CPC: Confederación de la Producción y el Comercio (Confederation of Production and Trade)

CONFIEP: Confederación Nacional de Instituciones Empresariales Privadas (National Confederation of Private Business Institutions)

UBE: União Brasileira de Empresários (Brazilian Union of Entrepreneurs)

IEDI: Instituto de Estudos para o Desenvolvimento Industrial (Institute for Industrial Development Studies)

CG: Consejo Gremial (Trade Council)

Sources: Doner and Schneider (2000); Durand and Silva (2000); Rettberg (2005); Schneider (2004; 2010); Silva (2002); Weyland (1998); * compiled by the author.

Market openness

The poorly developed financial structures in Latin America generate economies that depend vastly on developed economies in many ways, but above all, on trade. By 2013, the value of imports and the exports volume were much higher in Latin American economies than in the USA or European countries (World Bank, 2014). The degree of trade openness has possibly a more important role in emerging economies because major trade partners used to be developed economies – the USA, the European Union, Canada, and Japan (CIA, 2013) – with more experience and competitiveness in international markets. Few Latin American firms have become globally competitive.³ Latin American firms grew in protected environments of state support and are more vulnerable in international markets (Aldrichi and Postali, 2010; Hoshino, 2010; Sargent and Ghaddar, 2001). Trade openness and abolition of protectionist laws increase

opportunities of expansion for Latin American corporations, but also threaten their dominant positions in the national economy. Large corporations reduce the number of families on boards and recruit external directors with better understanding of international markets and financial connections, creating, consequently, strengthened cohesive networks.

Table 7 shows the degree of market openness by accounting the volume of exports and imports (% of GDP), the number of free trade agreements signed, those with the largest developed economies, the year they went into effect, and the main trade partners. I analyze free trade agreements, and not partial ones, because they represent great threats to all sectors and the economy as a whole. Chile has a trade-oriented economy characterized by a high number of free trade agreements (18), in effect since the early 2000s, more than a decade ago, and with all the largest economies of the world. Mexico and Peru are also very open markets. Mexico has 11 free trade agreements, since the 1990s with North American economies (NAFTA) and since the early 2000s with the Europe Union and EFTA countries (Iceland, Lichtenstein, Norway and Switzerland). Peru has a great number of free trade agreements (14) signed in the early 2010s with the world largest economies. Colombia has fewer free trade agreements (8), and those with the largest economies are in effect since 2011. In 2009, Colombia only had free trade agreements with Chile and Mexico. Brazil has very few free trade agreements (4), and none with the major economies of the world. In 2013, trade represented one third of the GDP in Mexico and Chile, a quarter in Peru, and less than a fifth of the GDP in Brazil and Colombia. Therefore, a higher degree of market openness corresponds to cohesive corporate networks.

