The Value of Political Connections in Fascist Italy - Stock Market Returns and Corporate Networks*

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1. Introduction

Recent years have witnessed the flourishing of a body of economic literature concerned with the search for empirical evidence of a positive relation between political connections, economic rent and the value of firms. As a brief survey of some of these works will show, we find in this literature a wide range of definitions of "political connectedness" – from (broadly understood) personal relationships between firms' owners or the members of its boards and politicians, through financial support offered by firms to electoral campaigns, to the political positions held (now or in the past) by directors of the boards.

Johnson and Mitton (2003) present empirical evidence that, in September 1998, Malaysian firms with strong personal ties to the Prime Minister Mahathir benefited from the imposing of capital controls. Khwaja and Mian (2005), by contrast, classify a Pakistani firm as "political connected" if its director participates in an election, and offer accordingly a quantitative estimation of the rent costs of politically connected firms in banking for the Pakistani economy in the years between 1996 and 2002. Faccio et al. (2006), however, do not include contributions to political campaigns or direct (undisclosed) payments to politicians in the definition of political connectedness that they employ in their examination of the link between political connections and corporate bailouts in 35 countries over the period 1997 through 2002. In their study, a company is defined as politically connected if at least one of its top officers or a large shareholder (that is, controlling at least 10% of the company's voting shares) was head of state, a government minister, or a member of the national parliament, as of the beginning of 1997. Moreover, they take into consideration forms of indirect connection, such as family ties between a head of state or minister and a top officer or a large shareholder, or the well-known "friendship" of a top executive or a large shareholder with a head of state, government minister, or member of parliament.

In analysing the development of China's private sector, Li et al. (2008) define political connection on the basis of the personal affiliation of the owners of private firms with the

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ruling Communist Party. They find that, in a transition economy such as China, political connections have a positive effect on firm performance, represent a differential advantage in obtaining loans from banks or other state institutions and make firms more likely to resort to the courts in business disputes than their less well-connected counterparts.

More recently, Civilize et al. (2015) define a Thai firm as politically connected in the period 1985-2008 whenever there is evidence of an affiliation or a remote familiar tie of members of the boards with the Prime Minister, cabinet members, or parliament members (both of coalition and opposition parties). Thailand represents one case of a 'crony economy,' and this research finds that, in an economy where rent seeking (through political connections) is essential and competed for, investors in the stock market systematically bid up the stock prices of politically connected firms.

The present article is a contribution to this literature dealing with the quantitative measurement of the value of the political connections. Our work proposes, for the first time, a quantitative measurement of the value of political connections between Italian firms and the Fascist regime in the years of Benito Mussolini's rise to power (1921-1925). Specifically, the present paper offers a quantitative answer to the question: how much was it worth to have close, early connections with the National Fascist Party (hereafter, PNF)?

We define a firm as politically connected when historical research has demonstrated that its owners (or the major shareholders) early joined the PNF or has shown the existence of any form of financial support to Mussolini's political project in its initial stages. With regard to the latter criterion, we have complemented the current knowledge of the flow of capital that financed Mussolini's political project in its initial stages by surveying the pages of his newspaper in order to identify the companies that purchased advertising space during the first year of its publication (November 1914-December 1915).

Event analysis is one of the methodologies that has been successfully employed in the measurement of the differential advantage deriving to firms from being politically connected. In a nutshell, an event study allows us to measure the impact of a specific event on the value of a firm as, given rationality in the marketplace, security prices reflect the effects of this event (MacKinley, 1997; Campbell et al., 1997).

Fisman appears to have been the first to employ modern event analysis in his 2001 work on Indonesia. In order to measure the value to firms of political connection with President Suharto, Fisman performs an event study of the Indonesian stock market on the occasion of some episodes concerning adverse rumours about Suharto's health in the last years of his office. Fisman's work has been complemented by Faccio's (2006) analysis of the common characteristics of political connected firms among 20202 traded firms in 47 countries, which performs event studies around the time of announcements that officers or large shareholders are entering politics, or politicians joining boards.

Bunkanwanicha and Wiwattanakantang (2009), use event studies to provide empirical evidence of the economic incentives enticing big business owners to seek election to top public office. Their case study is Thailand, where, in January 2001, and for the first time, a group of business tycoons won the general election. By means of an event study, Bunkanwanicha and Wiwattanakantang show, not only that the political power of firms' owners accounted for the extraordinary incremental gain in market valuation and market share, but also that the business tycoons used public office to expand their corporate control.

Another recent example of the application of the event study approach is the work of Chekir and Diwan (2015), who examine the nature and extent of Egyptian 'crony' capitalism. Specifically, they compare the corporate performance and the stock market valuation of politically connected firms before and after the 2011 popular uprising that led to the end of President Mubarak's rule.

In our engagement with Fascist Italy, the methodology employed in the work of Ferguson and Voth (2008), who studied the reaction of the German stock market to the Nazi seizure of power, constitutes our main point of reference. Specifically, we perform an event study in order to analyse the reaction of Italian stock market investors to the March on Rome (*Marcia su Roma*), the Fascist military expedition of 28th October 1922 with which the first Mussolini government unexpectedly began. However, because of the peculiarity of the Italian stock market, in contrast to Ferguson and Voth, and more broadly to the existing literature on the quantitative estimation of the value of political connectedness, we innovatively adopt a social network analysis in order to identify politically connected firms.[1] To our knowledge, this is the first time that a network analysis has been employed in an event study.

2. Mussolini's rise to power

The March on Rome of October 1922 was the culmination of the long political and social crisis that began after the general elections of May 1921. As is well known, in spring 1921 Mussolini transformed the Fascist movement into the PNF and, in the general elections that took place in May 1921, 32 candidates of the PNF, together with Mussolini, became deputies.

In the following months Mussolini defined the political platform of the PNF and, no doubt with an eye to following the parliamentary path to power, agreed with the Socialist Party to end the violence of the fascist action squads (*Patto di Pacificazione*). The strong opposition of the fascist actions squads towards this party line, however, soon compelled Mussolini to break his agreement with the Socialist Party. Summer 1921 saw a new period of social riots, acts of violence against political opponents, and the progressive transformation of the fascist action squads into a paramilitary organization.

The weakness of the Bonomi Government (July 4th 1921 - February 26th 1922) and of the two Facta Governments (respectively, February 26th 1922 - August 1st 1922 and August 1st 1922 - October 31st 1922) in opposing the unlawful actions of the fascist action squads, together with the inability of the leaders of the other Italian political parties to overcome their individual interests in order to establish a joint front against Fascism, paved the way to Mussolini's rise to power.

In this context of political instability, on August 1st 1922 the trade unions called a new general strike in support of workers' rights. This strike again gave to the Fascists the possibility of presenting themselves before the public as the only party able to maintain public order. In many cities, such as for example Milan, members of the PNF assumed responsibility for providing public transport. However, the strike also gave the fascist action squads the opportunity to attack the seats of trade-union organizations across the country. The PNF was thus simultaneously maintaining public order and committing illegal acts; but it was the former that primarily attracted public attention. Because of the strikes 7.336.393 workdays were wasted in Italy between November 1st 1921 and October 31st 1922; of these 6.892.795 were workdays of the manufacturing sector (De Felice, 1966, vol. I, 396).

In the build up to the Fascist military expedition to Rome three dates have a crucial importance for us: the 16th, 24th and 28th of October 1922 (Vivarelli, 1992, vol. III, 435-454).

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[1] In the years of Mussolini's rise to power, the Italian stock market was less advanced than, for example, the German one. To begin with, in Italy there were seven stock exchanges: Milan, Rome, Turin, Genoa, Trieste, Naples and Florence. Secondly, in 1921 only 120 societies were quoted in Milan, which was the leading market for exchange value (Consob, 2011: chapters 1 and 2). Thirdly, stock-market transactions were often somewhat opaque because of a structural conflict of interests due to the connection between listed companies and 'mixed' banks.[1] In other words, a few big banks and the group of firms that was financed by them tended to form something like credit-industrial organizations that, mutually, influenced the conduct of business and credit management (Bonelli, 1971).

In Milan, on 16th October 1922, Mussolini met with some generals of the Italian army who were also members of the PNF in order to seek the support of parts of the Italian army. In Naples, on 24th October 1922, during a secret meeting with his closest collaborators, Mussolini fixed the date of the March on Rome: October, 28th 1922.

The attack was to be carried out by means of two different kinds of operation. The advance on Rome would be concurrent with the seizure of the Prefectures and the editorial offices of the most important newspapers in many Italian cities. Nevertheless, and as we know, none of the Fascists marched on Rome until King Vittorio Emanuele III of Savoia gave Mussolini (who was in Milan) the task of forming a new government on October, 29th 1922. On the morning of October 28th, the Prime Minister, Facta, asked the King to declare a state of siege in order to allow the army to defend Rome but the King refused to sign the decree and, in fact, compelled Facta to resign.

On November 16th 1922, Mussolini called the Chamber of Deputies for a vote of confidence on his first government and, on November 29th, he won a vote of confidence at the Senate.

Mussolini had held the offices of both Foreign Minister and Home Minister. Three other members of the PNF were appointed ministers: Alberto De Stefani became Minister of Finance, Aldo Oviglio was given the office of Minister of Justice, and Giovanni Giurati was put in charge of the ministry that administered the territories annexed to Italy after the First World War (*Ministero per le Terre liberate dal Nemico*). Two members of the Catholic Popular Party, Vincenzo Tangorra and Stefano Cavazzoni, were appointed, respectively, Minister of the Treasury and Minister of Labour. The other ministers were members of the Liberal Party and the Democratic Party. High Admiral Paolo Emilio Thaon di Revel was appointed Minister of Navy and Armando Diaz, who on November 8th 1917 had been nominated Chief of Staff by the King, held the position of Minister of Defence.[2] Nine out of eighteen vice-ministers were fascists. Thus the first Mussolini government undoubtedly had a fascist complexion, but was nevertheless the expression of a parliamentary coalition (Vivarelli, 1992, vol. III, 480).

3. Fascism and Industry

The extent of Italian magnates' support for Mussolini is a controversial point. Broadly, scholars such as Rossi (1955), Guérin (1956) and Sarti (1977) explicitly link Mussolini's rise to power with the attempt of the big landowners and magnates to check union demands in the farmlands and in the factories. More cautiously, Melograni (1972) denies the existence of any organic support to Mussolini from the big magnates, arguing that among them there was a plurality of attitudes towards fascism.

As we shall see, Mussolini benefited from the financial support of some of the big names in the electrical, the sugar, the tire, the steel and the iron industries in the form of financing for his newspapers and for the election campaign of the PNF in 1922. Moreover, Mussolini's first government had the official confidence of both Confindustria (the Confederation of Italian Industry) and Assonime (the Association of Italian joint-stock companies), whatever any unfavourable attitudes of some of their members towards fascism. On November 1st 1922 Confindustria, in fact, claimed "to have exerted a direct and pressing influence in favour of Mussolini's solution" (Rossi, 1955, p. 41).

In beginning the exploration of the complex relation between fascism and industry, it is necessary as a first step to outline briefly the structure of Confindustria and Assonime during the years of the birth of the fascist movement and of the success of Mussolini.

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[2] At that time the Ministry of Defence was named *Ministero per la Guerra*.

Following the experience of local entrepreneurial associations in Milan, Genoa and Biella between 1902 and 1906, and the establishment of the Lega Industriale of Turin, Confindustria was founded on May 5th 1910 with the goal of coordinating at the national level the initiatives of entrepreneurs in their relations with the trades union and both the central and local governments. The founder of this employers' association was Gino Olivetti, the general secretary of the Lega Industriale, and an expert of industrial organization. He was the general director of Confindustria until 1934.

Confidustria's first president was Luigi Bennefon Craponne, a French silk industrialist who was in office until 1913. In the years 1914-1918 he was followed by Ferdinando Bocca, the head of a leather tanning industry. In 1919 Confindustria had two presidents, first Dante Ferraris, who resigned because he was nominated Minister of Industry, Commerce and Work (*Ministro dell'industria, commercio e lavoro*) in the Nitti government, and then Giovanni Battista Pirelli, who headed the most important Italian tyre factory. Giovanni Silvestri took office as president in the years 1919-1920. With his Officine Meccaniche Miani-Silvestri, he is considered one of the pioneers of the Italian mechanics industry. Silvestri was followed by Ettore Conti (1920-1921), who boosted the exploitation of hydraulic force for producing electric energy in Northern Italy. From 1922 to 1923 the president was Raimondo Targetti, who operated in the wool industry. Targetti was succeeded by Antonio Stefano Benni, who stayed on until 1934. Benni headed Fabbrica Italiana Magneti Marelli, a factory of electrical machinery.

Assonime was founded on November 22nd 1910 on the initiative of 53 businessmen on behalf of 181 companies. The following year 503 companies joined Assonime. Carlo Esterle, one of the pioneers of the electrical industry in Italy, was the president of Assonime from its foundation to 1917. Esterle was followed by Ferraris, who held the position of president until 1919. Luigi Volpi di Misurata succeeded Ferraris. His main company was the electrical company Società Adriatica di Elettricità (SADE). From 1921 to 1922 the president of Assonime was Silvestri. In the years 1922-1924 the office was held by Conti, who was followed by Alberto Pirelli, son of Giovanni Battista, who held the position until 1945.

Confindustria was established as a formally apolitical association. Olivetti, aiming to achieve consensus among the members of the association, decided that Confindustria would not support explicitly any political parties (Belloni, 2011, chapters 1 and 2). This resolution was soon disputed in 1911, when a government monopoly of life assurances was planned, and in 1913 when the government threatened to expel president Craponne from Italy for public nuisance because he was embarking on a lockout of the automobile industry in Turin in reaction to workers' strikes. In 1915 Confindustria officially took an interventionist position with regard to the war. In the elections of 1919 Olivetti became a deputy in the ranks of the right wing of the Liberal Party and, henceforth, effectively acted as a hinge between the industrial and the political classes.

The anti-union bias, which from 1920 increasingly characterized the fascist movement, undoubtedly appealed to Italian magnates. The wave of strikes that began in the spring of 1919 as a reaction to the heavy economic crisis that beset Italy in the wake of World War One, resulted in the occupation of metallurgic factories throughout Italy in September 1920. Workers demanded not only a wage rise and an eight-hour working day, but also the establishment of workers committees in the factories. These committees, they insisted, should take active part in the company management.

