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Directors and syndics in corporate networks: Argentina and Italy compared (1913–1990)

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ABSTRACT

This article analyses the evolution of corporate networks in Argentina and Italy from 1913 to 1990, using an interlocking directorates technique applied to six benchmark years and the largest 25 banks and 100 non-financial companies in both countries. The descriptive statistics of the companies and directors in the sample provide input for a network connectivity analysis of the two systems, integrated with historical and structural analyses. Furthermore, this article provides the first assessment of syndics – special auditors for firms – to the network analyses. Relying on a recently established analytical framework, the authors show that the Argentine and Italian corporate networks exhibit different structures and evolutions over time. This research broadens the extant analytical framework by exploring how syndics contribute to corporate networks and how the interaction of macro, meso, and micro levels affects the evolution of syndicates in the two countries. Finally, the detailed taxonomy of syndics offers evidence of companies’ selection strategies and the historical uses of syndicate as a governance mechanism.

KEYWORDS

Corporate networks; syndics; Italy; Argentina; macro; meso; micro levels

1. Introduction

In *The Power of Corporate Networks*, the editors Thomas David and Gerarda Westerhuis collect articles that provide a long-term analysis of the rise, consolidation, decline, and occasional re-emergence of corporate networks in 14 countries during the twentieth century.¹ This volume also provides an analytical framework to explain the structure and evolution of corporate networks, according to the interplay of macro-, meso-, and micro-level elements. The macro level pertains to political (politics and policies) and macroeconomic aspects (e.g., country’s level of wealth, openness of the economy). The meso level refers to the national corporate network. The modes by which firms interact at this level (control, competition, cohesion, communication) affect the structure and features of the system of corporate interlocks. Finally, at the micro level, the relations among the three most important stakeholders

of the firm (capital, management, and labour) shape the corporate network. These three levels interact and influence one another, contributing to explain why national corporate networks react differently to external pressures.²

The Power of Corporate Networks focused mainly on the interplay of macro and meso elements, though several chapters devote relatively minor attention to the micro level. Furthermore, in Latin countries, the contributors only investigate the board of directors' network, even though such nations usually feature a system of corporate administration that is structured around two boards: the board of directors, which is the executive body of the company, and the board of syndics, or corporate controllers, that exercises control and supervision over company management.³ In an effort to advance the results available in *The Power of Corporate Network*,⁴ the current article undertakes a comparative analysis of the *syndicatura* and syndics' relationships, according to a comprehensive assessment of the structure of the corporate networks in Argentina and Italy in six benchmark years: 1914 (1913 for Italy), 1923 (1927), 1937 (1936), 1954 (1952), 1970 (1972), and 1990 (1983). For each benchmark year, we select the largest 25 banks and 100 non-financial companies for each country (cf. 1954 and 1970 for Argentina, for which we could identify only 99 and 95 non-financial companies, respectively), such that the samples are comparable. The main novelty of this study lies in its inclusion of syndics, not just directors, for the last four benchmark years. Thus, for the first time in literature devoted to corporate network historical analysis, we consider both syndics and directors in our sample, thereby revealing the distinctive roles that both actors take in ensuring inter-firm coordination.

We also deepen and extend the analysis of macro, meso, and micro levels and how they shape corporate networks. As shown in Figure 1, we explore how syndics contribute to the network structure and the interactions among the three levels. At the macro level, three major systems of corporate administration exist in capitalist economies, as established by business law. In Anglo-Saxon countries, such as Britain and the United States, the single board of directors is vested with all legal responsibility for corporate affairs; this board is appointed by shareholders. Continental Rhine capitalist countries, such as Austria, Germany, the Netherlands, and Switzerland, instead feature a two-board system. Executives form an executive board; a supervisory board appoints the former and oversees the general management of the company. This supervisory board in turn is appointed by the shareholders. Latin French-influenced countries, such as France, Italy, Portugal, Belgium, Spain, and some Latin American nations, also have a two-board system, but it involves a board of directors and a board of syndics.⁵ Both boards are appointed by shareholders. The board of syndics

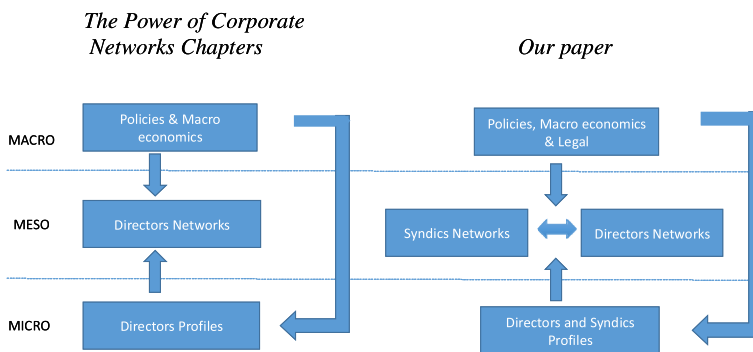


Figure 1. Framework for analysing corporate networks. *The Power of Corporate Networks*.

monitors the financial probity of the firm but has no management responsibility; the board of directors functions similarly to the single board in the Anglophone system.⁶

We propose that the interplay among the macro, meso, and micro levels explains why national corporate networks react differently to major external pressures in the long run, but it also affects corporate governance practices. Existing literature explores the use of supervisory boards as a governance control mechanism in countries with German-type, two-board systems of corporate administration but has not addressed the role of syndics in Latin French-influenced countries.⁷ To fill this gap, we pursue a more fine-grained understanding of the interactions among the macro, meso, and micro levels, such that we describe how the network of directors interacts with those who have control over performance (syndics).

Sufficient data are available to support this comparison between Italy and Argentina, such that we include directors and syndics for four benchmark years between the mid-1930s and 1990. That is, the choice of these two countries reflects our research goal to put syndics at the centre of the analysis. This comparison also should be fruitful, because these two countries share some cultural and customary values, and some of their macro elements are interrelated. The evolution of business law in the two countries also has been similar in many respects, even if some differences exist.

This article also contributes to auditing history research. Most previous studies explore the origin and evolution of auditing professional practices in England and the United States;⁸ we address how networks of internal auditors and corporate controllers (*síndicos*) evolved in two Latin economies, Argentina and Italy, during the twentieth century. Unlike the United States or United Kingdom, Argentina and Italy feature a large proportion of firms with private ownership and owner-management, so agency conflicts between controlling owners and minority shareholders are difficult to mitigate with conventional control mechanisms such as boards of directors.⁹ Jensen and Meckling suggest independent controllers as an effective control and monitoring mechanism;¹⁰ we challenge this assertion for the cases of Italy and Argentina.¹¹ Rather, *syndicatoria* have been questioned when syndics lack competence and independence, which are two fundamental attributes for fulfilling their role. As we discuss, syndics did not establish professional qualification requirements until the 1940s in Italy and 1970s in Argentina. The independence of syndics in Argentina for most of the twentieth century also was doubtful, because they were embedded in directors' networks; many syndics also were the controllers of the companies or else participated on some boards as directors and on others as syndics. This was less the case in Italy.

The next two sections detail the macro level of our framework. Specifically, Section 2 provides an overview of the two countries' economic performance and structure in the twentieth century, and Section 3 analyses business law in both nations, with special regard to the role of the syndicatoria. Section 4, pertaining to the meso level, offers a comparative analysis of their corporate network structure, distinguishing among the directors' network, the syndics' network, and the total network. In Section 5, we address the micro level by presenting a taxonomy of syndics in Italy and Argentina that helps clarify the companies' strategies for selecting them and the historical use of this institution to generate interlocks. The analysis in Section 6 refers to changes and differences in the network structure of the two countries, in light of the interaction among macro, meso, and micro elements. Section 7 concludes.

2. Argentina's and Italy's economic performance and structure in the long run

Despite their similarities at the macro level, Argentina and Italy have displayed very different economic performance over the period considered. As Figure 2 shows, in 1913 Argentina's real gross domestic product (GDP) per capita was about twice as high as Italy's. The average growth rate was very slow, with many ups and downs, in both countries until the late 1940s. In 1948, Argentine GDP per capita was still double that of Italy, but starting from the early 1950s, Italian growth became much faster, whereas Argentina did not leave its slow growth path.

After World War II, at the macro level, the Italian economy benefited from its reintegration into a revived international economy. The Marshall Plan applied in Italy, more so than in the other European countries, to introduce mass production technologies from the United States.¹² Italy's position in the international economic system was strengthened by its role as one of the founding members of the European Economic Community (EEC) in 1957. The EEC boosted international trade, as reflected in Italy's openness index, which increased constantly after the late 1950s.¹³ European markets enhanced the fast growing domestic demand, and low prices for natural resources (e.g., oil) enabled, during this 'Golden Age', the growth of energy-intensive industries, such as steel, petrochemicals, and motor vehicles.¹⁴ Italy's fast growth required financial resources, so to attract investments, it had to develop more effective corporate control mechanisms, including interlocking directorates.