Table 7. Trade openness of economies

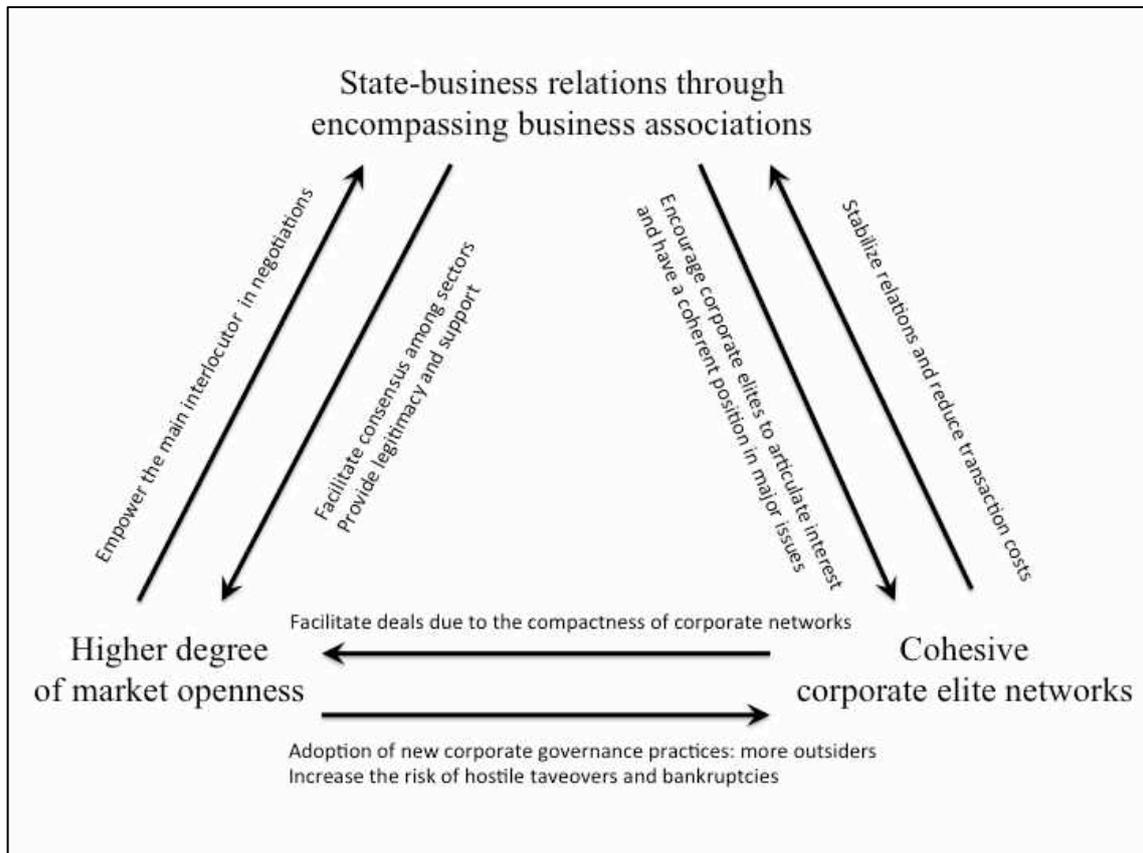
	Mexico	Chile	Peru	Brazil	Colombia
Number of free trade agreements (FTAs)	11	18	14	4	8
FTA with European Union, since	Yes, 2000	Yes, 2003	Yes, 2013	No	Yes, 2013
FTA with EFTA, since	Yes, 2001	Yes, 2004	Yes, 2011	No	Yes, 2011
FTA With USA, since	Yes, 1994	Yes, 2004	Yes, 2009	No	Yes, 2012
FTA with Canada, since	Yes, 1994	Yes, 1997	No	No	Yes, 2011
FTA with Japan, since	Yes, 2005	Yes, 2007	Yes, 2012	No	No
Main trade partner, exports (percent of total US \$ value) *	USA (78%)	China (23%) USA (12%) Japan (11%)	China (20%) USA (16%) Canada (10%)	China (17%) US (11%) Argentina (7%)	USA (36%) China (6%) Spain (5%)
Main trade partner, imports (percent of total US \$ value) *	USA (50%) China (15%) Japan (5%)	USA (23%) China (18%) Argentina (7%)	USA (25%) China (14%) Brazil (6%)	China (15%) US (15%) Argentina (7%)	USA (24%) China (16%) Mexico (11%)
Exports of goods and services (% GDP) **, 2013	32	33	24	13	18
Imports of goods and services (% GDP) **, 2013	32	33	25	15	20

Source: (SICE, 2014); * 2012 (CIA, 2013); ** World Bank (2014)

Complementarities

The interactions among corporate elite networks, state-business relations through encompassing business associations and market openness generate distinct complementarities and reinforcing dynamics. The bidirectional relations between these structures and institutions can be framed as complementarities. Structures or institutions are complementary when the presence of one reinforces the functioning of the other, that is, if their joint existence reinforces each other's stability (Deeg, 2007). Hence, it is easy to understand why choices in one domain depend on the choices in the other two domains. Figure 2 summarizes these complementarities, which are detailed and illustrated below.