The Giolitti government (June 16th, 1920 - July 4th, 1921) remained neutral and refrained from calling out the police in order to free the factories (such as for example FIAT in Turin) that were occupied. Instead, Giolitti resolved to wait for the realization of a compromise solution between workers and industrialists.

Olivetti set out Confindustria's intransigent position against workers committees in March 1920, during a meeting of Confindustria delegates in Milan. Olivetti's position was grounded on matters of principle and practice: the former in relation to the revolutionary bias of the proposal; the latter arose from the fact that the workers committees were to be self-governing bodies, so industrialists could not negotiate collective agreements, as in the case of trade unions.

Probably, Confindustria's intransigence was not free from political opportunism, with the industrialists hoping for some government benefits in order to sweeten the search for a compromise solution (Vivarelli, 1992, vol. II: 592-646). As we know, the first financial provisions of the Giolitti government caused a widespread outcry in industrial and financial circles. On September 24th 1920, the government passed laws according to which 1) the state took upon itself the extra profits generated by the war; 2) a parliamentary committee would conduct an inquiry into the war expenses; 3) the rate of probate duty would become more progressive; 4) the motor vehicle excise duty would increase; 5) it was obligatory to register all financial bonds, with the exception of government securities.

With these measures, Giolitti aimed to better the conditions of the working classes in order to pave the way to the abrogation of the 'political price' of bread. Nevertheless, his economic policy had deflationary effects and no provision had been made about customs policy and farm aid.

In such a strained political situation, the occupation of factories was not just a matter of public order. In the end, the government encouraged a resolution of the industrial disputes that favoured the workers. On September 20th 1920 the trades unions (Fiom and C.G.L.) and Confindustria drew up an agreement. The terms agreed granted an improvement in the economic and working conditions of the workers and, more importantly, the possibility of introducing "workers' control" inside the factories.

Giolitti's choice of neutrality had overlooked the fact that the workers' demands followed in the wake of the Russian Revolution and, for industrialists, the establishment of something like workers committees inside their factories could appear as the first step towards the abrogation of private property. As we have already seen, in the general context of parliamentary weakness, Mussolini took advantage of the industrialist's perception of a communist threat and was able to present the PNF to the public as an opponent of union demands and as a means of maintain public order by means of the fascist action squads.

In recent years, historical research has enriched our knowledge of the origin of the flow of capital that financed Mussolini's political project in its initial stages. According to De Felice (1966a, 277), *Il Popolo d'Italia*, the newspaper founded in 1914 by Mussolini in Milan, was financed by capital from some French political circles and also a group of Italian industrialists interested in Italy's entry into the War. These Italian industrialists were Mario and Pio Perrone (whose Ansaldo was an iron and steel business), Esterle (his Edison was an electrical industry), Giovanni Agnelli (the founder of FIAT), Emilio Bruzzone (on behalf of Unione Zuccheri, the association of sugar companies)[3] and Vittorio Emanuele Parodi (the owner of shipping company). More recently, archival research has proved that Banca Commerciale Italiana (hereafter, COMIT) provided financial support to Mussolini in the

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[3] Unione zuccheri was founded in 1904 and acted as a cartel fixing output quotas and artificially increasing price. It mainly represented the interests of the Genoa sugar companies because the Italian (beet) sugar industry was mainly located there The early development of the sugar sector in Italy was, in fact, linked with the emergence of the refining industry. In the first half of the nineteenth century Italian production was modest, and from 1870 almost 50% of imported sugar arrived in Genoa. This circumstance favoured the birth of the sugar refining industry in Genoa. The introduction of a duty on imported sugar in the 1870s gave an impetus to national production and, effectively, to those Genoese industrialists who already operated in the sugar refining sector. In 1914, 13 out of 26 companies operating in the sugar sector had their seats in Genoa (Tonizzi, 2001).

months preceding the election of May 1921 by lavishing considerable sums of money in the form of payments on account for advertising space in his newspaper (Fabre, 2003: Barbone, 2003).[4]

Our survey of the pages of *Popolo d'Italia* in search of the companies who bought advertising space in the first year of its publication, allows us to add, among other companies that will be analyzed in detail in section 6, Società italiana per le lampade eletteriche Z (which was a company of the Edison group), Pirelli, Officine Meccaniche Miani Silvestri, Migone (which was a chemical industry) to the financing group of Mussolini. We remind the reader that in 1914 Esterle was the president of Assonime, while Giovanni Battista Pirelli and Silvestri headed Confindustria in the years from 1919 to 1920.

Probably the initial support for Mussolini's political project by some Italian magnates arose out of the possibility of an increase in profits due to the job order for the war. On the other hand, support of Mussolini during the days of the March on Rome appears to relate to the desire for stable government. On October 28th 1922, a group of magnates that included Alberto Pirelli, Olivetti, Conti, and Benni met Mussolini in Milan. There are many different versions of the meeting, [5] but the official statement issued by Confindustria in support to Mussolini on November 1st 1922 is unquestionable.

The financial policy of the first Mussolini government leaned toward laissez-faire. One of the first act of the government was to revoke the law of 1922 on financial bonds. The minister De Stefani simplified the taxation system and cut down the rate of duties on profits and on new industrial constructions in order to foster the accumulation of capital. With the aim of reaching a break-even point, he pursued a policy of retrenchment in the administration of the national railways and postal services. In November 1923, 65.000 temporary state employees were dismissed (Toniolo, 1980, chapter II).

However, the rescue of Ansaldo, Ilva (a metallurgic business) and Banco di Roma (a bank) did not fit the laissez-faire economic policy of the first Mussolini government. In the case of Ansaldo, the government implemented the measures worked out by the Facta government and disbursed subsidies to Ansaldo. In the case of Ilva, the rescue was made by two banks: COMIT and Credito Italiano. The government reduced the amount of the debts of Ilva to the state for non-payment of taxes and some prepaid orders that had not been met. The rescue of Banco di Roma by way of a handout was, instead, an initiative taken by the Mussolini government immediately after its installation. It must, however, be remembered that Banco di Roma was at the top of the Catholic banking system and, for this reason, under the influence of the Vatican. Moreover, the bank had financed the Popular Party since its foundation in 1918, due to the initiative of Luigi Sturzo. Both Giuseppe Vicentini and Carlo Santucci, respectively, chief executive officer and president of Banco di Roma, had been appointed by Sturzo as members of the constituent assembly of the party. From then on, Banco di Roma not only directly subsidized the Popular Party but also many Catholic newspapers by means of a trust (*Società editrice romana*) founded in 1910, and from this time on it was directed by Giovanni Grosoli Pironi,[6] the vice-president of the bank (Maugeri, 2002).

Thus one possible explanation of the bailout of this Catholic bank has usually been found in the support offered by the Popular Party to the Mussolini government. Nevertheless, our analysis appears to suggest a new interpretation of this bailout.

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[4] During the war COMIT had purchased advertising space on *Popolo d'Italia* (De Felice, 1966a: 467-468).

[5] See Rossi (1955) and Belloni (2011) for two different reconstructions of the meeting.

[6] Since his youth, Grosoli Pironi had been involved in the Catholic movements. In 1896 he was among the founders of the Catholic newspaper *Avvenire d'Italia* and over the years his entrepreneurial activity was always characterized by a strong interest in both Catholic banking and the Catholic press.

4. Dataset characteristics: Il Sole and IMITA.db

Our empirical analysis is based on daily stock prices from the Milan Stock Exchange (MSE, hereafter) covering the period from July, 1922 to February, 1923. As an exploration into early twentieth-century history, our study is greatly dependent on *local* data sources. In particular, data are drawn from the financial newspaper 'Il Sole: organo ufficiale della Camera di commercio e industria di Milano'.[7] Besides daily price quotations, this specialised publication issued a weekly summary with additional data concerning, for example, the nominal value of each security, as well as the performance of Italian state bonds.

Moreover, as regards complementary firm characteristics for those enterprises operating in the MSE, like industry classification, regional origin, a synthetic balance sheet, as well as the composition of the Board of Directors, we have used the 'IMITA.db' database.[8] This database contains a digitalization and codification of a series of yearbooks published by Credito Italiano (1919, 1921, 1923, 1926) and Assonime (Associazione fra le società italiane per azioni: 1928, 1937), including firm-level data for some benchmark years (e.g. 1921, 1927, 1936).[9] Query capabilities allowed us to perform specific search operations by different criteria, and download one database record at a time. Hence, once the list of business firms operating in the MSE were defined, specific search and download operations were then performed.

Subsequently, both data sources ('Il Sole' and 'IMITA.db') have been merged into a unified relational database, matching firms in the financial newspaper with those appearing in IMITA. Given the different labels employed by each data source, in some cases, it was necessary to perform this matching operation with great care.[10]

5. Identification of connected firms[11]

At the beginning of the twentieth century, the existence of credit-industrial organizations, formed by one big bank and a few firms financed by it, was a peculiarity of the Italian bank system. We find a vivid description of this phenomenon in a 1922 article by Piero Sraffa published – on John Maynard Keynes's invitation – in the June issue of the *Economic Journal*.[12] The article was devoted to an analysis of the reasons for the bankruptcy of BIS,

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[7] The daily newspaper 'Il Sole' was founded in 1865 on the initiative of a group of small entrepreneurs in the textiles sector. In 1905, representatives of the machinery and banking sectors became shareholders in the newspaper. From its beginning, one of the main functions of the newspaper was to acquaint dealers with trends on the stock exchanges, in commodities markets, and the performance of companies and of market prospects. For this reason, soon after its foundation 'Il Sole' became an official organ of the chamber of commerce of Milan.

[8] IMITA.db (IMprese ITAliane Data Base) had been created by a consortium of universities (including Siena, Bocconi, Bologna and Firenze) and was supported by the Italian Ministry of Education, University and Research (MIUR) and the National Research Council (CNR). The database is freely accessible at: http://imitadb.unisi.it/en/home.asp.

[9] See Giannetti and Vasta (2006); Colli and Vasta (2010) for details.

[10] Useful information in this regard has been gathered from De Luca (2002).

[11] In the absence of any bibliographical indications, the data on the composition of firms' boards presented in this section are drawn from the IMITA database.

[12] Sraffa also published a popular version of this article in the monthly supplement to the *Manchester Guardian Commercial* of December 1922. This article aroused Mussolini's anger because, as he stated in a telegram to Sraffa's father (then rector of Bocconi University), the article was "an act of true and simple banking defeatism an act of true and real sabotage of Italian finance" (transcription in Naldi, 1998: 287). Nerio Naldi (1998) suggests that Mussolini's vehement reaction against an article that denounced the pervasive link between industry, finance and politics can be ascribed to its publication during the final phases of the bailout of Banco di Roma. For a detailed analysis of this episode of Sraffa's biography see Pasinetti (2007).

but Sraffa offered some insightful remarks on the general functioning of the Italian bank system of the time. He stated that, in order to overcome the natural opposition of interests of the banks that financed industry and the firms that were financed by them, there was in Italy a tendency towards the "formation of large 'groups' of companies of the most varied kinds concentrated round one or more banks, mutually related by the exchange of shares and by appointment of Directors common to them. Within these 'groups' the various interests are all equally subject to the interests of a few individual who control the whole group, possessing on their own only a very few shares of the various companies" (Sraffa, 1922: 196). Sraffa went on to explicitly warn his readers: "what the public knows and feels […] is the enormous financial and political power which they have and the frequent use they make of it to influence both the foreign and home policy of the Government in favour of their own interests" (*Ibidem*).

Thus, in order to identify those firms operating in the MSE that were connected to the PNF during the years of Mussolini's rise to power, we have built and analysed a network with the structure of interlocking directorates.

Specifically, we proceeded as follows. First, by using the IMITA database, we identified the people belonging to the Corporate Board of each firm in the dataset. Second, we computed a distance matrix whose elements are the number of people that each pair of firms had in common. Based on such a distance matrix, we implemented and refined a community detection algorithm known as 'spectral bisection for modularity maximization' (developed by Newman, 2006a, b; Leicht and Newman, 2008) to identify firm clusters.

We identified ten such clusters, of which only one showed returns significantly higher than the market model average. Figure 1 represents the graph of the Italian MSE Corporate Network reflecting interlocking directorates. Firms in cluster 1 are depicted as orange nodes. Nodes' size reflects companies' degree, i.e. the number of strong connections to other companies. In other words, the higher the number of firms with which the company of interest shares board members, the greater the size of the corresponding node in the graph. Looking at the individuals enabling key connections among firms in each cluster, we identified a set of people who actually had close connections to Mussolini.
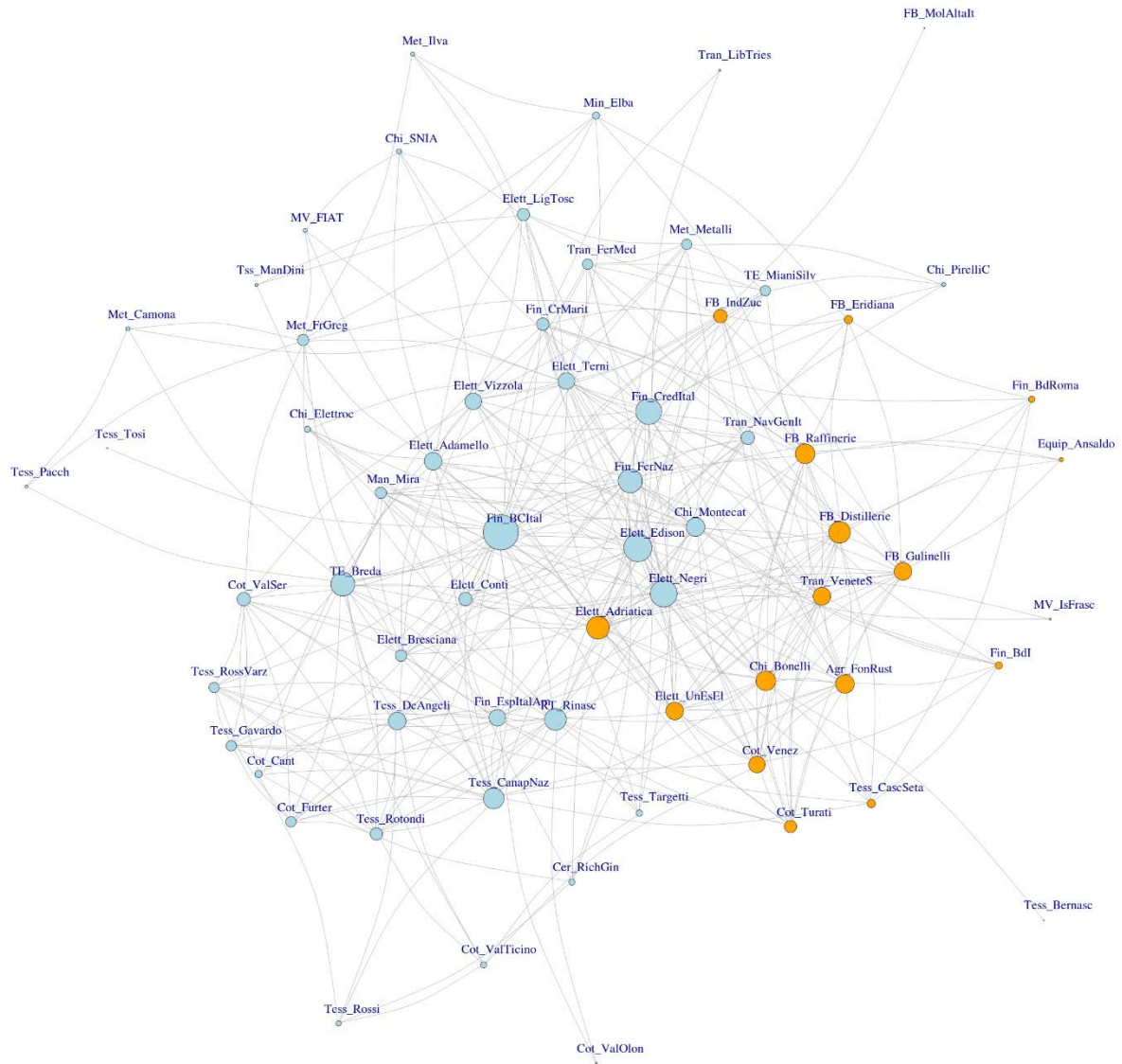
Figure 1: Graph of the Italian MSE Corporate Network reflecting interlocking directorates
(Benchmark year: 1921)