Conversely, after the Great Depression, Argentina abandoned its agricultural export-led model and started to close its economy, noting that international conditions had become increasingly unfavourable to serving the world market as a staple producer. In the 1940s, it adopted an extreme ISI policy,¹⁵ such that the performance of its economy, including several stops and starts before 1990,¹⁶ was particularly poor after 1970, marked by institutional volatility, frequent policy changes, strong redistributive pressures, and a closed economy.¹⁷ These factors prevented Argentina from seizing the benefits of international trade during a time of significant expansion. Economic crises became more frequent, and in the 1980s, the

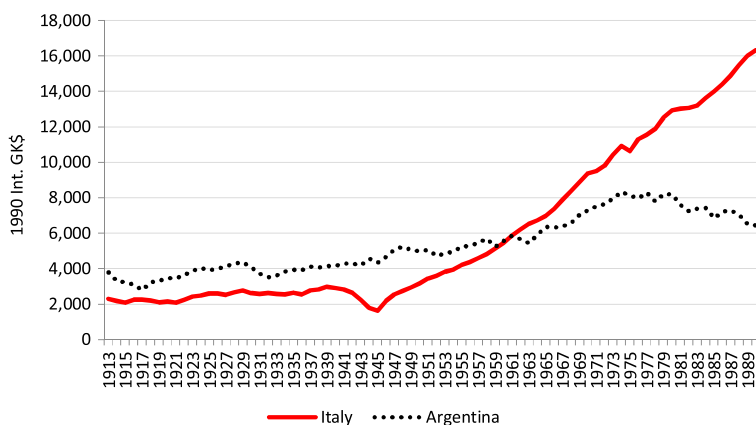


Figure 2. GDP per capita in Argentina and Italy (1913–1990). Source: Own elaboration, based on A. Maddison, *Historical Statistics of the World Economy: 1-2008 AD*, 2009 (<https://www.ggd.net/MADDISON/oriindex.htm>).

Argentine economy performed at its worst level in the post–World War II period.¹⁸ By 1990, Italy's real GDP per capita thus was 2.5 times higher than Argentina's.

The fast growth path Italy followed in the second half of the twentieth century further enlarged this difference between the two economies. With its larger population, Italy has always had a higher total GDP than Argentina, but the gap between the two countries remained stable until the late 1940s, after which it increased substantially.

Significant differences also existed in the economic structures of the two economies. An analysis of the top 100 non-financial firms across several benchmark years in the twentieth century shows that manufacturing companies consistently were most numerous in both countries,¹⁹ but in the years prior to World War II, Argentina featured more companies operating in primary activities (agriculture, cattle, land), and it traded according to an agricultural, export-based model. The adoption of ISI prompted a surge of manufacturing firms, which peaked at 81 in 1970, while primary activity firms disappeared from the top 100 (Table 1). Twenty years later, manufacturing firms were still the most numerous but had dropped to 65, followed by trade companies and then mining and oil companies – suggesting the persistent importance of resource-based production in Argentina. The list of the Italian top 100 non-financial firms instead has long been characterised by a prominent role of electricity companies; from 1913 to 1952, they accounted for more than one quarter of the total (Table 2). They nearly disappeared by 1972 though, due to the nationalisation of the electricity industry in 1962. Their disappearance left room for further increases among manufacturing firms and, to a lesser degree, service, transport, and trade companies.

Table 1. Top 100 non-financial firms in Argentina by industry.

Industry	1914	1923	1937	1954	1970	1990
Services	1	4	1	0	1	1
Public utilities and telephones	9	4	14	5	3	4
Trade	6	12	11	8	1	13
Manufacturing	27	43	34	72	81	66
Mining and oil	1	4	9	4	7	7
Shipping	2	1	1	0	0	2
Railways and tramways	21	2	12	0	1	0
Building	4	3	1	1	0	4
Transport and communications	7	5	6	0	1	3
Agriculture	16	16	6	1	0	0
Holding companies	2	6	5	8	0	0
Total firms	100	100	100	99	95	100

Table 2. Top 100 non-financial firms in Italy by industry.

Industry	1913	1927	1936	1952	1972	1983
Services	3	4	2	3	9	7
Public utilities and telephones	27	32	35	26	2	3
Trade	2	6	1	1	3	5
Manufacturing	46	39	47	55	74	69
Mining and oil	2	1	1	3	4	2
Shipping	5	9	0	4	3	2
Railways and tramways	11	4	3	2	1	0
Building	2	1	0	0	1	0
Transport and communications	0	3	7	6	8	9
Agriculture	1	2	3	0	0	0
Holding companies	0	0	0	0	0	0
Total firms	100	100	100	100	100	100

3. Business law and syndication in Italy and Argentina

The history of auditing practices in European and Anglo-Saxon countries is well researched,²⁰ in studies that highlight their longevity and pervasiveness as governance procedures, as well as their different evolution patterns worldwide. However, most literature focuses on the accounting profession and the development of independent professional audit firms, proposing that the need for auditing has developed in response to fundamental agency issues.

The origin of auditing practice in England dates to the medieval craft and merchant guilds, and early joint stock companies and it was not imposed by law. Auditing was a voluntary device for monitoring contracts between managers and those who supplied capital.²¹ However, independent reporting on the custodianship of business management became more widely practiced, so when the UK Companies Act in 1844–1845 required directors to keep accounts and then required these accounts to be audited by persons other than the directors, Parliament was merely formalising a practice that had existed in some business sectors for a century or more.²² Similarly, US corporations (e.g., railroads, banks) used committees of auditors well before they were required to do so by law.²³ In these early industrialised countries, the use of professional auditors has mainly been associated with market forces: They developed corporate control mechanisms because they needed investments to finance their industrial expansion.

Conversely, internal audits and third-party supervision of corporate governance mainly were imposed by law in Italy and Argentina, and in both cases it was a widely debated and contentious issue. In Italy and Argentina, industrialisation was late and mainly promoted by the state. Their financial markets were poorly developed, and they required other control mechanisms.

In Italy, the bases of a modern system of corporate administration were set by the 1882 Commercial Code, which abolished governmental authorisation for setting up joint stock companies. Instead, it demanded more rigorous conditions, set by law, and assigned control of legality to civil courts. The Code imposed a two-board system of corporate administration, in which shareholders had the legal authority to appoint two boards:²⁴

- (1) Board of directors (*Consiglio di amministrazione*), which is the executive body of the assembly of shareholders. Administrative power belongs jointly to its members, but executive power is usually delegated to one or few, who are called managing directors (*amministratore delegato*).
- (2) Board of syndics (*Collegio sindacale*), which consists of three to five regular syndics (*sindaci effettivi*) and two alternative syndics (*sindaci supplenti*) who cannot be dismissed during their period in office. Their duty is to exercise control and supervision over the management of the company, monitor decisions by the board of directors, and make decisions if the first board fails in its duties. This second board is legally responsible, jointly with the first board, for the decisions of the board of directors.

In 1899, Argentina reformed its Commercial Code. Similar to Italy, board members were appointed at shareholders' meetings and entrusted with the immediate management of corporate businesses. The only requirement to be a director was to be a shareholder of the company. Inspired by the Italian code, Argentina incorporated a requirement for an internal statutory controller (*síndico*) or oversight body for corporations in 1889.²⁵ This body was to

be managed by one (or more) syndics appointed by corporation shareholders, who would serve as company inspectors, with broad, varied duties. The syndic could take part in board meetings (but not vote) and call special meetings if the board failed to do so; this role also was responsible for monitoring the financial probity of the enterprise. Despite the many similarities, legislation in the two countries differed in two important respects. First, in Italy, corporations' syndicate was a collegiate body, whereas Argentina's law required a corporation to have 'at least' one syndic, but not a fixed or minimum number. Second, anyone can be a syndic, including a family member or a friend of the controllers in Argentina, but the Italian code established restrictions based on consanguinity or affinity.²⁶

From the outset, the introduction and use of syndicate to oversee controlling majority stockholders raised some questions and fuelled debates in both countries. In Italy, the 1882 Code established that, in the presence of a well-grounded suspicion that the boards of directors and of syndics had failed to exert their duties, a qualified minority of shareholders could turn to the commercial court, which might order inspections of the company's accounts by appointing one or more commissioners. However, commissioners did not offer effective protections for minority shareholder. Even if commissioners found irregularities in the management of the enterprise, the court might just convene another shareholders' meeting, controlled by the same majority that had appointed the directors and syndics whose irregularities had been denounced.²⁷