Figure 2. Complementarities



a) Cohesive corporate elite networks and strong encompassing business associations

When state-business relations are institutionalized through strong encompassing business associations, large corporations become interested in participating and controlling them, since it allows corporate elites to legitimize their demands as part of the overall business sector's will. The privileged access of encompassing business associations to policy formulation encourages corporate elites to articulate interest and have a coherent position in major economic issues, therefore, corporate elites self-organize and bind together. Moreover, the consolidation of encompassing business associations as effective business-state channels emerges due to the collective participation of top corporate elites, which is facilitated by the dense networks of interlocking directorates among the largest corporations. Cohesive elite networks

stabilize transactional relationships and reduce transaction costs (Granovetter, 1985), enabling the economic investment in collective action associations. In Mexico, the well-organized business sector and the enormous investment in time and money of large corporations in business associations, such as CMN, CCE and CEOCE, reinforce and are reinforced by the cohesiveness of corporate elites. An illustrative example: in 2009 approximately one-third of the firms listed in the Mexican stock exchange contained a CMN member and they were the central directors in the network of interlocking directorates (PODER, 2012), which denotes the relevance of business associations in the formation of the corporate elite network.

b) Cohesive corporate elite networks and a higher degree of market openness

Cohesive corporate elite networks are more feasible in open economies. First, market openness generated a more competitive environment and the need for better management within corporations (Husted and Serrano, 2002). After trade liberalization, new corporate governance rules and laws imposed the inclusion of independent directors on the executive boards, and it is among these outside directors that board interlocks are most frequent (Devos et al., 2009; Mizruchi, 1996). In Mexico in 1999, the encompassing business association CCE published the Best Practices Code, and in 2001 the new Securities Market Law was enacted. Among other things, the code and the law refer to the importance of hiring independent directors (at least 20% of the boards' members). Likewise, in Chile, the Corporate Governance Law was promulgated in 2009. This law introduces new rules to reduce the insiders' advantages and places an emphasis on the role of the independent director (García, 2014). On the contrary, in Brazil and Colombia, corporate governance guidelines that underline the incorporation

of independent directors were released, but adoption is voluntary and rarely followed (da Silveira and Saito, 2008; Pombo and Gutiérrez, 2011). Most of the largest Brazilian corporations' directors are insiders and representatives of the controlling family or group (Black et al., 2010), reducing the chance of board interlocking, and thus not forming cohesive networks.

Additionally, the relative weakness and low competitiveness of Latin American firms in open markets generate the risk of hostile takeovers and bankruptcy. Firms run by central directors are less susceptible to hostile takeovers (Palmer et al., 1995) and less likely to go bankrupt (Platt and Platt, 2012). In Chile, the few business groups – Cruzat-Larraín, BHC (Banco Hipotecario de Chile) and Edwards –, closely intertwined with the technocratic market liberalizers in the Pinochet's government (Silva, 1996), were feebly interlocked with the other large business groups during the 1970s (Salvaj and Lluch, 2012).⁴ After the financial collapse of 1982, Cruzat-Larraín's firms and BCH crashed and were taken over. Other large business groups, such as Matte and Luksic, whose firms were central in the corporate network (Salvaj and Lluch, 2012), were more resilient. Corporate interlocks can be mechanisms of support, especially necessary for family-controlled firms in open competitive markets.

Finally, market openness proceeded more smoothly in economies with cohesive elite networks since political elites were able to negotiate en bloc with a narrow group of corporate elites and induced acceptance in exchange of resources. In Mexico and Chile state facilitated low-interest credits, tax relief for firms already exporting, a delay of the banking liberalization, the restriction of competition in some sectors such as telecommunication, and direct access to free trade agreements negotiations (Teichman, 2001; Thacker, 2006). The personal networks linking the most powerful businessmen and political elites determined market liberalization agreements (Camp, 2002;

Teichman, 2001), but these deals were more easily distributed and accepted by large corporations thanks to the multiple connections of corporate elites across big business and the compactness of corporate networks.

c) State-business relations through encompassing business associations and a higher degree of market openness

Market openness, specifically negotiation of free trade agreements, empowered encompassing business associations as the main interlocutors with the government to achieve consensus. When political elites recognized encompassing business associations as the official channel, these business associations gained prominence, strength and financial support from corporate elites. Moreover, the unified voice of encompassing business associations gave political elites the legitimacy and support to move trade liberalization forward, instead of being rejected by the majority of medium and small firms. In Chile, the government invited business associations to participate during negotiations of free trade agreement with the European Union. The CPC (*Conferderación de la Producción y Comercio*) and SOFOFA (*Sociedad de Fomento Fabril*) were key in reconciling the differences between landowners, industrialists and merchants. The unified business voice and collaborative strategy formed the base for political support to further strengthen the government's position in a negotiation which was considered crucial (Bianculli, 2010). In Mexico, the successful adoption and implementation of NAFTA depended on the strong political and economic support of the encompassing business associations (Thacker, 2006).