Thus, the logic of our empirical strategy may be stated as follows. On the basis of an unsupervised statistical learning algorithm we uncovered the community structure of the graph of interlocking directorates of Italian firms operating in the MSE. Then we examined whether any of these clusters (bound together thanks to individuals participating in different corporate boards) outperformed the market on the event of Mussolini's rise to power. As it turned out, only one cluster of firms had this feature.

When studying the individuals at the basis of this cluster, we were able to assert that they indeed had a connection to the Fascist environment. Thus, a machine learning algorithm together with historiographic analysis of individuals emerging from it allowed us to establish a link between political connections and stock market returns.

Table 1 shows the list of connected firms belonging to cluster 1, while the composition of non-connected clusters, from cluster 2 to cluster 10, is reported in Table A.1 in the Appendix A.

Table 1: Clusters of connected Firms according to the shared members of their respective Corporate Boards (Benchmark year: 1921)

	Cluster of **Connected Firms**			
Ticker	Descriptor	ATECO	ATECO-Desc	Cluster
Agr_FonRust	ISTITUTO DI FONDI RUSTICI SOCIETÀ AGRICOLA INDUSTRIALE ITALIANA	A01	Agriculture	1
FB_Distillerie	DISTILLERIE ITALIANE	DA15	Food-beverages	1
FB_Eridiana	ERIDANIA SOCIETÀ INDUSTRIALE	DA15	Food-beverages	1
FB_Gulinelli	ZUCCHERIFICIO E DISTILLERIA ALCOOLS GULINELLI	DA15	Food-beverages	1
FB_IndZuc	SOCIETÀ ITALIANA PER L'INDUSTRIA DELLO ZUCCHERO INDIGENO	DA15	Food-beverages	1
FB_MolAltaIt	MOLINI ALTA ITALIA	DA15	Food-beverages	1
FB_Raffinerie	SOCIETÀ LIGURE LOMBARDA PER LA RAFFINAZIONE DEGLI ZUCCHERI	DA15	Food-beverages	1
Cot_Trobaso	COTONIFICIO DI TROBASO	DB17	Textiles	1
Cot_Turati	COTONIFICIO FRANCESCO TURATI	DB17	Textiles	1
Cot_Venez	COTONIFICIO VENEZIANO	DB17	Textiles	1
Tess_CascSeta	FILATURA DEI CASCAMI DI SETA	DB17	Textiles	1
Tess_UnManiff	UNIONE MANIFATTURE	DB17	Textiles	1
Chi_Bonelli	FABBRICHE ITALIANE MATERIE COLORANTI BONELLI	DG24	Chemicals	1
Equip_Ansaldo	ITALIANA GIO. ANSALDO & C.	DK29	Machinery-equipment	1
Elett_Adriatica	SADE SOCIETÀ ADRIATICA DI ELETTRICITÀ	E40	Electricity-gas	1
Elett_UnEsEl	UNES UNIONE ESERCIZI ELETTRICI	E40	Electricity-gas	1
Tran_VeneteS	VENETA PER COSTRUZIONE ED ESERCIZIO DI FERROVIE SECONDARIE ITALIANE	I60	Land-transport	1
Fin_BdI	BANCA D'ITALIA	J65	Finance	1
Fin_BdRoma	BANCO DI ROMA	J65	Finance	1

Source: Own computations based on IMITA.db

The composition of our cluster of connected firms confirms the existence of credit-industrial organizations envisioned by Sraffa: Banco di Roma was a major shareholder of Eridania (sugar industry), Distillerie italiane (a distillery), Zuccherificio e distillerie alcools Gulinelli (a distillery), Società ligure lombarda per la raffinazione degli zuccheri (sugar industry).

The link between Banco di Roma and the sugar sector dated back to the early 1900s. In 1905 Giovanni Battista Figari, one of pioneers of the sector and then president of Eridania, in alliance with Banco di Roma, founded a bank, Banco della Liguria. Figari intended to turn Eridania into a holding company with branches in many different sectors (and in the following years succeeded in realizing his plans by taking over companies operating, for instance, in the sectors of property, milling and mining). In Figari's view, Banco della Liguria should represent the financial organization of the prospective holding. The initial corporate capital of Banco della Liguria amounted to 20 million lire, of which 70% was held by Eridania. In 1911 Banco della Liguria was taken over by Banco di Roma.

The only milling society of our cluster 1, Molini Alta Italia, had also belonged to the Eridania group since the years of Figari's presidency by means of the amalgamation in 1904 of Molini Ligure (a milling society founded in 1903 by Figari himself) with Molini Alta Italia. Moreover, in 1906 Banco della Liguria took over many shares of Molini Alta Italia (Bianchi Tonizzi, 1997). Note that the milling sector, like that of sugar, was characterized by the presence of many Genoese industrialists.

According to the story that we have outlined, in the early stages of his first government, Mussolini's commitment to bailout Banco di Roma would have ensured him the support of the Popular Party. In the end, he was able to avoid a financial disaster that would have wrecked Bank of Italy and to put Banco di Roma under his influence. Nevertheless, our analysis appears to add some additional elements to the picture. As already argued, some industrialists of the sugar sector had financed Mussolini's political project in its initial stages, and in our cluster of connected firms we have four sugar societies of which Banco di Roma was among the major shareholders. Because the bankruptcy of Banco di Roma would inevitably have had serious consequences for this sector, we may venture to say that Mussolini, in bailing out Banco di Roma, also bailed out a group of industrialists who had established early connections with the PNF.

In our cluster of connected firms there are five textile companies. In order to explain the presence of these firms, we have to explore the connection of BIS to the textile sector. In December 1914, BIS was founded with the intention of establishing a "real" Italian bank (the so-called *Banca Italianissima*) against the predominance of COMIT and Credito Italiano, which were both financed by German capital. The subscribers' aim had to be attained by means of a prospective merger with two other banking institutions: Società Bancaria Italiana and Credito Provinciale; the merger was realized in June 1915.

Nevertheless, BIS was established with French as well as Italian capital. The group of Italian subscribers included the Perrone brothers and many of the big names of the textile sector, who were particularly interested in the establishing of a new credit institution because, in the years before, COMIT had avoided financing the textile manufacture, with only a few exceptions (*Ibid*.: 38-39). The significance of the textile sector was evident in the composition of the first board of BIS, which was appointed soon after the merger of June 1915: six out of thirty-five members came from the ranks of the Lombard textile businesses that hitherto had been financed mainly by Credito provinciale (*Ibid*.: 39). In the benchmark year 1911, Leopoldo Introini, for instance, was member of the boards of Credito Provinciale, Cotonificio Veneziano and Cotonificio Francesco Turati (another textile company of our cluster 1); while in the benchmark year 1913 he was on the boards of Credito Provinciale and Cotonificio Francesco Turati.

Our search of the pages of *Il Popolo d'Italia* for the companies who bought advertising space reveals that Credito Provinciale belonged to the first financing group of Mussolini. By discovering that Credito Provinciale bought advertising space in the months preceding the merger with BIS, we conjecture the presence of an early connection between many of the big names of the Lombard textile sector and Mussolini: in the benchmark year 1913 seven out of twenty-five board members of Credito Provinciale sat on the boards of Lombard societies of the textile sector. To our knowledge, this is the first time that such a connection has been established.

However, Filatura di cascami seta is another society of our cluster that can be traced back to Banco di Roma group. The fact that the vice president of the company was Ariberto Castelli; board member of Banco di Roma, leads us to conjecture that Banco di Roma was one of its major shareholders.

Turning to SADE and Unione Esercizi Elettrici, the companies of the electrical sector of our cluster, Volpi di Misurata is a prominent character. We remind the reader that in the years 1919-1921 Volpi di Misurata was the President of Assonime. Historical research has recently established that in the same years (1920-1922) he financed successively the fascist movement of Venice and then the local PNF (Piva, 1977; Albanese, 2001).

In 1921 Volpi was on the boards of 30 (quoted and not quoted) societies, among them Assicurazioni Generali, Unione Esercizi Elettrici and, another company of our cluster 1, Veneta per costruzioni ed esercizio di ferrovie secondarie italiane, a railway company that

operated in Veneto. Moreover, he held the office of president, vice-president or managing director of four societies, among them SADE, Società commerciale d'Oriente and CIGA. We find Da Zara on the boards of six societies together with Volpi, among them SADE and Veneta per costruzioni ed esercizio di ferrovie secondarie italiane.

The remaining company of our cluster 1 is Ansaldo. In 1908, after Ferdinando Maria Perrone's death, Mario and Pio inherited both their father's shares and managerial offices: Mario and Pio became, respectively, chief executive officer and managing director. In the following years they implemented the vertical integration of Ansaldo by building a steel plant for producing armour and buying the know how to produce artillery from a French company (Tolaini, 2015). As already noted, in the same years the Perrone brothers financed Mussolini's *Popolo d'Italia* (De Felice, 1966a: 277).

The financing of Mussolini's newspaper by the Perrone brothers has to be understood not only in the light of the prospective profits that Ansaldo could obtain from war orders, but also as part of their anti-German project, of which the establishment of the BIS represents the most striking evidence. By subscribing the initial capital of BIS with 1 million lire each, the Perrone brothers took over 4000 out of 30000 shares issued at the time of the foundation of the bank. During the war, BIS became the "bank of Ansaldo". Moreover, from 1918 BIS started to finance the industrial reconversion of Ansaldo from war to peace time production by means of an ambitious project of vertical integration of the numerous plants of the group that were operating in the iron and steel, naval and mechanical sectors (Falchero, 1990). However, the extension of the line of credit of Ansaldo was one of the main reason of the bankruptcy of BIS: in 1921 the debt of Ansaldo amounted to 750 million lire (*Ibid.*: 217). As already noted, the rescue of Ansaldo was finalized by the first Mussolini government.

6. An event-study on stock market returns

Once connectedness had been established, we followed the event-study methodology (MacKinlay, 1997) in order to measure its *effect* on stock market returns. Our event window covered the March on Rome.[13] More precisely, a 21-day event window is employed, comprised of 10 pre-event days, the event day (October 28th, 1922), and 10 post-event days.[14]

Moreover, as shown in Figure 2, each event window $(T_1, T_2]$ has a prior estimation window $(T_0, T_1]$, as well as a post-event window $(T_2, T_3]$. Their length is established in relation to that of the event window, determined also by the level of granularity of stock market data (daily, weekly, monthly).[15] In particular, our estimation window covers the three-month period before the event window (i.e. July-October, 1922), and we have performed a weekly analysis based on daily data for stock prices.
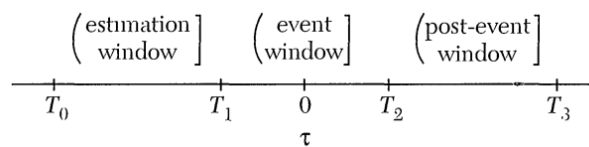
Figure 2: Time line for an event study. Source: MacKinlay (1997: 20)

When the interest lies in testing an hypothesis on the relation between excess returns and firm characteristics, the logic of event studies consists in a three-step procedure: (i) estimate

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[13] Following MacKinlay (1997), by *event window* we mean a brief time period associated with pieces of news that are supposed to influence stock market dynamics.

[14] Given that not all securities were traded in each day, the length of the pre-event and post-event days of the event window have been adjusted, whenever possible, by firm basis so as to cover the same period for all firms.

[15] See Brown and Warner (1980, 1985) on how to deal with monthly or daily information in connection to a very short event window.

expected (or normal) returns without conditioning on the event taking place (i.e. during the estimation window), (ii) use these point estimates to linearly project abnormal returns (i.e. the difference between actual and estimated normal returns) during the *event* window, and (iii) adopt a cross-sectional regression approach to study how much of the variation in log-returns is explained by specific firm characteristics such as, for example, being politically connected to the Fascist regime. A statistically significant coefficient associated with this feature would measure the value of political connections.

As regards step (i), we have estimated for each security expected returns by means of the market model (MacKinlay, 1997, p. 18).[16] As to step (ii), we computed cumulated abnormal returns (CAR) during the 21-day event window for each security and, finally, as regards step (iii), we estimated the expectation of stock market returns, conditional to belonging to the cluster of connected firms, as well as to other firm characteristics.

7. Methodology, empirical strategy and presentation of results

7.1 Computation of basic variables

Log-Returns at time τ for each security i have been computed as:

$$R_{i,\tau} = ln\left(1 + \frac{p_{i,\tau+1} - p_{i,\tau}}{p_{i,\tau}}\right), \qquad i = 1, \dots, n, \qquad \tau \in (T_0, T_3]$$

where $p_{i,\tau}$ is the closure price of the stock market security i on day τ, and $n = 72$ is the number of securities traded in the MSE for which we had all the information required.