These shortcomings were only partially overcome by the 1942 Civil Code, which imposed professional qualifications for syndics, who thereafter had to belong to the special list of chartered accountants (*Revisori Ufficiali dei Conti*), established by the Ministry of Justice, or to professional rolls determined by law. Moreover, courts were entrusted with more powers in the event of irregularities; they could revoke directors and syndics and appoint an official receiver in their place. The receiver in turn might propose a liability action against directors and syndics.²⁸

In Argentina, leading legal experts²⁹ rapidly recognised the need for independent audits and argued bitterly over the role of syndics, noting that their application had proven less effective than in Italy and citing several reasons for syndics' failure in Argentina. First, the selection criteria allowed syndics to be chosen by the same majority that appoints the board they are expected to control. Second, a one-person syndicate cannot represent groups outside the majority, rendering effective control impossible in large companies. Third, laws did not require certified, professional qualifications. Fourth, syndics were limited by short tenures, and they could be revoked by a simple majority vote of shareholders present at a meeting.³⁰

Despite these critiques, it was not until 1972 that a new corporation law was passed, which was in turn largely amended in 1983. Since then, it has not been mandatory to be a shareholder of the company to be eligible as a director. Corporations can divide competencies between their board and an executive committee (consisting of some directors). With regard to the role of syndics, Argentina's 1972 law – similar to Italy's 1942 Code – established a specific professional qualification for syndics (i.e., they must be accountants or lawyers) and cited incompatible traits that could guarantee their impartiality. Nonetheless, the audit system continued to be widely criticised. Syndics' uselessness led to a more candid approach in the subsequent 1983 law that allowed, in some cases, for corporations to do away with syndics.

Therefore, both Italy and Argentina introduced syndics into their business law, but the state regulations designed to oversee corporations differed, and companies selected their

internal controllers (syndics) in different and constantly evolving ways – a point that is less pertinent and thus less explored in Anglo-Saxon auditing history. Therefore, in the next section we provide a historical perspective on whether syndics created their own networks of corporate interlocks and what they might have added to networks generated by directors.

4. Networks' structure

4.1. Directors' networks

Our sample contains many more Italian directors than Argentine ones (see Appendixes 2 and 3); Italian firms have larger boards than Argentine ones. The average size of an Italian board of directors never falls below 10, with a peak of 14 members in 1927. Conversely, the average size of Argentine boards fluctuates between a minimum of four in 1923 and a maximum of seven directors in 1970.

In the entire period under investigation, the Italian directors' network also features a large, main component that includes no less than 90 per cent of the firms in the sample, though this value only reached 76 per cent in 1983. The main component in the Argentine network instead is much smaller, with a peak of 61 per cent in 1937. Following a slow decrease in number until 1970, this decline accelerates, such that firms in the main component plummeted to just 16 per cent in 1990.

The percentage of isolated and marginal firms also is much higher in Argentina than in Italy in all the networks.³¹ In Argentina, it fluctuated around 50 per cent from 1914 to 1954, after which the network became even less connected. Isolated and marginal firms jumped to more than 80 per cent in 1970 and then remained stable. Yet in the Italian network, isolated and marginal firms first decreased, from 20 per cent in 1913 to 11 per cent in 1952, but then rose to 25 per cent in 1972 and 46 per cent in 1983.

The total number of interlocks between firms is always much higher in Italy. It reached a peak in 1927, decreased in 1936, rose again in 1952, and then fell considerably in 1972 and 1983. The number of interlocks in Argentina varied less over time. Furthermore, the lowest values occurred during the most recent benchmarks, such that the gap between the two countries has narrowed, even if the decrease started in 1954.

The average degree offers the best index to assess network connectedness, because unlike a density index, it is not influenced by the size of the sample. The values for Italy are always higher than those of Argentina. As we would expect, the dynamics of the average degree are similar to those of the total number of interlocks. In Italy, the average degree reached a peak in 1927, then decreased substantially in 1936, due to the collapse of the major universal banks. It rose again in 1952, before falling dramatically in 1972, after the nationalisation of the electricity companies in 1962, and declined further in 1983 to reach its minimum level. Conversely, the average degree in the Argentine network both was lower and varied less over time. A corporate network in this country emerged before World War I, and then the interwar years saw its consolidation, with the average degree reaching its highest value in 1937. The fall in the average degree between 1937 and 1954 was mainly associated with utilities' nationalisation during the Peron administration, which displaced railway and electricity companies from the centre of the network. The lowest values appeared in the most recent benchmark, 1990. Thus, despite their different evolution, both countries eventually disentangled their networks in more recent years.³²

4.2. *Syndics' networks*

The available data enable us to analyse syndics' networks for the four most recent benchmark years, from 1936 to 1990. The difference between the two countries in the average number of syndics per board is even sharper than that for directors (see Appendixes 2 and 3). As we noted, Italy's legislation establishes that joint stock companies must have a board of 3–5 regular syndics. Thus, throughout the period investigated, the average size of the board of syndics is about 4, with a minimum of 3.5 in 1936 and a maximum of 4.5 in 1952. In contrast, Argentina's law allows companies to appoint a single syndic, which is what most firms did. As a result, the average number of syndics per company in Argentina was slightly more than 1 from 1937 to 1970, and though it rose to 2.3 in 1990, this level still was about a half the average number of syndics of Italian firms in 1983.

In both countries, the main component of the syndics' network is smaller than that of the directors' network. In Italy though, it is nonetheless sizeable, including about 50 per cent of the firms in 1936, reaching a 78 per cent peak in 1952 before declining. Yet in 1983 it still included 55 per cent of the firms. In contrast, in all benchmark years, the main component of the Argentine syndics' networks was very small, never exceeding 10 per cent of total firms. Thus, contrary to their Italian counterparts, Argentine syndics do not seem to form a real network but instead constitute a few clusters, surrounded by a great number of isolated firms. Figures 3 and 4 visually show the difference in the structure of the syndics' network in the two countries.

This element may reflect the specific role of syndics in performing oversight on Argentine firms. For the most part, the companies surveyed featured concentrated ownership structures, and their owners appointed someone they trusted to serve as a syndic (who thus did not serve the legal purpose of protecting minority shareholders). As noted previously, the lack of professional requirements for syndics (and dominant characteristics of the ownership structure and owner management practices of the largest Argentinean companies) likely explain why a parallel syndics' professional network never emerged alongside the directors' corporate network.

Both countries exhibit a very high percentage of isolated and marginal firms in the syndics' network. In Argentina, the latter accounted for more than 80 per cent of total firms in all

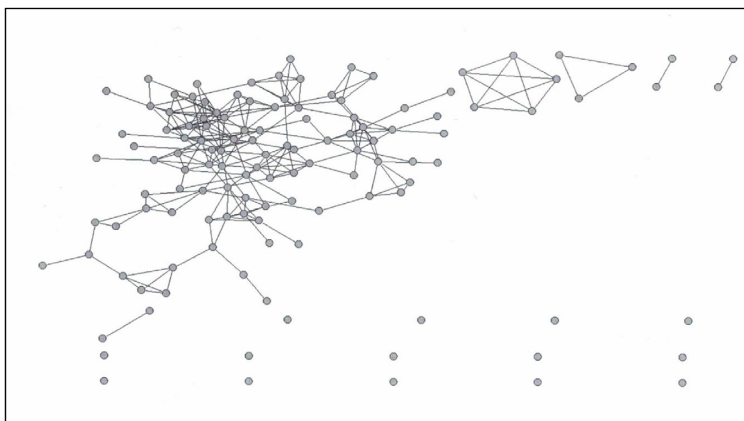


Figure 3. Syndics' network in Italy in 1952.

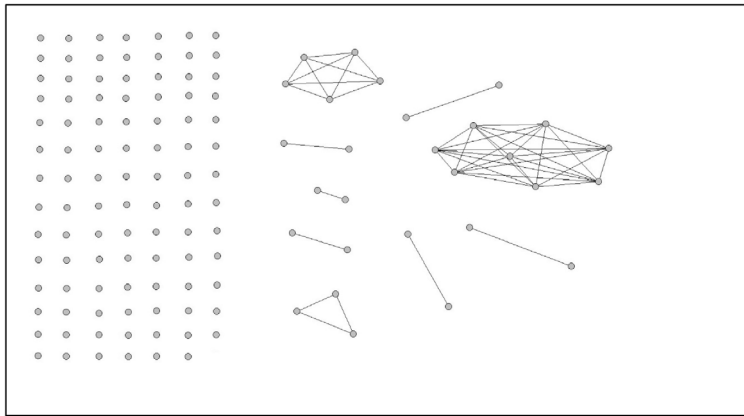


Figure 4. Syndics' network in Argentina in 1937.

benchmark years; in 1990, every firm in the syndics' network was isolated or marginal. In Italy, isolated and marginal firms dropped from 54 per cent in 1936 to 37 per cent in 1952, but then surged to 58 per cent in 1972 and to 70 per cent in 1983.