Discussion and conclusions

Although the five economies studied are characterized by the dominance of family business groups (Colpan et al., 2010) and clustered within a similar model of capitalism – hierarchical market economy – (Schneider, 2009), corporate elites vary in the patterns of networking. Financial system, ownership structure, geographic location, and board size might contribute to the formation of interlocks, but they are not decisive in explaining similarities and differences of corporate networks' cohesiveness in emerging economies.

How state business relations and trade with developed economies are regulated in the national economies influence corporate elite networks. In economies where state-business relations are mediated by strong encompassing business associations and open up to free trade with developed economies, corporate elites form cohesive networks, such as in Mexico, Chile, and to some extent, in Peru. In economies, like Brazil and Colombia, where encompassing business associations are weak, state-business negotiations are particularistic, and domestic market is more protected from foreign competition by law, corporate elites do not feel it is necessary to form cohesive networks. Looking ahead from 2016, it is likely that the Colombian corporate network will be more cohesive, since free trade agreements went into effect with the USA in 2012 and go into effect with the European Union in 2013.

The data and novel explanations presented here open up avenues of research to create new theories about elites and nurture them through analysis of emerging economies. It is necessary to compare developed and emerging economies to describe the distinguishing characteristics and projects of the business elite. For example, transnational interlocks are common and continue increasing in Europe (Heemskerk et

al., 2016), whereas in Latin America they are uncommon (Cárdenas, 2015). Future work should account for the distinct models of power and ruling around the world, which could be associated to distinct elite networks.

This research provides a benchmark for research on corporate elites in Latin America and the potential impacts of elite networks on politics and social issues. Although Latin American corporations are not the most competitive in global markets, their corporate elites accumulate enormous power within their nations due to the high overlap with political elites and the widening income inequalities. The reinforcing system between state-business relations, market openness and corporate networks strengthens corporate elites' leadership and pushes the state to be more business than politically oriented. Corporate elites' cohesion in the USA during the 1960s and 1970s contributed to business-state cooperation in providing solutions to national problems such as full employment and investment in education and research, as Mizruchi (2013) argues. On the contrary, the consequences of elite cohesion and interweaving of big business and the state have not solved major problems in Latin America countries such as unemployment, limited access to higher education, lack of public safety, high economic inequalities, and might even have undermined democracy. Future studies should go in-depth in the social impacts of corporate elite networking. At first sight, Latin American corporate elites seem or rather are disengaged from the social development of their nations.

¹ Other forms of networks that cement corporate elites are family ties and membership to exclusive social clubs, but the lack of reliable data on these undocumented ties hampers a systematic analysis.

2 A caveat: the theory of collusion as mechanism of interlock formation is not included because focuses on intra-sectorial ties, and not the overall network cohesion. For the relationship between collusion and interlocking directorates, see Buch-Hansen (2014)

3 In 2012, only 11 of the top 100 transnational corporations from developing countries had headquarters in Latin America, whereas more than 60 had their headquarters in East Asia (UNCTAD, 2014).

4 Salvaj and Lluch (2012) identified the most central corporations in the Chilean corporate network using Bonancich eigenvalue, and none firm from Cruzat-Larraín, BCH and Edwards' groups were among the most central.

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Table 3. Domestic credit provided by financial sector (% of GDP) and market capitalization of listed companies (% of GDP)

	Domestic credit provided by financial sector (% of GDP)				Market capitalization of listed companies (% of GDP)			
	2000	2005	2010	2012	2000	2005	2010	2012
Mexico	29	31.4	44.4	46.7	18.3	27.6	43.2	44.3
Chile	78.1	79.5	104.8	112.6	76.1	109.7	157.0	117.7
Peru	27.3	18.1	18.7	18.4	20.8	48.5	67.2	50.3
Brazil	71.9	74.5	96.3	110.8	35.1	53.8	72.1	54.7
Colombia	30.4	49.5	66.0	69.4	9.6	31.4	72.6	70.8
Spain	115.3	159.2	235.2	210.3	86.9	84.9	84.6	75.2
Portugal	127.9	144.0	208.9	189.4	51.7	34.9	35.8	30.9
World mean	---	158.5	163.2	165.5	---	93.7	85.1	74.2