The MSE market average log-return $R_{m,\tau}$ has been obtained instead as:

$$R_{m,\tau} = \frac{\sum_{i=1}^{n} R_{i,\tau} \times MK_{i,\tau}}{\sum_{i=1}^{n} MK_{i,\tau}}, \quad \tau \in (T_0, T_3]$$

where $MK_{i,\tau}$ is the market capitalization of security i at time τ.

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[16] We adopted this model as a first approximation, though it is clear that the joint distribution of stock prices is not even asymptotically normal, but rather exhibits fat tails and follows a power law (see, e.g. Buchanan, 2008). It might also be possible to try other specifications, for example, instead of defining abnormal returns using the conditional expectation, these could be defined on the basis of the conditional median (i.e. the 0.5 quantile).
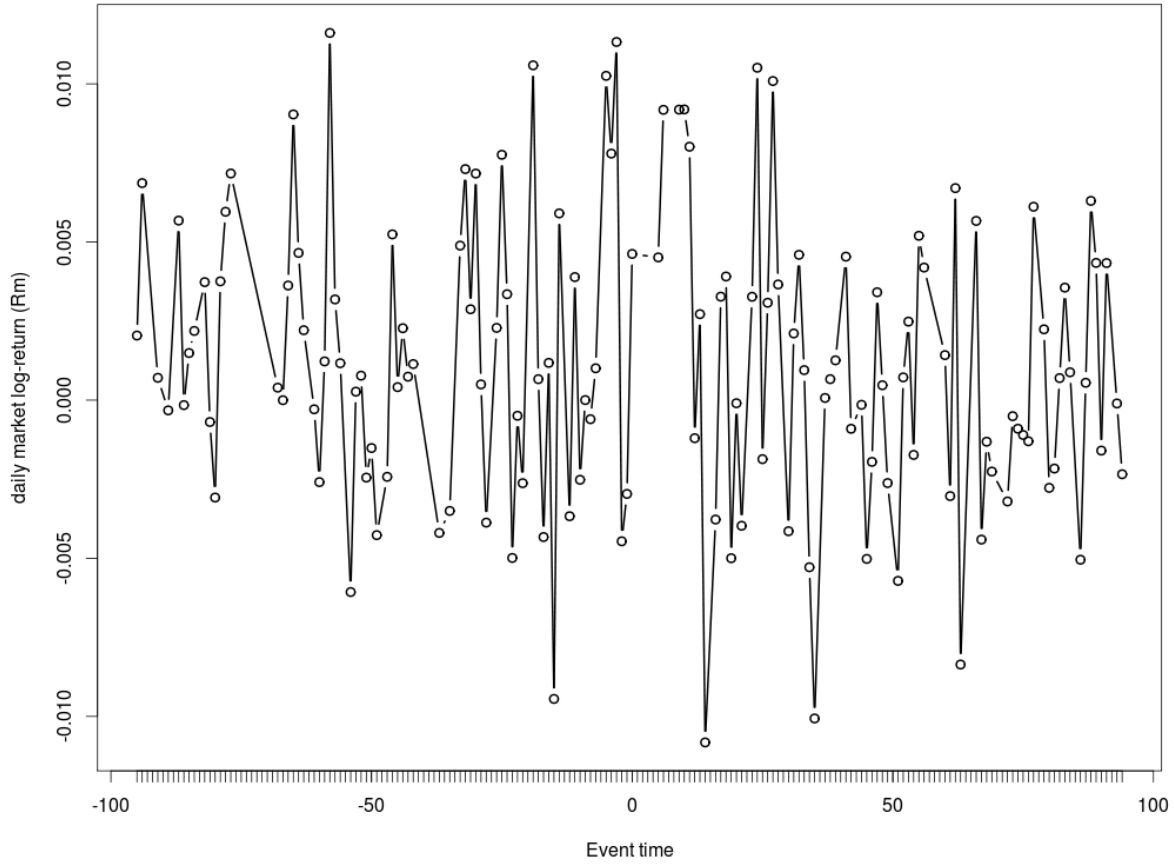
Figure 3: Market Return weighted by capitalization for the entire 26-week period (Jul, 1922 - Feb, 1923)

In order to build a measure of market capitalization $MK_{i,\tau}$, we have estimated the number of shares outstanding for each firm. In particular, we computed:

$$MK_{i,\tau} = \frac{SK_i}{NV_i} \times p_{i,\tau}, \qquad i = 1, \dots, n, \qquad \tau \in (T_0, T_3]$$

where SK_i is the share capital of the firm and NV_i is the nominal value of the security, for the benchmark year adopted.

Moreover, dividend payments per share (DpS_i) for each firm have been estimated combining data on dividends from balance sheet records in IMITA.db and the shares outstanding previously obtained:

$$DpS_i = \frac{NV_i}{SK_i} \times DIV_i, \qquad i = 1, \dots, n$$

where DIV_i is the dividend payments obtained from the balance sheet for 1922 of firm i.

Market capitalization $\left(MK_{i,\tau}\right)$ and dividends per share (DpS_i), however, are built from data which has an annual frequency, while our period of interest covers not only July-December, 1922, but also January-February, 1923. As a methodological choice, for data points relating to 1923 we considered it more appropriate to use data corresponding to the year 1922. In fact, since we have been considering only the first two months of 1923, using data concerning the whole year 1923, given the nature of the present analysis, would have implied incorporating into our regressions the effect of events taking place way beyond the event window of interest.
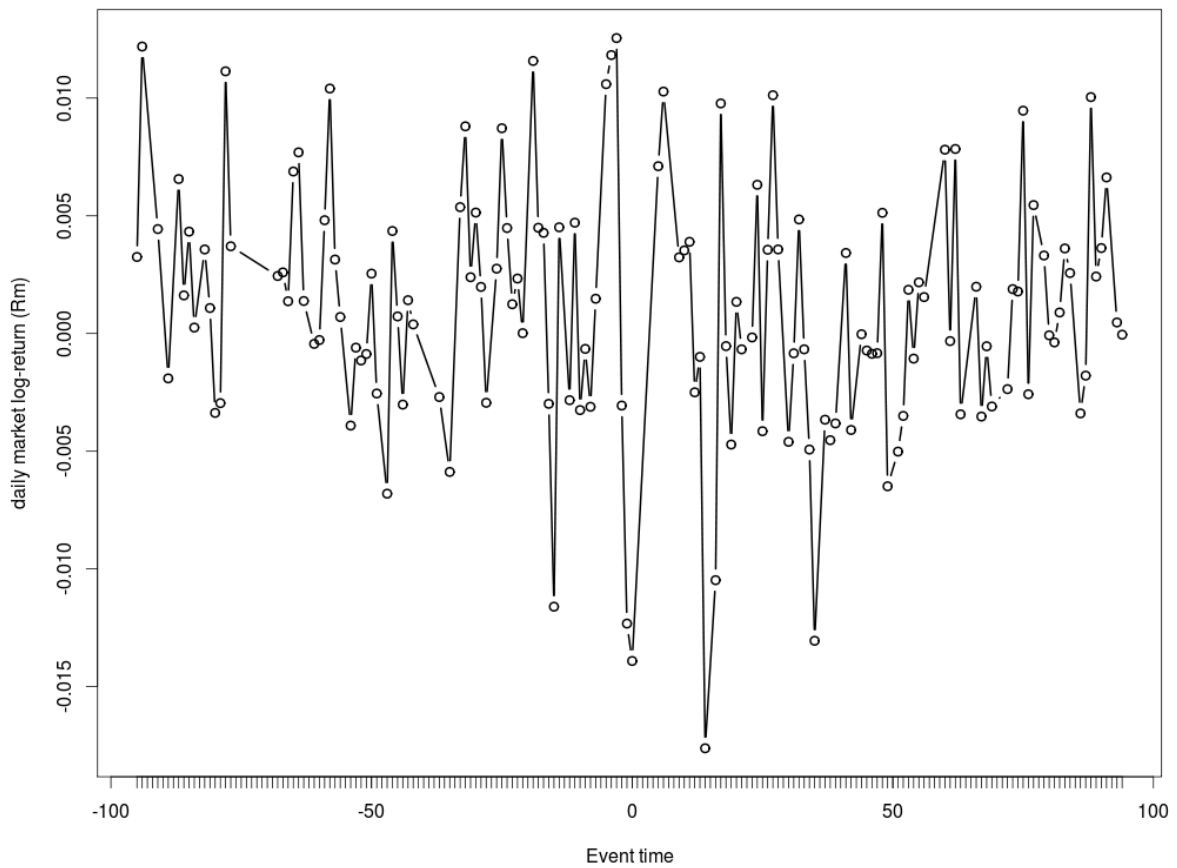
Figure 4: Unweighted Market Return for the entire 26-week period (Jul, 1922 - Feb, 1923)

Abnormal returns and cumulated abnormal returns for both connected and non-connected firms during the event window are visualized in Figures 5 and 6.[17]

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[17] Table A.2 in the Appendix A summarizes abnormal returns and cumulated abnormal returns for both connected and non-connected firms during the event window. The detailed summary of Abnormal Log-returns for both connected and non-connected firms can be found respectively in tables A.3 and A.4 in the Appendix A.
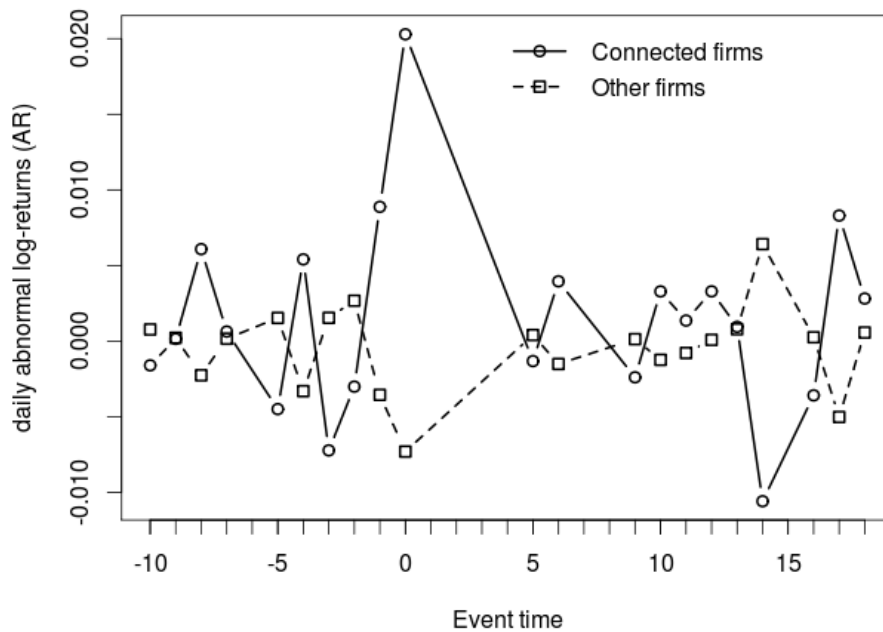
Figure 5: Abnormal Returns for Connected and Other firms during the event window
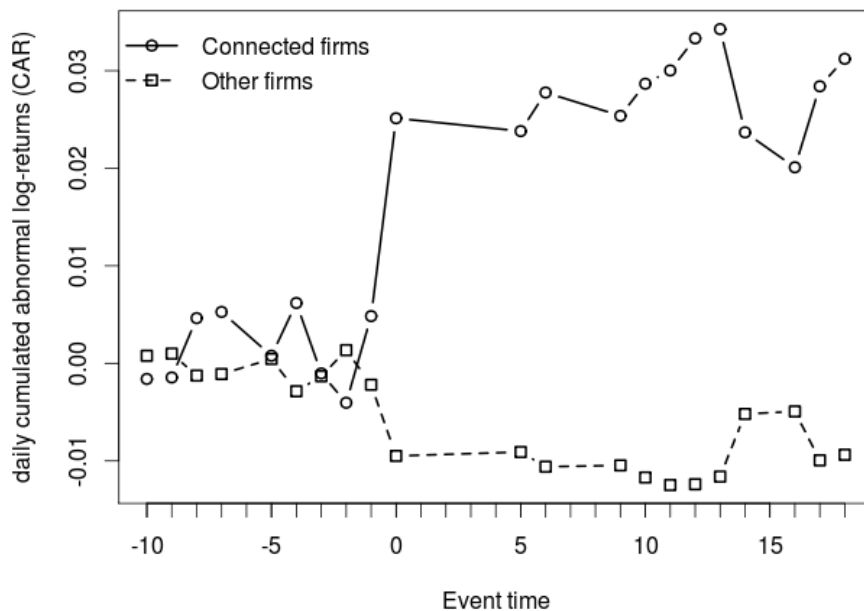
Figure 6: Cumulated Abnormal Returns for Connected and Other firms during the event window

As can be seen from Figure 5, the evolution of abnormal returns in the days before the March on Rome was characterized, for both groups, by strong fluctuations. On day zero, connected firms' abnormal returns peaked, being much higher than those of non-connected ones. In the following days, ARs began fluctuating again, but in a smoother way; in general,

and with the exception of day 14, ARs for connected firms were higher than for non-connected ones.[18]

Figure 6 reports cumulated abnormal returns for both connected and non-connected firms. As can be seen, the former group was characterized, during the event window, by higher CARs than non-connected ones, the gap between the two groups opening exactly in correspondence with the March on Rome.

7.2 Cross-sectional effect of connectedness on stock returns

At this point, we estimated the value of Fascist affiliations. Following the methodological blueprint of Ferguson and Voth (2008), we asserted the effect on the cross-section of log-returns of political connectedness for firms operating in the MSE between July, 1922 and February, 1923, considering additional controls.

Before proceeding with the analysis of the results, Table 2 provides some descriptive statistics of the sample used, for connected and non-connected firms, both *before* and *after* the March on Rome. The sample includes 70 firms, 19 connected and 51 non-connected.