As we might expect, the total number of interlocks and average degree revealed much higher values in Italy. The average degree reached a 4.0 peak in 1952,³³ dropped to 2.4 in 1972, and then remained nearly stable at 2.2 in 1983. Thus, the decline of the syndics' network seems to follow a pattern that is quite distinct from the directors'. Both networks peaked in 1952, but since then, the directors' network decreased by 44 per cent as of 1972 and another 54 per cent from 1972 to 1983, such that the overall decline between 1952 and 1983 was 74 per cent. The syndics' networks declined by a similar proportion (40 per cent) by 1972, but then became more resilient and declined by only 9 per cent from 1972 to 1983, for an overall decline of 45 per cent. Conversely, in Argentina, both the total number of interlocks and the average degree vary less over time, and their values are negligible. The lowest values occurred in the most recent benchmark year, 1990.

This overall evidence suggests that in Italy we are in the presence of two networks, clearly distinct from each other: the directors' network and the syndics' network. The two networks present different structures, such that the syndics' network is looser, with more isolated and marginal firms, a smaller main component, fewer interlocks, and a lower average degree. Nonetheless, its very existence enables Italian firms to draw on and share valuable information that improves their business practices.

The disconnect between the two networks is clear from an analysis of the most central companies, according to betweenness centrality. In 1936, only one of the ten most central companies of the directors' network appears in the top ten of the syndics' network. The number of companies that the two rankings have in common was zero in 1952, two in 1972, and one again in 1983. Moreover, very few interlocks linked the boards of directors and of syndics (Table 3). Inter-board interlocks never exceeded 10 per cent of total interlocks,³⁴ ranging from about 6 per cent in 1936 (78 out of 1,280) to little more than 9 per cent in 1983 (50 out of 551), mostly as a consequence of the dramatic drop in the directors' interlocks.

The Italian directors' network is denser, but its connectedness varies more over time. The syndics' network is looser but seems more resilient, such that it declines less after 1972. As a result, the structures of the two networks converge in the final benchmark year.

Table 3. Total number of interlocks (IDs) by type of interlock.

Year	Directors' IDs (1)		Syndics' IDs (2)		Inter-board IDs (3)		Total IDs	
	Italy	Argentina	Italy	Argentina	Italy	Argentina	Italy	Argentina
1936–37	1,010	364	192	47	78	19	1,280	430
1952–54	1,511	267	281	24	110	9	1,902	300
1970–72	783	192	159	23	62	21	1,004	236
1983–90	355	173	146	4	50	3	551	180

(1) Director–director IDs, such that individuals sit on the boards of directors of two firms.

(2) Syndic–syndic IDs, such that individuals sit on the boards of syndics of two firms.

(3) Director–syndics IDs, such that individuals sit on the board of directors of one firm and on the board of syndics of another firm.

In contrast, Argentina seems to have just one network that includes directors and some clusters of syndics. It is always less dense than the Italian one, which suggests a proxy of a less developed professional identity, which can hinder the organization of a more connected, powerful syndic network. The syndics exhibited diverse professional legitimacy and were more embedded in the directors' network; until the 1970s, the syndicate worked as an additional vector of cohesion, but without giving rise to a proper syndics' network. As a result, this network in Argentina turned out to be fragmented, with less organizing capability to perform its control function compared with the Italian version.

4.3. Total network

In Argentina, syndics do not form a real network but only a few clusters that are embedded in the directors' network and surrounded by a large number of isolated firms. As a result, the structure and evolution of the total network (including both directors and syndics) closely mirrors that of the directors' network (Appendix 3). This assessment is confirmed by the centrality analysis: in all benchmark years, the rankings of the ten most central firms in the total network are exactly the same as in the directors' network.

In Italy though, we encounter two distinct networks, such that the syndics' network has a greater influence on the structure and evolution of the total network. Syndics add more to the connectedness of the total network, and their network is more resilient over time. Thus, to analyse the total network that includes syndics and directors, we must reconsider how the networks disentangled in the final decades of the twentieth century. We observe that the decline of the network is weaker when we focus on the total network, not just the directors'. After the post-World War II peak in 1952, the average degree of the directors' network decreased by 44 per cent by 1972 and another 54 per cent by 1983, so the overall decline between 1952 and 1983 was 74 per cent. But in the total network, the decline was similar (43 per cent) by 1972, then just 42 per cent from 1972 to 1983. Its overall decline between 1952 and 1983 was 66 per cent.

The increased influence of the syndics' network is also evident in the centrality analysis. From 1936 to 1972, the most central companies in the total network closely mirror those in the directors' network, with either eight or nine of the ten most central firms in common. The rankings change only marginally; most firms hold the same position in both networks or perhaps move up or down by one position across networks.

The picture changes substantially in 1983 though. At that point, of the most central companies in the total network, only four appeared in the top ten of the directors' network too

(and one of them is in the top ten of the syndics' network). Three were in common only with the syndics' network. Finally, three companies in the top ten of the total network did not appear among the most central companies in either the directors' or syndics' networks.

5. Syndics

This study represents the first attempt in corporate network historical analysis literature to consider syndics as well as directors. Thus, in this section we explore in more detail who syndics are and how their profiles have affected the control function assigned by law. The proposed taxonomy of syndics in Italy and Argentina provides evidence of companies' strategies for selecting them and the historical uses of this institution (syndicature), despite what the law has explicitly established, as we detailed in Section 3.

We identify three categories of syndics: 'multiple', 'hybrids' (syndics-directors), and 'pure and non-recurrent'. Multiple syndics hold this position in more than one company; hybrids sit on multiple boards but may have positions as either syndics or directors. Finally, pure and non-recurrent syndics act as syndics in just one company.

Both Italy and Argentina incorporated syndicates in their business law, but Italian law established the figure of the *Collegio Sindacale*, a board of syndics with three to five regular syndics and two alternate syndics, whereas Argentine law required only that 'at least one syndic' be included in the board of directors. These differences affected both the number of syndics and their distribution among the three categories (Tables 4 and 5).

Italian law, since 1942, also has imposed more constraints on syndics' professional qualifications (i.e., at least one of the three syndics must be a certified accountant or lawyer). Accordingly, we observe an increase in the percentage of multiple syndics and a gradual

Table 4. Syndics in Argentina.

	1937	1954	1970	1990
1) Firms reporting syndic's information	95	103	102	38
2) Syndics (number of positions)	100	106	123	87
3) Syndics (individuals)	81	96	108	83
4) Multiple syndics	9	4	9	4
5) Multiple syndics (%)	11.1	4.2	8.3	4.8
6) Hybrids	9	13	15	3
7) Hybrids (%)	11.1	13.5	13.9	3.6
8) Pure syndics (3–6)	72	83	81	80
9) Pure syndics (%)	88.9	86.5	75.0	96.4
10) Pure & non recurrent syndics (%) (9–5)	77.8	82.3	66.7	91.6

Table 5. Syndics in Italy.

	1936	1952	1972	1983
1) Firms reporting syndic's information	120	125	124	124
2) Syndics (number of positions)	422	563	489	470
3) Syndics (individuals)	320	346	372	365
4) Multiple syndics	55	87	83	76
5) Multiple syndics (%)	17.2	25.1	22.3	20.8
6) Hybrids	30	33	31	16
7) Hybrids (%)	9.4	9.5	8.3	4.4
8) Pure syndics (3–6)	290	313	341	349
9) Pure syndics (%)	90.6	90.5	91.7	95.6
10) Pure & non recurrent syndics (%) (9–5)	73.4	65.4	69.4	74.8

reduction, though less marked, of hybrids in Italy (lines 5 and 7, Table 5). In comparison, Argentine law has no limitations on professional qualifications, so a higher percentage of hybrids occurs for most periods, with a lower percentage of multiple syndics (lines 5 and 7, Table 4). The situation in Argentina changed after the mid-1970s though, following the 1972 passage of the new Commercial Companies Act and then its amendment in 1983. Since then, the Syndicature is not mandatory (cf. companies with state supervision), and syndics have been required to be lawyers or public accountants, with qualified titles. These legal changes exerted a significant impact on the use of the Syndicature; the number of syndics substantially decreased, as did the percentage of hybrids, from 14 per cent in 1970 to 4 per cent in 1990. The decrease in the percentage of multiple syndics was less marked, from 8 per cent to 5 per cent (line 5, Table 4).