Source: World Bank 2014

Table 6. Table. Encompassing business associations

	Mexico	Chile	Peru	Brazil	Colombia
Include sectorial associations	CCE: yes	CPC: yes	CONFIEP: yes	UBE: yes IEDI: no	CG: yes
Scope	CCE: economy-wide CMN: economy-wide	CPC: economy-wide	CONFIEP: economy-wide	UBE: economy-wide IEDI: industry	CG: economy-wide
Presidents were or became directors of top firms *	CCE: yes CMN: yes	CPC: yes	CONFIEP: yes	UBE: no IEDI: yes	CG: no
Access to the state	CCE: negotiating role in social pacts and trade negotiations. CMN: privileged access through monthly luncheons	CPC: privileged access	CONFIEP: privileged access	UBE: none IEDI: none	CG: occasional consultations
Involvement of large corporations	CCE: high CMN: very high	CPC: high	CONFIEP: high	UBE: low IEDI: high	CG: low
Year of foundation	CCE: 1975 CMN: 1962	CPC: 1933	CONFIEP: 1984	UBE: 1987 IEDI: 1989	CG: 1993

CCE: Consejo Coordinador Empresarial (Business Coordinator Council)

CMN: Consejo Mexicano de Negocio, before Consejo Mexicano de Hombres de Negocio (Mexican Council of Business)

CPC: Confederación de la Producción y el Comercio (Confederation of Production and Trade)

CONFIEP: Confederación Nacional de Instituciones Empresariales Privadas (National Confederation of Private Business Institutions)

UBE: União Brasileira de Empresários (Brazilian Union of Entrepreneurs)

IEDI: Instituto de Estudos para o Desenvolvimento Industrial (Institute for Industrial Development Studies)

CG: Consejo Gremial (Trade Council)

Sources: Doner and Schneider (2000); Durand and Silva (2000); Rettberg (2005); Schneider (2004; 2010); Silva (2002); Weyland (1998); * compiled by the author.

Table 7. Trade openness of economies

	Mexico	Chile	Peru	Brazil	Colombia
Number of free trade agreements (FTAs)	11	18	14	4	8
FTA with European Union, since	Yes, 2000	Yes, 2003	Yes, 2013	No	Yes, 2013
FTA with EFTA, since	Yes, 2001	Yes, 2004	Yes, 2011	No	Yes, 2011
FTA With USA, since	Yes, 1994	Yes, 2004	Yes, 2009	No	Yes, 2012
FTA with Canada, since	Yes, 1994	Yes, 1997	No	No	Yes, 2011
FTA with Japan, since	Yes, 2005	Yes, 2007	Yes, 2012	No	No
Main trade partner, exports (percent of total US \$ value) *	USA (78%)	China (23%) USA (12%) Japan (11%)	China (20%) USA (16%) Canada (10%)	China (17%) US (11%) Argentina (7%)	USA (36%) China (6%) Spain (5%)
Main trade partner, imports (percent of total US \$ value) *	USA (50%) China (15%) Japan (5%)	USA (23%) China (18%) Argentina (7%)	USA (25%) China (14%) Brazil (6%)	China (15%) US (15%) Argentina (7%)	USA (24%) China (16%) Mexico (11%)
Exports of goods and services (% GDP) **, 2013	32	33	24	13	18
Imports of goods and services (% GDP) **, 2013	32	33	25	15	20

Source: (SICE, 2014); * 2012 (CIA, 2013); ** World Bank (2014)