<div align="center">Table 2: Descriptive Statistics</div>

	Before		After	
	(Jul, 1922 - Oct, 1922)		(Oct, 1922 - Feb, 1923)	
	Connected	Other Firms	Connected	Other Firms
Mean Stock Market Capitalization	80978017	83934069	91097587	90430738
(in thsd. LIRA)				
Weight by capitalization in total	0.2644	0.7356	0.2729	0.7271
Mean dividend yield	0.0616	0.0650	0.0548	0.0600
Mean log-return	0.0138	0.0105	0.0063	-0.0006
N	19	51	19	51

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

First of all, we can see that market capitalization was higher, in both periods, for non-connected firms; however, the gap reduced *after* the March. Mean dividend yields are also higher for non-connected firms; contrarily to market capitalization, the difference between the two groups deepened *after* the March. Mean log-returns were higher for connected firms in both time periods; however, whereas the difference between the two groups was smaller *before* (0.0138 as against 0.0105), such a difference became wider *after* the March, with average log-returns for non-connected firms becoming negative (0.0063 versus -0.0006).

Given the fact that our database includes a relatively small number of firms, we used weekly rather than monthly returns. More specifically, we estimated the following linear probability model:[19]

$$\ln(R_{i,\tau}) = \alpha_{0,t} + \alpha_{1,t}CL_{1,t} + \varepsilon_t$$

where $CL_{1,t}$ is a dummy which takes value 1 for firms in the 'connected' group.

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[18] It is worth stressing again that ARs have been computed on the basis of individual firm-level regressions in which the only independent variable is average market returns. As will be seen in the next section, there are other variables, in particular market capitalization, market beta and industrial sector of activity that influence market returns themselves. In particular, some sectors were characterized, during the period considered, by above- or below-average returns independently of the connectedness of firms.

[19] Standard errors are based on Huber-White heteroscedasticity-consistent estimates and clustered on the level of the firm.

Aiming to include as much information as possible, we decided to compute average weekly returns, i.e. computing for each week average quotations, and then computing returns based on such averages.[20] Using average weekly returns rather than picking a specific day of the week and computing returns against the same day of the following one avoids passing over observations.

However, in order to check the robustness of such a choice, we also computed returns using specific days of the week, and then ran regressions for each possible choice. Results are shown in Table 3.

Table 3: OLS regression, dependent variable: Log-returns. Weekly data. Column *week* reports results based on weekly averages rather than weekly observations. Standard errors are based on Huber-White heteroscedasticity-consistent estimates and clustered on the level of the firm. CL_1 is a dummy that takes value 1 for firms belonging to the cluster of connected firms.

	Before						
	Mon	Tue	Wed	Thu	Fri	Sat	Week
Constant	0.0125***	0.0143***	0.0131***	0.0097***	0.0112***	0.0110***	0.0104***
	(0.0015)	(0.0016)	(0.0014)	(0.0012)	(0.0014)	(0.0013)	(0.0012)
CL_1	0.0034	0.0043	0.0043	0.0024	0.0023	0.0045	0.0034
	(0.0026)	(0.0028)	(0.0026)	(0.0021)	(0.0024)	(0.0024)	(0.0020)
N. Obs	825	825	900	900	825	975	975
	After						
	Mon	Tue	Wed	Thu	Fri	Sat	Week
Constant	-0.0023	-0.0025*	-0.0023*	-0.0013	-0.0016	-0.0030*	-0.0007
	(0.0012)	(0.0011)	(0.0010)	(0.0010)	(0.0010)	(0.0013)	(0.0009)
CL_1	0.0093***	0.0084***	0.0067***	0.0069***	0.0064***	0.0065**	0.0069***
	(0.0022)	(0.0018)	(0.0017)	(0.0014)	(0.0015)	(0.0021)	(0.0014)
N. Obs	753	826	901	825	900	752	982

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Examining the top panel of Table 3, which concerns the period *before* the March on Rome, results are qualitatively very close to each other in the different cases considered, i.e. picking as a reference point each single day of the week and weekly averages: the constant is the only significant coefficient, while that associated with the dummy indicating connected firms is always positive but not significant. The bottom panel concerning the period *after* the March on Rome displays more heterogeneity. Specifically, the intercept is significant for the case of Tuesday, Wednesday and Saturday, while it is not for the other days and for weekly averages. However, the significance level in this cases is 90% only. On the contrary, the coefficient associated with the connected-firms dummy is significant and positive in all cases.

In the light of these considerations, it seems reasonable to take weekly averages as our reference point, given that the number of observations for the period following the March on Rome is considerably higher than that which could be obtained by picking any other day (982 as against 901, which is the highest number of observations for the case of single days of the week).

Table 4 compares the results shown in Table 3 (based on weekly averages) to those obtained by estimating the same equations for the other clusters. In the period *before* the March on Rome, two clusters (CL_3 and CL_{10}) show significantly higher-than-average log-returns; however, these two clusters include one single firm each, i.e. Ceramica Richard Ginori and Cotonificio Val d'Olona, respectively. At the same time, two clusters (CL_5 and CL_6) show significantly lower-than-average log-returns; CL_6 also consists of one firm only:

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[20] As already stressed above, some days are missing due to holidays and vacations.

Manifatture Cotoniere Meridionali. By contrast, CL_5 includes nine companies, of which two produced motor vehicles (Fabbrica automobili e Velocipedi Edoardo Bianchi and Fabbrica Automobili Isotta Fraschini) and five produced gas and electricity (Generale Elettrica dell'Adamello, Elettrica Bresciana, Società Anonima per Imprese Elettriche Conti, Società Generale Italiana Edison di elettricità, and Società Elettrica Riviera di Ponente).

As to the period *after* the March on Rome, CL_1 is the only group showing higher-than-average returns; by contrast, log-returns of clusters CL_3, CL_8 and CL_{10} are significantly lower than average. As stated above, CL_3 and CL_{10} consist of one firm only, while CL_8 includes two: Linificio e Canapificio Nazionale and Fabbrica Candele Steariche di Mira.

Table 5 shows the results of including in the regressions additional variables: firm-level market capitalisation and dividend yields, and the market β computed against the performance of state bonds. Table 6 also includes sectoral dummies.

As can be seen from Table 5, introducing market capitalisation, which has an associated coefficient that is significant but equal to zero in both time periods, does not change estimated coefficients: belonging to the connected cluster has the effect of increasing log-returns by 0.7% above other firms. Dividend yields do not significantly affect log-returns *before* the March on Rome, but they (positively) do *after*; however, the introduction of this variable does not change the estimated coefficient. Also in this case, belonging to CL_1 increases log-returns by 0.7% above average. Conversely, the effect of market β is positive and significant *before* the March, increasing log-returns by about 0.6% with respect to the rest, while it is negative, though not significant, *after*.

Moreover, introducing β into the estimated equation makes the coefficient associated with CL_1 statistically significant also *before* the March: belonging to the connected groups makes log-return grow about 0.4% more than the remainder of firms. However, this latter effect disappears when sectoral dummies are also introduced into the estimated equation. In fact, in this case, as shown in Table 10, the introduction of market β does not make the coefficient associated with CL_1 statistically significant. However, in all cases considered in the right-most panel of the Table – i.e. concerning the period *after* the March on Rome – the effect of belonging to connected firms makes log-returns increase by about 0.5%.

Table 6 also reports the coefficients associated with different sectoral dummies, the reference sector being *J65*, i.e. Financial intermediation.[21] It is interesting to observe which sectors are associated with above-average and below-average log-returns both *before* and *after* the March on Rome.

Looking at column (4), which refers to the period *before* the March and shows estimations of *all* variables, three sectors – namely CB13 (Mining of metal ores, 0.0165), DI26 (Manufacture of other non-metallic mineral products, 0.0154), I60 (Land transport; transport via pipelines, 0.0078) – are associated with above-average log-returns with 99% confidence. Sector DK29 (Manufacture of machinery and equipment) shows a significant effect on log-returns only when market β is not included among regressors, showing that its effect on log-returns is not sector-specific but simply associated with the fact that firms in the sector are characterised, on average, by a higher value of β itself. Moreover, two sectors – CA11 (Extraction of crude petroleum and natural gas, -0.0132), DN36 (Manufacture of furniture; manufacturing n.e.c., -0.0074) – are characterised by below-average log-returns.

In general, sectoral effects seem weaker in the period *after* than before; more specifically, three sectors – (Land transport; transport via pipelines, 0.0109), I61 (Water transport, 0.0044), I64 (Post and telecommunications, 0.0106) – show above-average log-returns, and one – DI26 (Manufacture of other non-metallic mineral products, -0.0125) –

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[21] Table B.1 in the Appendix B reports the Code, Label and Description associated with the sector classification adopted by IMITA.db, i.e. Level-3 Ateco (1991), which is the Italian implementation of Eurostat Nace Rev. 1.

below-average returns. In this case, the introduction among regressors of market β does not alter the significance of the coefficients at the 99% significance level.

It is worth stressing that while sector I60 is associated with above-average returns, both before and after the March on Rome, though in the latter case with a smaller effect, firms operating in sector DI26 have significantly above-average returns *before* the March, which turns significantly below-average *after*.

Table 4. OLS regression based on weekly averages. Dependent variable: Log-returns. Standard errors are based on Huber-White heteroscedasticity-consistent estimates and clustered on the level of the firm. CL_1 is a dummy which takes value 1 for firms belonging to the cluster of connected firms.

	CL_1	CL_2	CL_3	CL_4	CL_5	CL_6	CL_7	CL_8	CL_9	CL_{10}
Before										
Constant	0.0104***	0.0106***	0.0110***	0.0117***	0.0122***	0.0113***	0.0111***	0.0114***	0.0114***	0.0111***
	(0.0012)	(0.0011)	(0.0010)	(0.0010)	(0.0011)	(0.0010)	(0.0011)	(0.0010)	(0.0010)	(0.0010)
CL_i	0.0034	0.0029	0.0215***	-0.0035	-0.0074***	-0.0028**	0.0005	-0.0067	-0.0047	0.0084***
	(0.0020)	(0.0025)	(0.0010)	(0.0031)	(0.0017)	(0.0010)	(0.0024)	(0.0039)	(0.0073)	(0.0010)
N. Obs	975	975	975	975	975	975	975	975	975	975
After										
Constant	-0.0007	0.0015	0.0014	0.001	0.0015	0.0011	0.0014	0.0013	0.0011	0.0012
	(0.0009)	(0.0010)	(0.0008)	(0.0009)	(0.0008)	(0.0009)	(0.0010)	(0.0009)	(0.0009)	(0.0009)
CL_i	0.0069***	-0.0019	-0.0244***	0.0007	-0.0028	0.0016	-0.0015	-0.0064*	-0.0009	-0.0048***
	(0.0014)	(0.0018)	(0.0008)	(0.0017)	(0.0032)	(0.0009)	(0.0017)	(0.0027)	(0.0012)	(0.0009)
N. Obs	982	982	982	982	982	982	982	982	982	982

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Table 5: OLS regression based on weekly averages. Dependent variable: Log-returns. Standard errors are based on Huber-White heteroscedasticity-consistent estimates and clustered on the level of the firm. CL_1 is a dummy which takes value 1 for firms belonging to the cluster of connected firms. *mkt cap* stands for market capitalization; *div yields* for dividend yields.

	Before			
	(1)	(2)	(3)	(4)
Constant	0.0104***	0.0121***	0.0100***	-0.0024
	(0.0012)	(0.0014)	(0.0022)	(0.0015)
CL_1	0.0034	0.0031	0.0032	0.0037*
	(0.0020)	(0.0019)	(0.0019)	(0.0017)
mkt cap		0.0000**	0.0000**	0.0000
		(0.0000)	(0.0000)	(0.0000)
div yields			0.0324	0.0265
			(0.0242)	(0.0192)
β				0.0065***
				(0.0011)
N. Obs	975	962	962	962
	After			
	(5)	(6)	(7)	(8)
Constant	-0.0007	-0.0014	-0.0049*	-0.0014
	(0.0009)	(0.0011)	(0.0023)	(0.0019)
CL_1	0.0069***	0.0069***	0.0070***	0.0067***
	(0.0014)	(0.0014)	(0.0016)	(0.0015)
mkt cap		0.0000*	0.0000*	0.0000
		(0.0000)	(0.0000)	(0.0000)
div yields			0.0576*	0.0590*
			(0.0277)	(0.0262)
β				-0.0029
				(0.0011)
N. Obs	982	969	969	969

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Table 6. OLS regression based on weekly averages. Dependent variable: Log-returns. Standard errors are based on Huber-White heteroscedasticity-consistent estimates and clustered on the level of the firm. CL_1 is a dummy which takes value 1 for firms belonging to the cluster of connected firms. *mkt cap* stands for market capitalization; *div yields* for dividend yields. Sectoral dummies indicated using ATECO classification. Reference sector: J65.