With regard to their biographical profiles, we find some significant differences in the backgrounds of the syndics in each of the three categories. Multiple syndics are mostly members of a professional elite, whereas hybrids mainly represent a business or social elite. Multiple syndics in Argentina are lawyers, accountants, or former auditors. They tend to be affiliated with several companies in the same industry, such as Eduardo Richardson, who in 1937 served as a syndic for five companies in the electricity industry. Others are trusted individuals, such as Alejandro Drysdale, a multiple syndic in 1954, who was a well-known lawyer and confidante of German, English, and American companies.³⁵ The accountant J.J. Waite was Chief Accountant in the Buenos Aires Great Southern Railway, then later at Deloitte, Plender and Griffiths, the company's London auditors.³⁶ His time as an auditor at Deloitte allowed him to build a strong reputation and a diverse network of business contacts, so that by 1937, Waite was a syndic on the boards of eight companies in diverse industries.

In Italy, multiple and pure syndics are professionals, such as certified accountants, lawyers, or consultants, with low public profiles. This status seemingly became more pronounced after the enactment of the 1942 Civil Code, which may help explain why syndics, at the meso level, developed their own network, distinct from the directors'. A remarkable example of a pure multiple syndic in 1936 was Arnaldo Marcantonio: He held a university degree in economics and business administration and worked as a business consultant (*commercialista*) and a university lecturer. In 1936, he became a regular syndic of Credito Italiano, Italy's second largest bank, an office he kept until 1953, but he also was syndic for another six firms: three large telecommunication companies (Stipel, Stet, and Telve), two shipyards (Cantieri Riuniti dell'Adriatico and Odero Terni Orlando), and one shipping company (Adriatica Società di Navigazione). At the same time, he served as the central manager of the state-owned holding IRI. After World War II, he became a member of several ministerial committees and consultant for several public bodies and authorities.³⁷ By 1952 he was serving as a syndic for the finance company Setemer too. Then 1972 he appeared again in our sample, this time as a hybrid, and in 1983, he was a syndic for the finance company Società Gestioni e Partecipazioni. In the more recent benchmark years, pure multiple syndics grew even more low-profile, probably indicating their membership in a strictly professional elite of certified accountants and business consultants. Most, if not all, of them are *commercialisti* with university degrees in economics or business administration.

We have argued that hybrids constitute a business and social elite, rather than a professional elite, and this claim is well supported by their educational backgrounds. Most hybrids have substantial education, with bachelor's degrees in engineering or jurisprudence; unlike pure syndics, only a minor proportion of them have educational backgrounds in accountancy,

economics, or business administration. Some remarkable examples emerge in 1936 in Italy, such as Carlo Bobbio (BA: jurisprudence), Giorgio Valerio (BA: engineering), Enrico Ottolenghi (BA: engineering), and Tullio Torchiani (BA: jurisprudence). The first two were executives at Edison, Italy's largest electricity company, and they became managing directors at the end of World War II. Ottolenghi joined IRI at its foundation in 1933, which in turn appointed him as syndic of several electricity companies. Then after World War II, IRI also appointed him as a director of several firms. Torchiani started his career at IRI too, but in 1954, he was appointed as the managing director of Bastogi, one of Italy's largest finance companies, an office that he retained until the early 1970s.³⁸ In 1972 he still appeared as a hybrid, with eight positions as a director and one as a syndic.

As in Italy, a common trait of Argentine hybrids was that they belonged to a traditional social or business elite. Most of them were members of traditional Argentine families, founders of business groups, or trusted partners and managers – often recruited in Europe – of local groups. Until 1954, many were foreign businessmen or Argentine entrepreneurs of foreign origin, with strong ties to their ancestral communities. This trait illustrates the significant role of immigration in the creation of Argentina's corporations. An exemplary hybrid in 1954, Eugenio Castelli, was an Italian engineer, industrialist, and financier who studied in France, Switzerland, and England and was associated with the Italian-Argentine business community.³⁹ Tito Arata was affiliated with three electricity companies, a tramway company, and a firm related to Tornquist business group in 1937; he was also a conservative lawyer, journalist, professor, government official, and member of the traditional social elite.⁴⁰ Finally, some hybrids were shareholders and/or family members of local business groups, such as Pedro and Emilio Soulas, César Bunge, Carlos Menéndez Behety, Alberto De Bary Tornquist, and Alejandro Shaw.

In 1970, we see a change in the background of the hybrids in Argentina though; they become more professional. This change is likely a response to the macro conditions, particularly the dominant business environment and the changes in the ownership structure of the largest firms. In this period, businesspeople were less prominent as links; the most central directors were lawyers, engineers, or certified public accountants. They kept low profiles in the late 1960s, and businesspeople adopted this goal as political violence grew. In Argentina's troubled business environment, by 1970, firms tended to include well-connected legal and financial advisors and government officials on their directors' boards, because they knew how to navigate the changing conditions created by political and economic instability, powerful labour unions, new economic regulations, stabilisation-oriented economic plans, and idiosyncratic credit allocation practices. In this period, the two main hybrids were renowned professionals (in law and accounting, respectively) but not businesspeople. Alfredo Lisdero had a doctoral degree in economics from Turin University and arrived in Argentina in 1938, where he opened an accounting-legal firm that was retained by numerous companies with ties to the Italian-Argentine community and Italian multinationals investing in Argentina (e.g., Banco de Italia y Río de la Plata, Fiat). A member of one of Argentina's most traditional families, Horacio Beccar Varela was a lawyer whose father founded the Beccar Varela Law Firm in 1897. This firm was a leading expert in corporate, banking, and financial law and represented multiple companies, particularly foreign ones. Both Lisdero and Beccar Varela – with their distinct connection styles and types – functioned as central players, forging ties between foreign companies (the former with Italian companies, the latter with American ones) and firms owned by local business groups.⁴¹

6. Interaction among macro, meso, and micro levels

Italy had a denser corporate network than Argentina for the whole period investigated. In this section, we present a more fine-grained analysis of the interaction among the macro, meso, and micro elements, which is crucial for explaining the observed difference. Furthermore, we broaden the framework suggested by two chapters on Italy and Argentina published in *The Power of Corporate Networks* by exploring how these interactions affected the use of the syndicate and the syndics' network. The main findings are summarised in Table 6.

In Italy, at the macro level, the enactment of the 1882 Commercial Code led to the formation of a national corporate network. At the meso level, German-style universal banks (e.g., Banca Commerciale Italiana and, to a lesser extent, Credito Italiano) were central actors, from the start of the twentieth century to the early 1930s. These banks, created in the 1890s, were a major driver of Italy's first industrial spurt.⁴² The 1920s reinforced their positions within the network. When a post-World War I financial crisis made it impossible for many companies to repay their debts, the banks transformed their 'frozen' loans into share capital and became real owners of many industrial companies. Interlocking directorships were superimposed on these relationships.⁴³

When the Great Depression struck, the system collapsed, and both the banks and their industrial clients were bailed out by the state. Two important events occurred at the macro level in the 1930s that had profound impacts at the meso level for the remainder of the century. First, in 1933, the government created the big, state-owned holding IRI, which took over the universal banks and their industrial securities. In 1937, it became a permanent institute. Second, in 1936, a new banking law imposed a clear-cut separation between banks and industry, thereby putting an end to universal banking: Banks could extend only short-term credit, and their share participation in non-financial companies was strictly limited. At the same time, industrial credit was entrusted to newly created, specialised institutes.⁴⁴

Thus at the meso level, former universal banks lost their central position in networks, replaced by a new core formed by the larger electricity companies and state-owned enterprises (SOEs). This surge of SOEs was, to a large extent, a result of the impact of IRI's creation at the micro level. Although IRI was organised by public law, it could hold shares in companies that were ruled by private law. In this framework, both state and private shareholders constitute the share capital of many SOEs, thus favouring joint directorships between SOEs and private firms.⁴⁵

The first benchmark year for which we have information about syndics (1936) further shows that the institution of boards of syndics, by the 1882 Commercial Code (macro), eventually led to the formation of a syndics' network, clearly distinct from the directors' network (meso). In 1942, another major event at the macro level, the enactment of Italy's new Civil Code, exerted an important effect at the micro level, in that it required the professionalisation of syndics; at the meso level, this shift also led to the consolidation and development of the syndics' network. Firms could now rely on professional multiple pure syndics to draw on and share valuable information and improve business practices.