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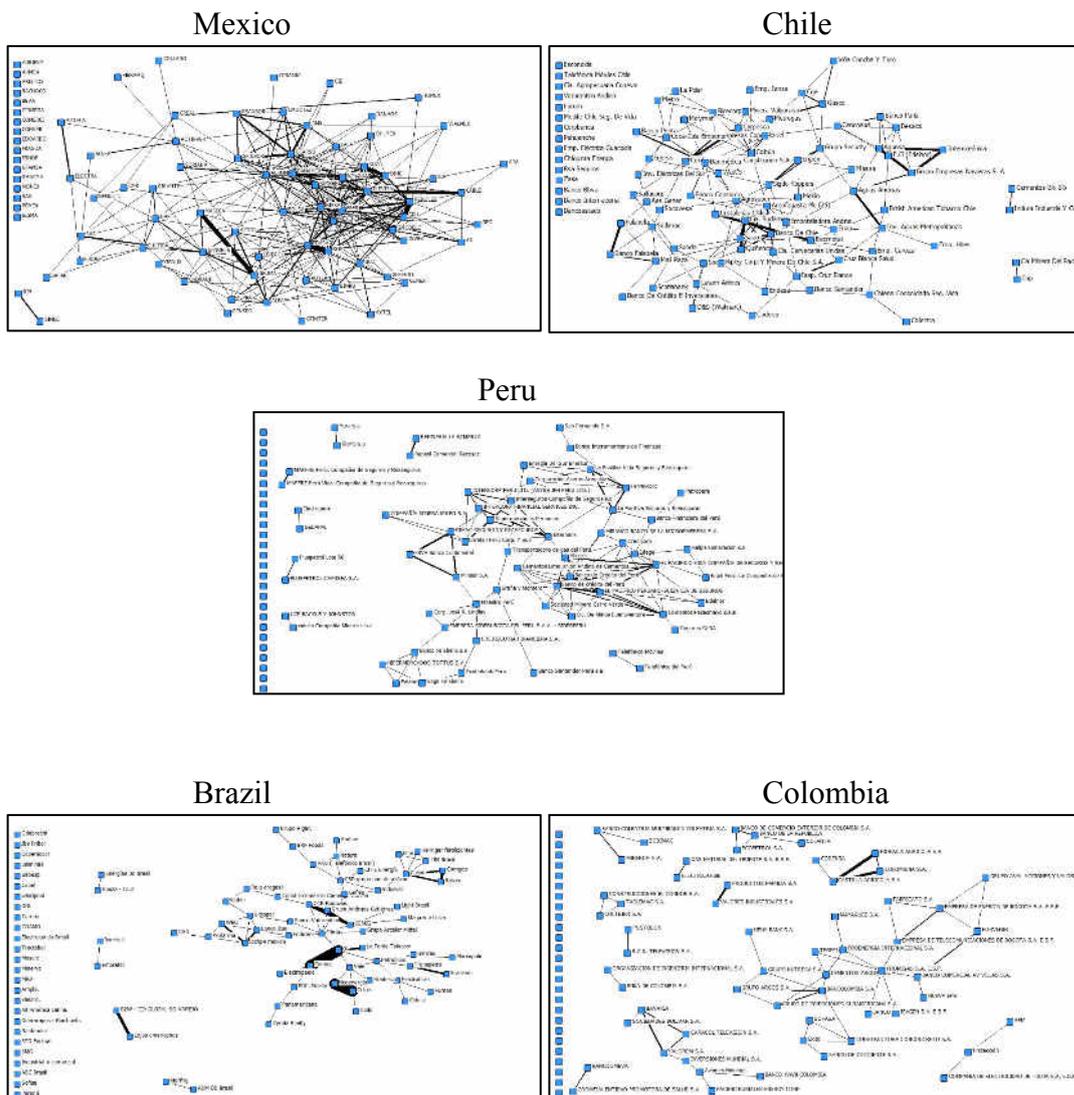
Sources: Doner and Schneider (2000); Durand and Silva (2000); Rettberg (2005); Schneider (2004; 2010); Silva (2002); Weyland (1998); * compiled by the author.

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FTA With USA, since	Yes, 1994	Yes, 2004	Yes, 2009	No	Yes, 2012
FTA with Canada, since	Yes, 1994	Yes, 1997	No	No	Yes, 2011
FTA with Japan, since	Yes, 2005	Yes, 2007	Yes, 2012	No	No
Main trade partner, exports (percent of total US \$ value) *	USA (78%)	China (23%) USA (12%) Japan (11%)	China (20%) USA (16%) Canada (10%)	China (17%) US (11%) Argentina (7%)	USA (36%) China (6%) Spain (5%)
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Source: (SICE, 2014); * 2012 (CIA, 2013); ** World Bank (2014)

Figure 1. Corporate networks*



*Nodes: corporations; lines: shared directors; tie strength: more than one shared director (multiple ties)