	Before				After			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.0054**	0.0060*	0.0036	0.0011	0.0002	-0.0021	-0.0057*	-0.0043
	(0.0019)	(0.0026)	(0.0027)	(0.0021)	(0.0019)	(0.0020)	(0.0027)	(0.0023)
CL_1	-0.0003	-0.0003	0.0003	0.0009	0.0051**	0.0049**	0.0055**	0.0048*
	(0.0018)	(0.0018)	(0.0015)	(0.0013)	(0.0017)	(0.0017)	(0.0021)	(0.0019)
mkt cap		0.0000	0.0000	0.0000		0.0000	0.0000	0.0000
		(0.0000)	(0.0000)	(0.0000)		(0.0000)	(0.0000)	(0.0000)
div yields			0.0520*	0.0484*			0.0748**	0.0737**
			(0.0242)	(0.0224)			(0.0286)	(0.0272)
β				0.0040**				-0.0025*
				(0.0014)				(0.0012)
A01	0.0074**	0.0070**	0.0052*	0.0055**	0.0023	0.004	0.0027	0.0032
	(0.0022)	(0.0026)	(0.0024)	(0.0019)	(0.0020)	(0.0023)	(0.0025)	(0.0021)
CA11	-0.0089***	-0.0095***	-0.0125***	-0.0132***	0.0013	0.0035	-0.0013	-0.0003
	(0.0019)	(0.0025)	(0.0027)	(0.0017)	(0.0019)	(0.0020)	(0.0027)	(0.0021)
CB13	0.0239***	0.0235***	0.0231***	0.0165***	-0.0009	0.001	0.0012	0.0057**
	(0.0019)	(0.0025)	(0.0023)	(0.0022)	(0.0019)	(0.0019)	(0.0020)	(0.0020)
DA15	0.0115**	0.0111**	0.0094*	0.0082*	0.0023	0.0036	0.0022	0.0036
	(0.0038)	(0.0039)	(0.0043)	(0.0040)	(0.0023)	(0.0024)	(0.0025)	(0.0022)
DB17	0.0095***	0.0091***	0.0070*	0.0036	-0.0010	0.0008	-0.0014	0.0013
	(0.0023)	(0.0027)	(0.0028)	(0.0020)	(0.0022)	(0.0022)	(0.0024)	(0.0022)
DG24	0.0116*	0.0113*	0.0125*	0.0102*	0.0043	0.0051	0.0073	0.0087*
	(0.0056)	(0.0056)	(0.0054)	(0.0043)	(0.0033)	(0.0035)	(0.0045)	(0.0043)
DI26	0.0271***	0.0266***	0.0271***	0.0154***	-0.0231***	-0.0211***	-0.0203***	-0.0125***
	(0.0019)	(0.0025)	(0.0024)	(0.0040)	(0.0019)	(0.0019)	(0.0022)	(0.0033)
DJ27	0.0093*	0.0090	0.0112*	0.0097*	-0.0048	-0.0036	-0.0004	0.0007
	(0.0047)	(0.0049)	(0.0049)	(0.0039)	(0.0039)	(0.0041)	(0.0046)	(0.0037)
DJ28	0.0023	0.0018	0.0006	0.0030	0.0018	0.0040*	0.0026	0.0015
	(0.0019)	(0.0025)	(0.0024)	(0.0019)	(0.0019)	(0.0020)	(0.0022)	(0.0016)
DK29	0.0150***	0.0144***	0.0162***	0.0058	-0.0058**	-0.0034	-0.0004	0.0066
	(0.0022)	(0.0027)	(0.0025)	(0.0035)	(0.0020)	(0.0025)	(0.0033)	(0.0039)
DM34	0.0027	0.0027	0.0032	-0.0004	-0.0104	-0.0103	-0.0092	-0.0068
	(0.0025)	(0.0024)	(0.0018)	(0.0019)	(0.0073)	(0.0059)	(0.0053)	(0.0046)
DM35	0.0009	0.0005	-0.0014	-0.0014	-0.0001	0.0015	-0.0008	-0.0003
	(0.0031)	(0.0034)	(0.0034)	(0.0034)	(0.0020)	(0.0018)	(0.0023)	(0.0016)
DN36	-0.0059**	-0.0064*	-0.0087***	-0.0074***	-0.0018	0.0003	-0.0035	-0.0038*
	(0.0019)	(0.0025)	(0.0025)	(0.0018)	(0.0019)	(0.0020)	(0.0025)	(0.0018)
E40	0.0000	-0.0002	-0.0009	0.0001	0.0017	0.0027	0.0022	0.0020
	(0.0022)	(0.0024)	(0.0023)	(0.0016)	(0.0024)	(0.0020)	(0.0021)	(0.0015)
G52	-0.0064**	-0.0066**	-0.0040	-0.0013	-0.0010	0.0002	0.0040	0.0024
	(0.0019)	(0.0022)	(0.0024)	(0.002)	(0.0019)	(0.0016)	(0.0023)	(0.0021)
I60	0.0152***	0.0147***	0.0119***	0.0078***	0.0071*	0.0092*	0.0077***	0.0109***
	(0.0023)	(0.0028)	(0.0031)	(0.0016)	(0.0035)	(0.0036)	(0.0022)	(0.0021)
I61	-0.0046	0.0002	-0.0002	0.0009	0.0007	0.0050***	0.0048**	0.0044***
	(0.0040)	(0.0019)	(0.0018)	(0.0013)	(0.0035)	(0.0014)	(0.0015)	(0.0011)
I64	0.0040*	0.0034	0.0058*	0.0043*	0.0036	0.0059**	0.0095***	0.0106***
	(0.0019)	(0.0026)	(0.0027)	(0.0018)	(0.0019)	(0.0020)	(0.0027)	(0.0019)
N. Obs	975	962	962	962	982	969	969	969

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

24

Conclusion

As with other works in the literature that employ an event-analysis in order measure the value of political connections, our article shows that in 1922 the Italian stock market realized the value of having early connections to the PNF when it saw them.

However, in contrast to existing literature, in order to understand which firms operating in the MSE were connected to the PNF during the years of Mussolini's rise to power we have built and analysed a network with the structure of interlocking directorates. To our knowledge, this the first time that a network analysis has been employed in an event analysis.

Our analysis has not only unveiled the clustering configuration of Italian industry during the interwar period in terms of political connection with the PNF, but has also showed that the firms in the connected cluster outperformed the rest of the economy in terms of stock market returns. Specifically, either by means of detailed inspection of ARs and CARs at the level of individual securities of the MSE, or by means of point estimates of cross-sectional stock market return differences in concomitance with being connected to the PNF, we have estimated an effect of 2% average abnormal returns for connected firms during the event day (the March on Rome) and 2.8% excess returns (on a compounded monthly basis) for connected firms during-and-after the event day (which were absent beforehand).

The existence of a measurable advantage for connected firms suggests that key players behind the widening of Italy's industrial structure were not only driven by effective demand for their output, but also by the differential returns to be obtained from political support of Fascism. Indeed, the possibility for the firms in the connected cluster to outperform the rest of the economy in terms of stock market returns calls into question studies in firm dynamics that exclude the role of power and politics in the capitalist competition process (Ferguson, 1995).

A second, complimentary goal of the present article has been to enrich the current knowledge of the origin of the flow of capital that financed Mussolini's political project in its initial stages. In this respect, our analysis proposes an alternative interpretation of the bailout of Banco di Roma, suggesting that, in bailing out Banco di Roma, Mussolini also bailed out a group of industrialists of the sugar sector who had established early connections with the PNF. Moreover, our work allows us to establish an early connection between the Lombard textile sector and Mussolini that until now was completely underestimated by historical literature.

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Appendix A Statistics

Table A.1
Clusters of non-connected firms according to the shared members of their respective Corporate Boards (benchmark year: 1921)

Ticker	Descriptor	ATECO	ATECO-Desc	Cluster
Min_Elba	ELBA SOCIETÀ ANONIMA DI MINIERE E DI ALTI FORNI	CB13	Metal-ores	2
Tess_Targetti	LANIFICIO TARGETTI	DB17	Textiles	2
Tess_Tosi	MANIFATTURA TOSI	DB17	Textiles	2
Tss_ManDini	MANIFATTURE TOSCANE RIUNITE	DB17	Textiles	2
Chi_Elettroc	SOCIETÀ ITALIANA DI ELETTROCHIMICA	DG24	Chemicals	2
Chi_Montecat	MONTECATINI	DG24	Chemicals	2
Met_Ilva	ILVA ALTI FORNI E ACCIAIERIE D'ITALIA	DJ27	Basic-metals	2
TE_Reggiane	OFFICINE MECCANICHE ITALIANE	DM35	Transport-equip	2
Elett_Terni	TERNI SOCIETÀ PER L'INDUSTRIA E L'ELETTRICITÀ	E40	Electricity-gas	2
RT_Rinasc	LA RINASCENTE SOCIETÀ PER L'ESERCIZIO DI GRANDI MAGAZZINI	G52	Retail-trade	2
Tran_FerMed	SOCIETÀ ITALIANA PER LE STRADE FERRATE DEL MEDITERRANEO	I60	Land-transport	2
Fin_BCItal	BANCA COMMERCIALE ITALIANA	J65	Finance	2
Fin_Brasital, Fin_EspItalAm	SOCIETÀ PER L'ESPORTAZIONE E PER L'INDUSTRIA ITALO AMERICANA	J65	Finance	2
Cer_RichGin	CERAMICA RICHARD GINORI	DI26	Non-metallic-mineral	3
Chi_SNIA	SNIA VISCOSA SOCIETÀ NAZIONALE INDUSTRIE APPLICAZIONI VISCOSA	DG24	Chemicals	4
Met_Metalli	METALLURGICA ITALIANA	DJ27	Basic-metals	4
MV_FIAT	F.I.A.T.	DM34	Motor-vehicles	4
TE_MianiSilv	OFFICINE MECCANICHE	DM35	Transport-equip	4
Elett_LigTosc	SOCIETÀ LIGURE TOSCANA DI ELETTRICITÀ	E40	Electricity-gas	4
Elett_Vizzola	VIZZOLA SOCIETÀ LOMBARDA PER DISTRIBUZIONE DI ENERGIA ELETTRICA	E40	Electricity-gas	4
Tran_LibTries	NAVIGAZIONE LIBERA TRIESTINA	I61	Water-transport	4
Tcom_Marconi	SOCIETÀ ITALIANA SERVIZI RADIOTELEGRAFICI E RADIOTELEFONICI	I64	Post-Telecomm	4
Chi_PirelliC	PIRELLI & C.	J65	Finance	4
Fin_CredItal	CREDITO ITALIANO	J65	Finance	4
MV_Bianchi	FABBRICA AUTOMOBILI E VELOCIPEDI EDOARDO BIANCHI	DM34	Motor-vehicles	5
MV_IsFrasc	FABBRICA AUTOMOBILI ISOTTA FRASCHINI	DM34	Motor-vehicles	5
Elett_Adamello	GENERALE ELETTRICA DELL'ADAMELLO	E40	Electricity-gas	5
Elett_Bresciana	ELETTRICA BRESCIANA	E40	Electricity-gas	5
Elett_Conti	SOCIETÀ ANONIMA PER IMPRESE ELETTRICHE CONTI	E40	Electricity-gas	5
Elett_Edison	SOCIETÀ GENERALE ITALIANA EDISON DI ELETTRICITÀ	E40	Electricity-gas	5
Elett_Negri	SOCIETÀ ELETTRICA RIVIERA DI PONENTE ING. R. NEGRI	E40	Electricity-gas	5
Tran_NavGenIt	NAVIGAZIONE GENERALE ITALIANA	I61	Water-transport	5
Fin_FerNaz	SOCIETÀ ITALIANA PER LE STRADE FERRATE MERIDIONALI	J65	Finance	5
Cot_Merid	MANIFATTURE COTONIERE MERIDIONALI	DB17	Textiles	6

Cot_Cant	COTONIFICIO CANTONI	DB17	Textiles	7
Cot_Furter	COTONIFICIO FURTER	DB17	Textiles	7
Cot_ValSer	COTONIFICIO DELLA VALLE SERIANA	DB17	Textiles	7
Cot_ValTicino	COTONIFICIO VALLE TICINO	DB17	Textiles	7
Tess_DeAngeli	DE ANGELI FRUA SOCIETÀ PER L'INDUSTRIA DEI TESSUTI STAMPATI	DB17	Textiles	7
Tess_Gavardo	LANIFICIO DI GAVARDO	DB17	Textiles	7
Tess_Pacch	MANIFATTURA ITALIANA CARLO PACCHETTI	DB17	Textiles	7
Tess_Rossi	LANIFICIO ROSSI	DB17	Textiles	7
Tess_RossVarz	MANIFATTURA ROSSARI & VARZI	DB17	Textiles	7
Tess_Rotondi	MANIFATTURA ROTONDI	DB17	Textiles	7
Met_FrGreg	ALTI FORNI FONDERIE ACCIAIERIE E FERRIERE FRANCHI GREGORINI	DJ27	Basic-metals	7
Met_Camona	OFFICINE DI SESTO SAN GIOVANNI & VALSECCHI ABRAMO	DJ28	Fabricated-metals	7
TE_Breda	ITALIANA ERNESTO BREDA PER COSTRUZIONI MECCANICHE	DM35	Transport-equip	7
Tess_CanapNaz	LINIFICIO E CANAPIFICIO NAZIONALE	DB17	Textiles	8
Man_Mira	FABBRICA CANDELE STEARICHE DI MIRA	DN36	Manufacturing-nec	8
Min_Petroli	PETROLI D'ITALIA	CA11	Petroleum-Gas	9
Tess_Bernasc	TESSITURE SERICHE BERNASCONI	DB17	Textiles	9
Cot_ValOlon	COTONIFICIO VAL D'OLONA OGNA CANDIANI	DB17	Textiles	10

Source: Own computations based on IMITA.db

Table A.2

Abnormal Log-Returns (ARs) and Cumulated Abnormal Log-Returns (CARs) for Connected and Other firms during the event window (Oct-Nov, 1922)

	Market model			
Event time	$AR_{con,\tau}$	CAR_{con}	$AR_{ncon,\tau}$	CAR_{ncon}
-10	-0.0016	-0.0016	0.0008	0.0008
-9	0.0002	-0.0014	0.0002	0.0010
-8	0.0061	0.0046	-0.0023	-0.0013
-7	0.0006	0.0053	0.0002	-0.0011
-5	-0.0045	0.0008	0.0015	0.0004
-4	0.0054	0.0062	-0.0033	-0.0029
-3	-0.0072	-0.0010	0.0015	-0.0013
-2	-0.0030	-0.0040	0.0027	0.0014
-1	0.0089	0.0048	-0.0035	-0.0022
0	0.0203	0.0251	-0.0073	-0.0095
5	-0.0013	0.0238	0.0004	-0.0091
6	0.0040	0.0278	-0.0015	-0.0106
9	-0.0024	0.0254	0.0001	-0.0105
10	0.0033	0.0287	-0.0012	-0.0117
11	0.0014	0.0300	-0.0008	-0.0125
12	0.0033	0.0333	0.0001	-0.0124
13	0.0009	0.0343	0.0008	-0.0116
14	-0.0106	0.0237	0.0064	-0.0052
16	-0.0036	0.0201	0.0003	-0.0049
17	0.0083	0.0284	-0.0050	-0.0099
18	0.0028	0.0312	0.0006	-0.0094

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Table A.3
Summary of Abnormal Log-Returns (ARs) for connected firms
(21-day event window, Oct-Nov, 1922)