After the 1960s, the Italian corporate network started to decline. Its disentanglement was triggered by a major break-up at the macro level, namely, the nationalisation of the electricity industry in 1962 which had a profound impact at the meso level. Electricity companies thus disappeared from the core of Italian capitalism. By 1972, a new, thinner core had emerged



Table 6. Interplay of macro, meso, and micro levels in Argentina and Italy.

	Macro	Meso	Micro
Macro		<p>1882 Commercial Code:</p> <ul style="list-style-type: none"> → Formation of the Italian corporate network. <p>1936 Banking Law:</p> <ul style="list-style-type: none"> → Banks lost centrality. 1933–37: creation of IRI and its transformation into a permanent institute. 1942 Civil Code: → SOEs became a central actors in the network. 1942 Civil Code: → Consolidation of the syndics network. 1962 Nationalisation of the electricity industry: → Electricity companies lost centrality. 1970s state rescue of larger private groups: → Disconnection between SOEs and private firms. 	<p>1933–37: creation of IRI and its transformation into a permanent institute:</p> <ul style="list-style-type: none"> → Both the state and private shareholders were present in the share capital of SOEs. → It favoured joint directors between SOEs and private firms. 1942 Civil Code: → Professionalisation of syndics. 1970s state rescue of larger private groups: → Private shareholders disappeared from the share capital of SOEs. 1942–1952:
Meso	<p>1899 Commercial Code:</p> <ul style="list-style-type: none"> → Formation of the Argentine corporate network. → Syndics' network fragmented, with low independence from the directors' network. <p>Mid-nineteenth century–1929 primary export-led model:</p> <ul style="list-style-type: none"> → DBG centrality. <p>1930s–1955:</p> <ul style="list-style-type: none"> → Great Depression, electrical and utility companies take more central roles (until nationalisation process). 1955–1976 Vertical stage of ISI policies: → MNE centrality. Traditional firms and groups lost centrality. → State as financial provider (BANADE) and entrepreneurial state, with SOEs' insular behaviour. 1976–1990: new DBGs centrality 1955–: political and economic instability: → Loss of network cohesion. → 1970s: tendency toward syndic professionalisation. 		
Micro	<p>1899 Commercial Code:</p> <ul style="list-style-type: none"> → Board members were appointed at shareholders' meetings and entrusted with the immediate management of corporate businesses. → Corporation should have at least one syndic. Personal qualities not required. → Hybrid syndics: occupy positions as directors as well as syndics. 1972 Act Nr. 19,550 established a specific professional qualification for syndics (accountants or lawyers): → Professionalisation did not provide more independence to syndics. 1983 Act Nr. 22,903 allowed, in some specific cases, corporations to do away with syndics: → Reduction of the syndicature. 		<ul style="list-style-type: none"> → Professionalisation of the syndics' network provides more independence to syndics.

Notes: Argentina; Italy. This table is a symmetric, double-entry matrix that summarises the interaction of the macro, meso, and micro levels. In the upper part, the diagonal details the interplay of the three levels for Italy. In the lower part of the matrix, below the diagonal, we summarise the dynamics of the three levels in Argentina. For example, macro changes such as the 1882 and 1899 Commercial Codes generated the formation of the Italian and Argentine corporate network (meso-level change).

which included several manufacturing companies allied with Mediobanca, Italy's sole merchant bank at that time, and with the larger SOEs. In 1983, the cohesion of the network further and sharply declined, due to the changing role of SOEs and their disengagement from private companies.⁴⁶ This changed role in turn was a consequence of the interplay of macro, meso, and micro elements. Responding to the economic crisis of the 1970s, the state assigned (macro) SOEs the mission of rescuing larger private groups. Massive losses forced several SOEs to reduce their capital, and in many cases their subsequent capital increase was underwritten only by the state so that recapitalisation brought with it a substantial change in the ownership structure of the SOEs involved (micro), with the almost total disappearance of private shareholders. Then at the meso level, these developments reduced the scope for generating interlocking directorates based on share relationships between SOEs and private firms. Another major consequence at the micro level was that the bailouts pushed a new generation of managers, more closely tied to the governing political parties, to the front of the SOE system. Private companies grew more reluctant to appoint them to their own boards, lest they became instruments for the parties to expand their influence on private business. At the meso level, this aspect had the effect of further sharpening the disconnection between SOEs and private firms.

In Argentina, two major elements at the macro level affected the formation of a national corporate network: the agricultural export-led model followed between the mid-nineteenth century and the Great Depression, and the enactment of the 1899 Commercial Code. Their impact at the meso level meant that the Argentine network was much less dense than the Italian one, principally due to the minor role of banks in Argentina which were only partially substituted by diversified business groups (DBGs). The latter served as connectors between foreign capital and local financial markets; they were mainly built by immigrants or Argentine entrepreneurs whose families were of foreign origin and who maintained strong ties with investors and businesses in their respective communities, both inside and outside Argentina. These DBGs generally began with trade operations, then diversified into finance, agribusiness, real estate, industry, and other activities. Thus, they pursued unrelated diversification and relied on their own banks or financial institutions.⁴⁷ The DBGs also made use of interlocking directorates as a control mechanism, so that they are well-represented at the centre of the network in 1923.⁴⁸ For example, the Tornquist business group owned seven firms included in our eigenvector-based top ten ranking.

At the micro level, the 1899 Commercial Code affected the actual use of the syndicature and its role, at the meso level, in shaping the network's structure. As we have seen, unlike Italy, where firms had to appoint a board of syndics, Argentine firms could appoint just one syndic, which is what most of them did. Without any restrictions based on consanguinity or kinship, these syndics were chosen by the same majority that appointed the board of directors, in a context marked by concentrated ownership and the dominance of non-listed firms among the largest companies.

These arrangements at the macro level prevented the formation, at the meso level, of a syndics' network in Argentina. Syndics lacked professional identity and cohesion; they were mostly part of a social and business elite, embedded in the directors' network and characterised by an inner circle of foreign executives, business owners, and members of the traditional elite. As bitterly argued by one jurist, it was very easy for directors to 'appoint a syndic or syndics responding to them, and since shareholders show little interest in administrative formalities, it turns out that the syndics elected by the coalition of directors, collude with them, transforming this control body ineffectual and worthless.'⁴⁹

After the Great Depression, the passage to ISI policies marked a major turning point at the macro level. State intervention in the economy increased,⁵⁰ but it had a much lower impact at the meso level than in Italy. That is, unlike their Italian counterparts, Argentine SOEs lacked an effective networking strategy, with the exception of SOMISA (Sociedad Mixta Siderúrgica Argentina), which was created in 1947 to produce steel.⁵¹ Their insular behaviour resulted from frequent overhauls of their boards, in response to another macro element, namely, political instability. This key factor helps explain the lower connectedness of the Argentine network and its early decline, starting in the 1950s.⁵²

Since the mid-1950s, horizontal ISI – that is, the substitution of local manufacturing of light consumer goods with imports – was superseded at the macro level by vertical ISI, which aimed to internalise all manufacturing of consumer goods, together with backward integration of intermediate products and capital goods. For this purpose, the government gave a key role to multinational enterprises (MNEs), encouraging them to expand capital-intensive, technologically sophisticated industries.⁵³ New foreign players and the growth of MNEs that already had been established in Argentina changed the ownership structure of larger corporations. By 1970, half (53%) of the non-financial companies in our sample were foreign; domestic private companies ranked second. This change at the macro level generated modifications in the MNEs' corporate strategies too, so at the meso level, they became central players in the corporate network.

The 1970s and 1980s, in a more troubled economic environment characterised by high inflation rates (macro), saw a new Argentine network (meso), marked by the entrance of some 'new' DBGs, such as Techint and Fortabat. In contrast with the groups that emerged during the agricultural export-led period, these second-generation DBGs pursued related diversification. They kept their core business in an industrial sector, moved only to a limited extent into financial services, and did not own banks. In the 1980s, they developed active board relationships as part of their business strategies. These DBGs benefited from state-sponsored investment and export promotion schemes, as well as market reserves, better access to public purchases, and contracts favoured by state policies.⁵⁴

In a comparative perspective, explaining the evolution of an institution such as the syndicature might benefit from an analysis of the interplay of macro, meso, and micro elements. We posit that the syndicature was less questioned in Italy than in Argentina, because in the former nation, it was more effective as an instrument to monitor firm managers (micro). The process could have to do with the laws that regulate the board of syndics in Italy (macro). Using a board of syndics, rather than a single syndic, improved their performance and independence because collusion between the manager/owner and syndic is more difficult and costly when it requires bribing an entire board rather than a single person (micro). In Argentina, legislative flaws meant that the syndicature was ineffective as a governance control mechanism.

