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The Italian corporate system in a network perspective (1952–1983)



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HIGHLIGHTS

- The Italian Corporate board network is very resilient and its main properties remain stable over decades.
- The Italian corporate board network is not different from other countries of the same variety of capitalism, and it is close to a small world model.
- Community analysis reveals two main adjustments: after the nationalization of the electrical industry and after the financial crisis of the late Seventies.

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ABSTRACT

We study the Italian network of boards in four benchmark years covering different decades, when important economic structural shifts occurred. We find that the latter did not significantly disturb its structure as a small world. At the same time, we do not find a strong peculiarity of the Italian variety of capitalism and its corporate governance system. Typical properties of small world networks are at levels which are not dissimilar from those of other developed economies. Even the steady decrease of density that we observe is recurrent in many other national systems. The composition of the core of the most connected boards remains also quite stable over time. Among the most central boards we always find those of banks and insurances, as well as those of State Owned Enterprises (SOEs). At the same time, the system underwent two significant dynamic adjustments in the Sixties (nationalization of electrical industry) and Seventies (financial restructuring after the "big inflation") which are revealed by modifications in the core and in the community structure.

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1. Introduction

According to institutional economists, the institutional differences among countries, as well as the evolution of their institutions, shape their corporate system. The most widely accepted view distinguishes two main varieties of capitalist economies [1]: liberal market economies (LME), like U.S., U.K., Canada, Australia, New Zealand, Ireland, and coordinated market economies (CME), like Germany, Japan, Sweden, Austria. These two types are distinguished by how firms coordinate among themselves and with other social actors. In LMEs firms primarily coordinate through markets and related institutions. In CMEs they rely instead on non-market forms of interaction, where culture, informal rules, and History play a major role. These represent important elements of common knowledge that lead agents to coordinate on a solution rather than another.

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Italy is considered to belong to CMEs due to the presence of extensive relational contracting and of arrangements based on the exchange of private information and collaborative methods (cross ownership, shareholders agreements) [2–4]. Starting from this background, we investigate the Italian network of corporate boards in four benchmark years covering different decades, when important economic structural shifts occurred. The first year (1952) falls before the onset of a strong period of economic development (the so called "economic miracle"); the second year (1960) follows the strong wage claims shock to economy in the midst of the "economic miracle", which pushed the subsequent change in the parliamentary majority to include the Socialist Party (1957–1963); the third year (1972) marks the end of the economic "Golden Age" of the Sixties and precedes the advent of a decade of monetary disorder, inflation and economic stagnation; the last year (1983) is subsequent to the end of the great inflation of the Seventies and the dawn of the Neoliberal Age.

Throughout this period, the Italian institutional framework was dominated by the State, which controlled entirely money creation and credit [5]. The banking system, which was since 1933 predominantly State owned, managed the funding of non financial companies. Through the lever of credit, policy makers oriented corporate investments according to the general mission of boosting national industrial production [6]. State Owned Firms (SOEs) strengthened the public nature of the system [7]. A single private investment bank was established, Mediobanca, whose mission was to maintain the stability and the cohesion of the system of private enterprises, preventing takeovers by outsiders, especially if they were foreigners. Mediobanca took strategic equity positions, promoting cross shareholdings, and shareholders'/voting agreements among the main groups [8].

The rest of the paper is organized as follows. In Section 2 we shortly describe the data source of our analysis. In Section 3, we recall the main results of the literature on board networks and analyze the Italian system. In Section 4 we perform the core–periphery partition of the Italian network. In Section 5 we perform the community decomposition of the same network and detect the statistically significant characteristics of each community. Finally, Section 6 concludes. The technical apparatus of the analysis is detailed in three appendices.

2. Dataset

We employ the digitalization of the serial source "Notizie statistiche sulle principali società per azioni" published between 1908 and 1926 by Credito Italiano and afterwards by the Associazione fra le società italiane per azioni, up to 1984. This historical source contains information regarding companies, boards of directors and balance sheets of a large sample of Italian joint-stock companies for several benchmark years. It includes all the joint-stock companies located in Italy whose equity was higher than a given threshold, which varied from year to year. On the whole, the dataset contains data on more than 38,000 companies, almost 300,000 directors, and more than 100,000 balance sheets. Its representativeness, in terms of equity, is very high: the sample covers well over 90% of the total in all but the first two benchmark years (1911 and 1913) and the last one (1983), for which the proportion is around 85%.

This paper uses the company dataset and the list of board of directors for the years 1952, 1960, 1972, 1983. For each year the network of boards is obtained as described in Appendix A. These are symmetric weighted networks, where the strength of connections between boards is given by the number of shared directors.

3. Network properties

The literature on interlocking directorates which employs network theoretical methods has detected a number of recurrent properties of board networks.³ These are low average distances coupled with relatively high values of the average clustering coefficient [9–13]. It is well known that this combination characterizes the "small world model" [14]. The typical values of average distance range, depending on network size, between 3 and 6, while the clustering coefficient ranges between 0.20 for the US, Swiss networks [10,12] and 0.57 for the German network [9]. A third recurrent characteristics is degree assortativity: if a network is assortative, nodes with a similar degree value are more likely to be neighbors. This feature, which is ubiquitous in social networks, has been detected in different national [13,15] and international datasets [16,17].

Board networks are typically very sparse, which means that only a small fraction of the potential connections are put in place. This feature is reflected in density values of the order of up to 5% for smaller samples [15] and down to 0.4% for larger samples [9]. At the same time, most nodes belong to the same, large, connected component, the so-called "giant component". This feature cannot be related to some special characteristics of board networks since their average node degree always exceeds unity, and a network formed by independent random links would display the same behavior under this condition. On the other hand, the fraction of nodes belonging to the giant component changes sensibly for different networks, e.g. it is 24% for Germany and 84% for U.S. according to [9].

¹ SOEs where organized in three main business groups: IRI (Istituto di Ricostruzione Industriale), founded in 1933; ENI (Ente Nazionale Idrocarburi), founded in 1953; EFIM (Ente partecipazioni e Finanziamento Industrie Manifatturiere), founded in 1962..

² The digitalized dataset IMITA.db was built thanks to a project financed by the Italian Research Agency (CNR) and the Ministry of Research under the direction of one of us, Renato Giannetti. For more details see https://imitadb.unisi.it/.

³ For definitions and notation see Appendix A.

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