Ticket	Cluster	ATECO	$\overline{AR}_{i,pre-event}$	$AR_{i,event-1}$	$AR_{i,event}$	$\overline{AR}_{i,post-event}$	$\overline{AR}_i$
					ARs for the Market model		
Equip_Ansaldo	1	DK29	-0.0067	0.0262	0.0970	0.0011	0.0039
FB_Gulinelli	1	DA15	0.0040	0.0129	0.0657	0.0028	0.0067
Tess_CascSeta	1	DB17	0.0019	-0.0230	0.0432	0.0098	0.0068
Cot_Trobaso	1	DB17	-0.0162	0.0298	0.0334	0.0065	0.0003
Elett_Adriatica	1	E40	0.0007	0.0098	0.0292	0.0011	0.0027
Tran_VeneteS	1	I60	-0.0054	-0.0006	0.0292	0.0146	0.0069
Cot_Venez	1	DB17	0.0049	-0.0069	0.0260	-0.0040	0.0007
Elett_UnEsEl	1	E40	0.0003	-0.0042	0.0250	-0.0015	0.0003
Tess_UnManiff	1	DB17	-0.0035	0.0218	0.0227	-0.0073	-0.0030
Fin_BdI	1	J65	-0.0009	0.0032	0.0159	0.0021	0.0017
Chi_Bonelli	1	DG24	-0.0164	0.0102	0.0118	-0.0114	-0.0111
FB_Distillerie	1	DA15	0.0058	-0.0025	0.0057	0.0012	0.0030
FB_Raffinerie	1	DA15	0.0023	-0.0012	0.0057	0.0001	0.0011
FB_IndZuc	1	DA15	0.0003	0.0046	0.0054	-0.0003	0.0004
Agr_FonRust	1	A01	0.0084	0.0429	0.0050	0.0027	0.0069
Fin_BdRoma	1	J65	0.0001	-0.0006	-0.0006	0.0000	0.0000
Cot_Turati	1	DB17	0.0017	0.0146	-0.0014	-0.0048	-0.0012
FB_Eridiana	1	DA15	0.0036	0.0030	-0.0017	-0.0008	0.0010
FB_MolAltaIt	1	DA15	0.0056	0.0287	-0.0317	-0.0014	0.0013

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Table A.4
Summary of Abnormal Log-Returns (ARs) for non-connected firms
(21-day event window, Oct-Nov, 1922)

Ticker	Cluster	ATECO	$\overline{AR}_{i,pre-event}$	$AR_{i,event-1}$	$AR_{i,event}$	$\overline{AR}_{i,post-event}$	$\overline{AR}_i$
					ARs for the Market model		
Cot_ValOlon	0	DB17	0.0035	0.0370	0.0075	-0.0111	-0.0024
TE_Reggiane	2	DM35	-0.0162	0.1404	0.1045	0.0040	0.0076
Tss_ManDini	2	DB17	0.0022	0.0414	0.0709	0.0047	0.0087
Min_Elba	2	CB13	0.0015	0.0419	0.0636	0.0019	0.0066
Tran_FerMed	2	I60	0.0041	-0.0129	0.0380	0.0176	0.0120
Chi_Montecat	2	DG24	0.0011	-0.0145	0.0277	-0.0079	-0.0031
Tess_Targetti	2	DB17	0.0067	-0.0368	0.0252	-0.0096	-0.0030
Chi_Elettroc	2	DG24	-0.0024	0.0191	0.0213	0.0115	0.0070
Fin_BCItal	2	J65	0.0000	-0.0035	0.0167	0.0038	0.0026
Fin_Brasital	2	J65	-0.0026	0.0118	0.0139	-0.0022	-0.0009
Elett_Terni	2	E40	-0.0045	0.0083	0.0116	0.0018	0.0002
Met_Ilva	2	DJ27	0.0055	0.0012	0.0017	-0.0032	0.0005
Tess_Tosi	2	DB17	0.0030	0.0065	-0.0021	-0.0097	-0.0037
RT_Rinasc	2	G52	-0.0158	0.0081	-0.0032	-0.0007	-0.0062
Fin_EspItalAm	2	J65	-0.0025	-0.0074	-0.0087	-0.0081	-0.0059
Cer_RichGin	3	DI26	-0.0103	0.0256	0.0294	-0.0032	-0.0030
MV_FIAT	4	DM34	0.0010	0.0045	0.0307	0.0045	0.0044
Met_Metalli	4	DJ27	0.0046	0.0110	0.0206	-0.0041	0.0011

Chi_SNIA	4	DG24	-0.0022	0.0306	0.0166	-0.0052	-0.0013
Tran_LibTries	4	I61	-0.0021	0.0068	0.0124	0.0036	0.0020
Fin_CredItal	4	J65	0.0008	0.0041	0.0123	0.0028	0.0026
TE_MianiSilv	4	DM35	0.0065	-0.0026	0.0123	-0.0017	0.0020
Chi_PirelliC	4	J65	0.0023	0.0009	0.0033	0.0042	0.0033
Elett_LigTosc	4	E40	0.0012	0.0040	0.0019	0.0071	0.0045
Elett_Vizzola	4	E40	0.0016	0.0078	-0.0018	-0.0029	-0.0006
Tcom_Marconi	4	I64	-0.0052	0.0206	-0.0514	-0.0120	-0.0097
Fin_FerNaz	5	J65	-0.0018	0.0074	0.0352	0.0078	0.0054
MV_Bianchi	5	DM34	0.0086	0.0433	0.0200	-0.0016	0.0055
Elett_Conti	5	E40	0.0008	0.0144	0.0113	0.0003	0.0017
Tran_NavGenIt	5	I61	0.0028	0.0041	0.0087	0.0047	0.0041
Elett_Bresciana	5	E40	0.0054	0.0020	0.0084	-0.0005	0.0023
Elett_Edison	5	E40	0.0038	-0.0010	0.0081	-0.0008	0.0014
Elett_Adamello	5	E40	0.0016	0.0265	-0.0130	0.0089	0.0059
Elett_Negri	5	E40	-0.0226	0.0490	-0.0279	-0.0049	-0.0102
MV_IsFrasc	5	DM34	0.0054	0.0565	-0.0403	0.0047	0.0053
Cot_Merid	6	DB17	0.0056	0.0046	0.0356	0.0005	0.0043
Cot_Furter	7	DB17	0.0001	0.0180	0.0442	0.0035	0.0048
Cot_Cant	7	DB17	-0.0054	0.0150	0.0260	-0.0037	-0.0020
TE_Breda	7	DM35	0.0010	0.0157	0.0216	0.0041	0.0043
Tess_Pacch	7	DB17	0.0140	0.0016	0.0163	0.0002	0.0063
Met_Camona	7	DJ28	0.0003	0.0509	0.0073	-0.0005	0.0026
Cot_ValTicino	7	DB17	0.0019	0.0038	0.0046	-0.0031	-0.0005
Tess_DeAngeli	7	DB17	0.0072	0.0052	0.0043	-0.0038	0.0012
Tess_Rossi	7	DB17	-0.0070	0.0065	0.0023	0.0000	-0.0022
Tess_Rotondi	7	DB17	-0.0023	-0.0020	-0.0019	0.0007	-0.0007
Met_FrGreg	7	DJ27	0.0071	0.0168	-0.0031	0.0040	0.0055
Tess_RossVarz	7	DB17	-0.0034	0.0138	-0.0051	-0.0094	-0.0058
Cot_ValSer	7	DB17	-0.0058	-0.0052	-0.0188	-0.0134	-0.0103
Tess_Gavardo	7	DB17	-0.0028	0.0325	-0.0287	0.0055	0.0020
Tess_CanapNaz	8	DB17	-0.0043	0.0556	0.0620	0.0196	0.0142
Man_Mira	8	DN36	0.0005	0.0084	-0.0551	-0.0081	-0.0063
Min_Petroli	9	CA11	0.0005	0.0022	0.0024	-0.0004	0.0002
Tess_Bernasc	9	DB17	0.0162	-0.9875	-0.9861	0.0006	-0.0875

Source: Own computations based on Il Sole Financial Newspaper and IMITA.db

Appendix B. Statistical Companion

Table B.1
Level-3 Ateco (1991) Sector Classification
Italian implementation of EUROSTAT NACE Rev. 1 (1990)

Code	Label	Description
A01	Agriculture	Agriculture
A02	Forestry	Forestry
B05	Fishing	Fishing
CA10	Coal-lignite-peat	Mining of coal and lignite; extraction of peat
CA11	Petroleum-Gas	Extraction of crude petroleum and natural gas
CB13	Metal-ores	Mining of metal ores
CB14	Other-mining	Other mining and quarrying
DA15	Food-beverages	Manufacture of food products and beverages
DB17	Textiles	Manufacture of textiles
DB18	Wearing-apparel	Manufacture of wearing apparel; dressing and dyeing of fur
DC19	Leather-footwear	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
DD20	Wood	Manufacture of wood and of products of wood and cork
DE21	Pulp-paper	Manufacture of pulp, paper and paper products
DE22	Publishing-printing	Publishing, printing and reproduction of recorded media
DF23	Refined-petroleum	Manufacture of coke, refined petroleum products
DG24	Chemicals	Manufacture of chemicals and chemical products
DH25	Rubber-plastic	Manufacture of rubber and plastic products
DI26	Non-metallic-mineral	Manufacture of other non-metallic mineral products
DJ27	Basic-metals	Manufacture of basic metals
DJ28	Fabricated-metals	Manufacture of fabricated metal products
DK29	Machinery-equipment	Manufacture of machinery and equipment
DL30	Office-machinery	Manufacture of office machinery and computers
DL31	Electrical-machinery	Manufacture of electrical machinery and apparatus
DL32	Communication-equip	Manufacture of radio, television and communication equipment and apparatus
DL33	Precision-equip	Manufacture of medical, precision and optical instruments, watches and clocks
DM34	Motor-vehicles	Manufacture of motor vehicles, trailers and semi-trailers
DM35	Transport-equip	Manufacture of other transport equipment
DN36	Manufacturing-nec	Manufacture of furniture; manufacturing n.e.c.
E40	Electricity-gas	Electricity, gas, steam and hot water supply
E41	Water	Collection, purification and distribution of water
F45	Construction	Construction
G50	Repair-fuel	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
G51	Wholesale-trade	Wholesale trade and commission trade
G52	Retail-trade	Retail trade
H55	Hotels-restaurants	Hotels and restaurants
I60	Land-transport	Land transport; transport via pipelines
I61	Water-transport	Water transport
I62	Air-transport	Air transport

I63	Supporting-transport	Supporting and auxiliary transport activities
I64	Post-Telecomm	Post and telecommunications
J65	Finance	Financial intermediation
J66	Insurance	Insurance and pension funding
K70	Real-estate	Real estate activities
K71	Renting-machinery	Renting of machinery and equipment
K74	Other-business-acts	Other business activities
M80	Education	Education
N85	Health	Health and social work
O92	Recreation-culture	Recreational, cultural and sporting activities
O93	Other-services	Other service activities

Table B. 2. *Reference Table Metadata (Identifiers, Descriptors, Industry Classification, Foundation Year) and Summary Indicators for 1922 (Nominal Value, Share Capital, Assets, Dividend)*

Panel (A). *Firms listed in the MSE with full data availability*

	IMITA.db-identifiers				De Luca (2002)	IlSole	IlSole	Found.	MSE	MSE	1922 Balance sheet and MSE data (in thsd. LIRA)					MSE
Id-Orig	Id-Soc	Descriptor	Headquarters	Ateco	Descriptor	Weekly Id	Daily Id	Year	Listed	Cancel	NV	Share-Cap	Outs-Shares	Assets	Divid.	Ticker
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
10310	19143	ISTITUTO DI FONDI RUSTICI SOCIETÀ AGRICOLA INDUSTRIALE ITALIANA	ROMA(RM)	A01	Fondi Rustici - Agricola Industriale Italiana	Istituto Fondi Rustici	Fon. Rust.	1905	1905	1955	0.200	45000	225000	68051	3600	Agr_FonRust
21495	25902	PETROLI D'ITALIA	MILANO(MI)	CA11	--	--	Petroli	1906	1924	1958	--	10000	--	13927	750	Min_Petroli
7870	9667	ELBA SOCIETÀ ANONIMA DI MINIERE E DI ALTI FORNI	ROMA(RM)	CB13	Elba - Miniere Alti Forni	Min. Alti Forni (Elba)	Elba	1899	1902	1931	0.040	20000	500000	61552	1400	Min_Elba
7217	8895	DISTILLERIE ITALIANE	MILANO(MI)	DA15	Distillerie Italiane	Distillerie Italiane	Distillerie	1905	1905	1968	0.100	50000	500000	100288	6000	FB_Distillerie
8256	10111	ERIDANIA SOCIETÀ INDUSTRIALE	GENOVA(GE)	DA15	Eridania (poi Finanziaria Agroindustriale)	«Eridania»	Eridania	1899	1902	1995	0.150	45000	300000	95448	6000	FB_Eridiana
31351	38120	ZUCCHERIFICIO E DISTILLERIA ALCOOLS GULINELLI	FERRARA(FE)	DA15	Zuccherificio e Distilleria Alcools Gulinelli	Zucch. Dist. Gulinelli	Gulinelli	1905	1906	1930	0.050	40000	800000	91107	8000	FB_Gulinelli
27896	33776	SOCIETÀ ITALIANA PER L'INDUSTRIA DELLO ZUCCHERO INDIGENO	ROMA(RM)	DA15	Italiana Industria Zuccheri	It. Ind, Zucch. Indig.	Ind. Zuc.	1898	1904	1936	0.150	40000	266667	77730	5600	FB_IndZuc
19639	23646	MOLINI ALTA ITALIA	GENOVA(GE)	DA15	Molini Alta Italia	Molini Alta Italia	Mol. A. It.	1899	1899	1924	0.100	15000	150000	23501	1800	FB_MolAltIt
17835	33993	SOCIETÀ LIGURE LOMBARDA PER LA RAFFINAZIONE DEGLI ZUCCHERI	GENOVA(GE)	DA15	Ligure Lombarda Raffinazione Zuccheri	Lig. Lomb. Raff. Zucc.	Raffinerie	1872	1882	1943	0.200	50000	250000	95639	6000	FB_Raffinerie
6543	7950	COTONIFICIO CANTONI	MILANO(MI)	DB17	Cotonificio Cantoni (poi Cantoni ITC)	Cotonificio Cantoni	Cot. Cant.	1872	1872	1998	0.625	20000	32000	66802	2000	Cot_Cant
17410	8130	COTONIFICIO FURTER	MILANO(MI)	DB17	Cotonificio Furter	Cotonificio Furter	Furter.	1901	1904	1946	0.100	5000	50000	11873	552	Cot_Furter
18768	22659	MANIFATTURE COTONIERE MERIDIONALI	NAPOLI(NA)	DB17	Manifatture Cotoniere Meridionali	Filan. Coton. Meridion.	Cot. Mer.	1913	1920	1965	0.100	80000	800000	165777	4800	Cot_Merid
6631	8079	COTONIFICIO DI TROBASO	MILANO(MI)	DB17	Cotonificio di Trobaso	Cotonificio di Trobaso	Trobaso	1905	1905	1928	0.050	12000	240000	24513	--	Cot_Trobaso
6693	8103	COTONIFICIO FRANCESCO TURATI	MILANO(MI)	DB17	Cotonificio Francesco Turati (poi Cotonificio Vittorio Olcese, dopo Cotonificio Olcese-Veneziano, quindi Olcese)	Cotonificio Turati	Turati	1904	1908	2005	0.200	20000	100000	35976	3500	Cot_Turati