Another contrast arises from the distinct impacts of the professionalisation of syndics. In Italy, this requirement was introduced earlier, by the 1942 Civil Code (macro), and it led to the consolidation and development of the syndics' network (meso). Sharing syndics offered a device for firms to both monitor managers and share valuable information. But in Argentina, the professionalisation of the *syndicatura* only really began in 1970, a process associated with the need for more technical skills in the troubled, complex business environment. Only in 1972 did Act No. 19550 establish a professional qualification for syndics and require their impartiality. In 1983, a new law even allowed some corporations to do away with syndics, eventually leading to the decrease in the presence of syndics in corporate networks.⁵⁵

7. Conclusions

These findings indicate that historical analysis is fundamental to understanding the evolution of national corporate governance systems.⁵⁶ By relying on an analytical framework that is based on the interplay of elements acting at the macro, meso, and micro levels, as suggested in the recently published *The Power of Corporate Networks*, this article presents a thorough comparative analysis of the structure of the corporate networks in Argentina and Italy in six benchmark years during the twentieth century. As a major novelty, for the first time among corporate network historical analyses, we include syndics as well as directors.

The long-term evolution of directors' and syndics' networks also proved dissimilar, though in both countries, the lowest connectedness occurred in the most recent benchmark years. The Italian directors' network was much denser overall. At the meso level, this status resulted from the active interlocking strategies of the central actors of this network: first the larger, German-style universal banks and then, after their collapse during the Great Depression, larger SOEs. In Argentina, banks had a minor role and thus could be substituted for by DBGs and MNEs; though the SOEs' area expanded after the adoption of the ISI policy, they lacked an effective networking strategy, due to the frequent overhauls of their boards in Argentina's volatile political and economic context.

As a result of differences at the macro level, such as changes in the ownership structure and legislation defining the syndicate, syndics' networks in the two countries were very dissimilar. Argentine syndics did not form a real network but instead featured a few clusters, surrounded by a great number of isolated firms. In Italy, syndics gave rise to their own network, clearly distinct from the directors' network, which was looser but more resilient. It declined much less after 1972, and its influence on the total network became especially substantial in the final benchmark year (1983).

We also present a taxonomy of syndics which provides evidence about the companies' strategies at the micro level and the historical uses of the syndicate. Pure and multiple syndics are more numerous in Italy and constitute a professional elite, which likely explains why they succeeded in forming a network of their own. The syndicate was less questioned in Italy than in Argentina, probably because in the former nation it was more effective as an instrument to monitor firm owners and managers. The Argentine case reveals that the failure to introduce earlier changes to the auditing regulations likely prompted the lack of support from the business community, which was not disposed to entrust the audit of their books to independent controllers. Practices (beyond the laws) to develop a more professional internal auditing system developed slowly, as the majority of firms were subject to family control or were subsidiaries of MNEs. With these insights, this article contributes to literature on board interlocks but also to the analysis of professional networks and how they interact with corporate networks.

Notes

1. David and Westerhuis, *The Power of Corporate Networks. A Comparative and Historical Perspective*. The analysis of corporate interlocks has its origin in modern sociology and has gained, in recent decades, significant traction in all social sciences, including economics and economic and business history. This approach can serve a dual function: complementing traditional case study methods while also offering broad overviews of the corporate systems under investigation, which help verify different theoretical perspectives. The need to introduce new methodologies

- and integrate more economic, business, and social history also has been stressed by Jones, van Leeuwen, and Broadberry, 'The Future of Economic, Business and Social History'.
2. David and Westerhuis, 'Comparing Corporate Networks in a Long-Term Perspective'.
 3. The board of syndics is fundamentally an auditing board; its function does not coincide with those of the supervisory board in the German system of corporate administration.
 4. Rinaldi and Vasta, 'Persistent and Stubborn: The State in Italian Capitalism, 1913–2001'; Lluch and Salvaj, 'Longitudinal Study of Interlocking Directorates in Argentina and Foreign Firms' Integration into Local Capitalism (1923–2000)'.
 5. Countries such as Chile, Brazil, and Colombia did not introduce syndics for example. Argentina did so after the 1889 Reform, following the 1882 Italian Code.
 6. Scott, 'Theoretical Framework'.
 7. It is worth noting that both major international research projects on corporate networks that take comparative perspectives focus only on directors and do not include syndics in their analyses of Latin countries. See Stokman, Ziegler and Scott, *Networks of Corporate Power. A Comparative Analysis of Ten Countries*; David and Westerhuis, *The Power*.
 8. Watts and Zimmerman, 'Agency Problems, Auditing, and the Theory of the Firm: Some Evidence'.
 9. Schulze, Lubatkin, Dino and Buchholtz, 'Agency Relationships in Family Firms: Theory and Evidence'.
 10. Jensen and Meckling, 'Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure'.
 11. Watts and Zimmerman, 'Agency Problems'.
 12. Fauri, *Il Piano Marshall e l'Italia*.
 13. Felice and Vecchi, 'Italy's Modern Economic Growth'; Vasta, 'Italian Export Capacity in the Long-Run Perspective 1861–2009: A Tortuous Path to Stay in Place'.
 14. Felice and Vecchi, 'Italy's'.
 15. López, 'Multinational enterprises'.
 16. Barbero, 'Business Groups in Nineteenth and Twentieth Century Argentina'.
 17. Taylor, 'Capital Accumulation'.
 18. That decade ended in hyperinflation; Argentina's annual inflation rate reached a 3,058 per cent peak in 1989. See Jones and Lluch, 'Argentine and Chilean Business in the Second Global Economy', Table 9.2.
 19. The criteria for the selection of the top 100 non-financial firms are set out in Appendix 1.
 20. Hay, 'Internal Control: How it Evolved in Four English-Speaking Countries'; Praquin, 'Commercial Legislation and the Emergence of Corporate Auditing in France, 1856–1935'.
 21. Jensen and Meckling, 'Theory of the Firm'.
 22. Boockholdt, 'A Historical Perspective on the Auditor's Role: The Early Experience of the American Railroads'.
 23. Watts and Zimmerman, 'Agency Problems'. In the United States, railroad companies in the 1840s and 1850s relied on auditors to investigate fraud and verify account balances, as well as to report on the company's financial status to stockholders. See Boockholdt, 'A Historical Perspective'.
 24. Teti, 'Imprese imprenditori e diritto'.
 25. Halperín, *Manual de Sociedades Anónimas*.
 26. Rossi Cimmino, *Funciones de los síndicos y fiscalización oficial de las sociedades*.
 27. Teti, 'Imprese'.
 28. De Luca and Verrilli, *Dizionario economico finanziario e contabile. Corredato da riferimenti normativi, confronti interdisciplinari e profili delle maggiori società italiane*.
 29. Rivarola, *Sociedades Anónimas*; Halperín, *Manual*.
 30. For example, 'In our country, it is common practice to appoint as receivers, or trustees, business figures who do not have the necessary preparation in accountancy, economic and administrative technicalities, legislation, and who, very often, lack the required time due to their numerous occupations. They accept these positions sometimes out of commitment, sometimes for self-adornment, allowing the directors and managers to free themselves from the substantial concerns this custodianship entails', Rossi Cimmino, *Funciones*, p. 51.

31. Similar to international research on corporate networks with a comparative perspective, we define marginal firms as those of with degree 1 or 2, such that they are interlocked with one or two other firms. See David and Westerhuis, *The Power*.
32. This trait seems common to most capitalist nations; nearly all countries experienced an erosion of their corporate networks in the final decades of the twentieth century. A key explanatory factor seems to be a change in banks' strategy, such that they disengaged from industrial companies as they moved from traditional lending toward fee-based businesses, especially investment banking. This changing strategy was closely linked the effects of globalisation and financial deregulation, which deeply affected the banks' activities. See David and Westerhuis, *The Power*.
33. The increase in the syndics' network connectedness in 1952 was probably a consequence of the enactment of the 1942 Civil Code that imposed more constraints on syndics' professional qualifications. As a result, we observe, after that year, an increase in the percentage of multiple syndics, from 17.2 per cent in 1936 to 25.1 per cent in 1952. In subsequent benchmark years, it never fell below 20 per cent.
34. Inter-board interlocks are generated by individuals (syndics–directors) who sit on more than one company, in positions as either syndics (in some companies) or directors (in some other companies).
35. Lluch and Salvaj, 'Longitudinal Study'; Sommi, *Los capitales alemanes en la Argentina*.
36. 'The Railway Gazette', 1920, p. 199.
37. Conti and La Francesca, *Banche e reti de banche nell'Italia postunitaria*.
38. Rinaldi, 'Entrepreneurs and Managers (1913–1972)'.
39. Lluch and Salvaj, 'Fragmentación del empresariado en la época de la industrialización por sustitución de importaciones (ISI) en la Argentina: Una aproximación desde el estudio de la red corporativa (1954–1970)'.
40. *Who's who in Latin America. Argentina, Paraguay and Uruguay*, 1950.
41. Lluch, Salvaj and Barbero, 'Corporate Networks and Business Groups in Argentina in the Early 1970s'.
42. Gerschenkron, *Economic Backwardness in Historical Perspective*.
43. Confalonieri, *Banche miste e grande industria in Italia 1914–1933*, vol. I and vol. II.
44. La Francesca, *Storia del sistema bancario italiano*.
45. Colli, Rinaldi and Vasta, 'The Only Way to Grow? Italian Business Groups in Historical Perspective'.
46. Rinaldi and Vasta, 'The Italian Corporate Network after the 'Golden Age' (1972–1983): From Centrality to Marginalization of State-Owned Enterprises'.
47. Barbero, 'Business Groups'.
48. Lluch and Salvaj, 'Longitudinal Study'.
49. Rodríguez, *La sindicatura: proposiciones relativas a su reforma en la legislación argentina*.
50. Belini and Rougier, *El Estado empresario en la industria argentina*.
51. Belini, *La Industria Peronista. Políticas públicas y cambio estructural, 1946–1955*.
52. In contrast, in neighbouring Chile, the state played an important role in fostering networks of Chilean capitalism. See Salvaj and Couyoumdjan, '“Interlocked” Business Groups and the State in Chile (1970–2010)'.
53. Lluch and Salvaj, 'Longitudinal Study'.
54. Barbero, 'Business Groups'.
55. Conversely, in the United States and the United Kingdom, shareholders' auditors were replaced by professionals much earlier, and this change was not promoted by law but rather by companies' need to respond to market pressures. See Watts and Zimmerman, 'Agency Problems'.
56. Bucheli, Salvaj and Kim, 'Non Market Strategies during Transitions: The Case of Chile'.
57. Imita.db is one of the largest data sets for joint stock companies with a historical perspective. For details, see Vasta, 'Appendix'. The database is available online: <http://imitadb.unisi.it>
58. Data for companies, boards of directors, and boards of syndics are available for 1911, 1913, 1921, 1927, 1936, 1952, 1960, 1972, and 1983; for balance sheets, time series are available for the spans from 1900 to 1971, 1982 and 1983.

59. The threshold was set at one million Italian lire until 1940, with the sole exception of 1914, when it was set at 500,000 lire. In 1952, the threshold was raised to 10 million, then to 25 million in 1956, 50 million in 1961, and 100 million from 1964 through 1972. For 1983, the threshold was raised to 2 billion lire.
60. For 1983, there are not enough official data on the representativeness of the sample. According to a recent estimate, such a weight could reach 83.3 per cent of the total of Italian joint stock companies. See Cerise, 'apporto'.

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Appendix 1

Sample characteristics and sources

The source we used for Italy is *Notizie statistiche sulle principali società italiane per azioni*, edited by the Associazione fra le Società Italiane per Azioni. The Imita.db database is an electronic version of this source.⁵⁷ This data set contains information regarding the boards of directors, boards of syndics, and balance sheets of a large sample of Italian joint stock companies for several benchmark years.⁵⁸ It includes all the joint stock companies listed on one of the Italian stock exchanges, together with those companies located in Italy whose share capital at the close of the last balance was higher than a set threshold, which varies from year to year.⁵⁹ Overall, this data set contains data on more than 42,000 companies, more than 300,000 directors and syndics, and more than 100,000 balance sheets. Representativeness, in terms of capital, is very high; the sample covers well over 90 per cent of the total universe in every year but the first two benchmark years (1911 and 1913) and the last one (1983), for which the proportion is around 85 per cent.⁶⁰

We focus on six benchmark years: 1913, 1927, 1936, 1952, 1972, and 1983. For each benchmark year, we selected the top 125 companies by value of share capital, according to the following division: 25 financial (excluding insurance companies) and 100 non-financial firms. Members of both the boards of directors and the boards of syndics were included.

For Argentina, we also selected the top 125 companies for six parallel benchmark years: 1914, 1923, 1937, 1954, 1970, and 1990. However, data availability required us to use share capital as a selection criterion only for the first four benchmark years, whereas for 1970 and 1990, we used annual sales. Similar to Italy, we included both directors and syndics.

We collected data for the four benchmark years for Argentina from the *Argentine Year Book* (1914) and *Guía de Sociedades Anónimas, Responsabilidad Limitada y Cooperativas* (1923, 1937, and 1954 issues). Data for 1970 and 1990 came from different sources, including *Guía de sociedades anónimas* (Chamber of Private Corporations, 1972), *Boletín Oficial de la República Argentina*, *Boletín Oficial de la Provincia de Santa Fe*, National Exchange Commission, Dun's 1990 *Latin America's top 25,000*, *Guía bancaria de la República Argentina* (BCRA 1954), *Bancar* (1973), *Guía General del Sistema Bancario Argentino* (1991 issue), and Argentina's Corporation Control Authority (Inspección General de Justicia). We also gathered data from stock exchange manuals, financial yearbooks, and firms' annual reports.

Appendix 2

Italy's network characteristics

Year	1913			1927			1936			1952			1972			1983			
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Total number of firms	125			125	120	125	125	125	125	125	125	125	125	124	125	125	124	125	125
Total number of seats	1,356			1,749	1,306	1,728	1,531	1,531	1,531	1,531	1,531	1,531	1,482	1,482	1,971	1,280	1,280	1,750	1,750
Total number of persons	925			1,042	851	1,141	969	969	969	969	969	969	1,083	1,083	1,422	1,043	1,043	1,391	1,391
Average size of the board	10.8			14.0	10.4	3.5	13.8	12.2	4.5	16.3	11.9	3.9	15.8	10.2	3.8	14	3.8	14	14
Percentage of firms in main component	90%			94%	95%	48%	96%	95%	78%	98%	98%	89%	89%	63%	98%	76%	56%	86%	86%
Number of marginal firms (M)	14			11	11	35	6	8	32	5	22	49	13	30	55	21	55	21	21
M as percentage of total number of firms	11%			9%	9%	29%	5%	6%	26%	4%	18%	40%	10%	24%	44%	17%	44%	17%	17%
Isolated firms (I)	11			7	6	30	5	6	14	2	10	22	3	28	32	14	32	14	14
I as percentage of total number of firms	9%			6%	5%	25%	4%	5%	11%	2%	8%	18%	2%	22%	26%	11%	26%	11%	11%
Total number of interlocks	906			2,000	1,010	192	1,280	1,511	281	1,902	783	159	1,004	355	146	551	146	551	551
Average degree	10.2			19.6	10.9	2.9	13.2	14.9	4.0	17.2	8.3	2.4	10.1	3.8	2.2	5.9	2.2	5.9	5.9

Notes: I = directors' network; II = syndics' network; III = total network.

Appendix 3

Argentina's network characteristics

Year	1914			1923			1937			1954			1970			1990			
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Total number of firms	125	-		125	95	125	125	103	103	125	123	102	123	127	38	127	38	127	127
Number of seats	675			500	775	100	875	850	105	850	861	122	984	876	91	965	91	965	965
Number of persons	515			478	585	81	656	709	95	791	800	107	891	805	83	885	83	885	885
Average size of the board	5.4			4	6.2	1.1	7	6.8	1	7.6	7	1.2	8	6.9	2.4	7.5	2.4	7.5	7.5
Percentage of firms in main component	58%			44%	61%	8%	64%	60%	8%	66%	32.5%	4%	50%	16%	18%	18%	16%	18%	18%
Number of marginal firms (M)	24			27	30	15	30	29	5	30	35	16	37	21	5	28	5	28	28
M as percentage of total number of firms	19%			21%	24%	16%	24%	23%	5%	24%	28%	16%	30%	17%	13%	22%	13%	22%	22%
Isolated firms (I)	40			50	35	67	29	42	91	36	65	78	47	84	33	76	33	76	76
I as percentage of total number of firms	32%			40%	28%	71%	23%	34%	88%	29%	53%	76%	38%	66%	87%	60%	66%	87%	87%
Total number of interlocks	348			261	364	47	405	267	24	300	192	23	236	173	4	180	4	180	180
Average degree	4.7			2.7	5.8	1	6.9	3.3	0.46	4	3.2	0.45	2.2	1.2	0.21	1.4	0.21	1.4	1.4

Notes: I = directors' network; II = syndics' network; III = total network.