6738	8264	COTONIFICIO VAL D'OLONA OGNA CANDIANI	MARNATE (BUSTO ARSIZIO)(VA)	DB17	Cotonificio Val d'Olona (Ogna Candiani)	Cotonificio Val. Ol. Ogna Can.	V. Olonn.	1903	1906	1939	0.200	12000	60000	34227	1500	Cot_ValOlon
6570	7998	COTONIFICIO DELLA VALLE SERIANA	GAZZANICA(BG)	DB17	Cotonificio Valle Seriana	Cotonificio Valle Seriana	V. Ser.	1888	1888	1935	0.250	12000	48000	40255	1680	Cot_ValSer
6746	8282	COTONIFICIO VALLE TICINO	MILANO(MI)	DB17	Cotonificio Valle Ticino	Cotonificio Val Ticino	V. Ticin.	1905	1907	1968	0.100	9000	90000	12046	1080	Cot_ValTicino
6748	8294	COTONIFICIO VENEZIANO	VENEZIA(VE)	DB17	Cotonificio Veneziano	Cotonificio Veneziano	Venez.	1882	1903	1931	0.075	30000	400000	109846	6000	Cot_Venez
29756	36163	TESSITURE SERICHE BERNASCONI	CERNOBBIO(CO)	DB17	Tessiture Seriche Bernasconi	Tess. Ser. Bernasconi	Bernasc.	1899	1899	1969	0.075	15000	200000	42299	2400	Tess_Bernasc
17872	21496	LINIFICIO E CANAPIFICIO NAZIONALE	MILANO(MI)	DB17	Linificio e Canapificio Nazionale	Lanif. E Canap. Naz.	Lin. C. N.	1873	1876	2008	0.250	50000	200000	126385	8000	Tess_CanapNaz
9710	31718	FILATURA DEI CASCAMI DI SETA	MILANO(MI)	DB17	Filatura Cascami Seta (poi Cascami 1872, dopo Santavaleria Finanziaria, quindi Santavaleria)	Filat. Cascami seta	Casc. Seta	1872	1880	1998	0.300	60000	200000	107640	10000	Tess_CascSeta
7032	33576	DE ANGELI FRUA SOCIETÀ PER L'INDUSTRIA DEI TESSUTI STAMPATI	MILANO(MI)	DB17	De Angeli-Frua	Ital. Tessuti Stamp.	De Angeli	1899	1903	1992	0.250	32500	130000	110681	7700	Tess_DeAngeli
17416	20959	LANIFICIO DI GAVARDO	MILANO(MI)	DB17	Lanificio di Gavardo	Lanificio di Gavardo	Lan. Gav.	1889	1899	1978	0.250	10000	40000	38484	1920	Tess_Gavardo
18807	22629	MANIFATTURE TOSCANE RIUNITE	LIVORNO(LI)	DB17	Manifatture Toscane Dini (poi Manifatture Toscane Riunite)	Manif. Toscana Dini	Man. Dini	1905	1918	1931	0.100	15000	150000	27573	--	Tess_ManDini
21152	22481	MANIFATTURA ITALIANA CARLO PACCHETTI	MILANO(MI)	DB17	Manifattura Italiana C. Pacchetti (poi Pacchetti)	C. Pacchetti e C.	Pacch.	1905	1905	1994	0.100	12000	120000	17133	1440	Tess_Pacch
17371	21045	LANIFICIO ROSSI	MILANO(MI)	DB17	Lanificio Rossi (poi Lanerossi)	Lanificio Rossi	Rossi	1873	1873	1979	1.350	44550	33000	135700	4620	Tess_Rossi
18718	22577	MANIFATTURA ROSSARI & VARZI	GALLIATE(NO)	DB17	Manifattura Rossari e Varzi	Manif. Rossari-Varzi	Ross.V	1900	1904	1975	0.250	20000	80000	46239	3200	Tess_RossVarz
18721	22586	MANIFATTURA ROTONDI	MILANO(MI)	DB17	--	--	Rotondi	1902	1926	1922	--	15000	--	49472	2100	Tess_Rotondi
29848	21054	LANIFICIO TARGETTI	MILANO(MI)	DB17	Lanificio Nazionale Trezzi Dario (poi Lanificio Targetti, quindi Tilane ed infine Profing)	Lanificio Naz. Targetti	Targetti	1899	1900	1981	0.200	6000	30000	20715	600	Tess_Targetti
18751	22635	MANIFATTURA TOSI	BUSTO ARSIZIO(VA)	DB17	Manifattura Tosi	Manif. Tosi Busto A.	Tosi. B.	1898	1899	1973	0.125	18000	144000	52490	3600	Tess_Tosi

30486	37093	UNIONE MANIFATTURE	PARABIAGO(MI)	DB17	Cotonificio Muggiani (poi Unione Manifatture)	Un. Man. (Già Mugg.)	Un. Maniff.	1903	1903	1993	0.100	18000	180000	53692	4500	Tess_UnManiff
9165	10926	FABBRICHE ITALIANE MATERIE COLORANTI BONELLI	MILANO(MI)	DG24	Fabbriche Italiane Materie Coloranti Bonelli	Materie color. Bonelli	Bonelli	1915	1919	1929	0.100	30000	300000	56290	--	Chi_Bonelli
27721	33540	SOCIETÀ ITALIANA DI ELETTROCHIMICA	ROMA(RM)	DG24	Italiana di Elettrochimica	Ital. Elettroch. Roma	Elettroc.	1899	1902	1928	0.070	21000	300000	46458	--	Chi_Elettroc
19857	23958	MONTECATINI	MILANO(MI)	DG24	Montecatini	A. G. Ind. Min. Montec.	Montecat.	1888	1900	1967	0.100	200000	2000000	399623	30000	Chi_Montecat
25152	30095	SNIA VISCOSA SOCIETÀ NAZIONALE INDUSTRIE APPLICAZIONI VISCOSA	TORINO(TO)	DG24	Snia Viscosa (poi Snia BPD, ora SNIA)	Nav.In Com. S. N. I. C.	S.N.I.A.	1917	1920	--	0.100	175000	1750000	378494	--	Chi_SNIA
4774	32229	CERAMICA RICHARD GINORI	MILANO(MI)	DI26	Ceramica Richard Ginori (poi S.C.I. Pozzi-Richard Ginori, dopo Finanziaria Pozzi-Ginori)	Ceram. Richard-Gin.	Rich. Gin.	1873	1877	1994	0.250	10000	40000	23872	600	Cer_RichGin
25339	30334	ALTI FORNI FONDERIE ACCIAIERIE E FERRIERE FRANCHI GREGORINI	BRESCIA(BS)	DJ27	Alti Forni Gregorini (poi Alti Forni Fonderie Acciaierie Ferriere Franchi Gregorini)	Franchi Gregorini	Fr. Greg	1905	1905	1930	0.050	30450	609000	120992	--	Met_FrGreg
16475	14942	ILVA ALTI FORNI E ACCIAIERIE D'ITALIA	GENOVA(GE)	DJ27	Ilva Alti Forni Acciaierie d'Italia (poi Italsider)	Ilva Alti Forni. Acc.	Ilva	1897	1918	1983	0.010	150000	15000000	661054	3413	Met_Ilva
19255	34131	METALLURGICA ITALIANA	MILANO(MI)	DJ27	SMI (ora KME Group)	Metallurg. It. Roma	Metalli	1886	1897	--	0.100	40000	400000	118705	211	Met_Metalli
20543	25131	OFFICINE DI SESTO SAN GIOVANNI & VALSECCHI ABRAMO	MILANO(MI)	DJ28	Officine Sesto S. Giovanni & Valsecchi Abramo	Offic. Sesto S. Giov.	Camona	1906	1905	1925	0.100	5000	50000	9024	--	Met_Camona
26059	38217	ITALIANA GIO. ANSALDO & C.	ROMA(RM)	DK29	Italiana Gio. Ansaldo & C.	Gio. Ansaldo e C.	Ansaldo	1903	1905	1923	0.250	500000	2000000	969301	--	Equip_Ansaldo
7825	30834	FABBRICA AUTOMOBILI E VELOCIPEDI EDOARDO BIANCHI	MILANO(MI)	DM34	Fabbrica Automobili e Velocipedi E. Bianchi (poi Edoardo Bianchi)	Aut. E vel. E. Bianchi	Bianchi	1905	1907	1971	0.050	14000	280000	25582	1960	MV_Bianchi
8575	10483	F.I.A.T.	TORINO(TO)	DM34	--	--	F.I.A.T.	1899	1924	--	--	200000	--	423052	15000	MV_FIAT
8920	10592	FABBRICA AUTOMOBILI ISOTTA FRASCHINI	MILANO(MI)	DM34	Fabbrica Automobili Isotta Fraschini	Aut. Isotta-Fraschini	Is. Frasc.	1904	1905	1949	0.050	3600	72000	22575	0	MV_IsFrasc
9907	33582	ITALIANA ERNESTO BREDA PER COSTRUZIONI MECCANICHE	MILANO(MI)	DM35	Italiana Ernesto Breda per Costruzioni Meccaniche (poi Finanziaria Ernesto	Cost. Mecc. E. Breda	Breda	1899	1904	1994	0.250	100000	400000	215437	9000	TE_Breda

Breda)

20650	24894	OFFICINE MECCANICHE	MILANO(MI)	DM35	Officine Meccaniche gia Miani e Silvestri	Off. Mecc. Miani Silv.	Miani Sil.	1899	1899	1935	0.100	40000	400000	69222	4000	TE_MianiSilv
22384	25004	OFFICINE MECCANICHE ITALIANE	REGGIO EMILIA(RE)	DM35	Reggiane-Officine Meccaniche Italiane	Off. Mecc. Reggiane	Reggiane	1904	1907	1951	0.005	25000	5000000	89674	1500	TE_Reggiane
8932	10614	FABBRICA CANDELE STEARICHE DI MIRA	MIRA(VE)	DN36	Fabbrica Candele Steariche Mira	Candele stear. Mira	Mira	1905	1905	1925	0.100	14000	140000	56882	1400	Man_Mira
11067	32931	GENERALE ELETTRICA DELL'ADAMELLO	MILANO(MI)	E40	Generale Elettrica dell'Adamello (poi Generale Elettrica Cisalpina)	Elettr. Dell'Adamello	Adamello	1907	1911	1943	0.200	84993	424965	196574	6400	Elett_Adamello
23690	30180	SADE SOCIETÀ ADRIATICA DI ELETTRICITÀ	VENEZIA(VE)	E40	SADE - Adriatica Elettricita	Adr. Elettr. Venezia	Adriatica	1905	1906	1965	0.100	100000	1000000	116684	10000	Elett_Adriatica
7914	32594	ELETTRICA BRESCIANA	BRESCIA(BS)	E40	Elettrica Bresciana	Elettrica Bresciana	Bresciana	1905	1907	1964	0.100	40000	400000	125953	--	Elett_Bresciana
26350	31674	SOCIETÀ ANONIMA PER IMPRESE ELETTRICHE CONTI	DOMODOSSOLA(NO)	E40	Imprese Elettriche Conti	Imprese elettr. Conti	Conti	1901	1907	1927	0.250	79000	316000	160152	6570	Elett_Conti
19861	32955	SOCIETÀ GENERALE ITALIANA EDISON DI ELETTRICITÀ	MILANO(MI)	E40	Edison (gia Generale Italiana Edison di Elettricita, poi Montedison)	Gen. It. Edison d'Elettr.	Edison	1884	1895	1990	0.300	165600	552000	253200	15360	Elett_Edison
28067	34015	SOCIETÀ LIGURE TOSCANA DI ELETTRICITÀ	LIVORNO(LI)	E40	Ligure Toscana di Elettricita	Lig. Toscana d'Elet.	Lig. Tosc.	1905	1912	1933	0.200	78400	392000	116110	7056	Elett_LigTosc
5035	32692	SOCIETÀ ELETTRICA RIVIERA DI PONENTE ING. R. NEGRI	GENOVA(GE)	E40	Elettrica Riviera di Ponente Ing. R. Negri (poi Cieli - Compagnia Imprese Elettriche Liguri)	Elett. Pon. Ing. Negri	Negri	1905	1906	1967	0.200	110000	550000	179148	--	Elett_Negri
29586	35955	TERNI SOCIETÀ PER L'INDUSTRIA E L'ELETTRICITÀ	ROMA(RM)	E40	Alti Forni Acciaierie e Fonderie di Terni (poi Terni-Societa per l'Industria e l'Elettricita)	Alti Forni F. A. Terni	Terni	1884	1895	1983	0.400	114133	285333	330403	7133	Elett_Terni
30371	37003	UNES UNIONE ESERCIZI ELETTRICI	MILANO(MI)	E40	UNES - Unione Esercizi Elettrici	Unione eserc. Elettr.	Un. Es. El.	1905	1905	1964	0.050	42000	840000	83446	5460	Elett_UnEsEl
31165	34039	VIZZOLA SOCIETÀ LOMBARDA PER DISTRIBUZIONE DI ENERGIA ELETTRICA	MILANO(MI)	E40	Vizzola - Lombarda Distribuzione Energia Elettrica	Lomb. distr. ener. El.	Lan. Viz.	1897	1902	1965	0.500	45150	90300	81035	5195	Elett_Vizzola
17100	20585	LA RINASCENTE SOCIETÀ PER L'ESERCIZIO DI GRANDI MAGAZZINI	MILANO(MI)	G52	La Rinascente	«La Rinascente»	Rinasc.	1917	1921	2003	0.040	90000	2250000	164408	0	RT_Rinasc

19578	33804	SOCIETÀ ITALIANA PER LE STRADE FERRATE DEL MEDITERRANEO	MILANO(MI)	I60	Italiana Strade Ferrate Mediterraneo (ora Mittel)	Ferr. Mediterranee	Fer. Med.	1885	1885	--	0.850	93443	109933	373363	3204	Tran_FerMed
30814	34783	VENETA PER COSTRUZIONE ED ESERCIZIO DI FERROVIE SECONDARIE ITALIANE	PADOVA(PD)	I60	Veneta Imprese e Costruzioni Pubbliche (poi Veneta Costruzione ed Esercizio Ferrovie Secondarie)	Ven. S. Eserc. Ferr.	Venete S.	1872	1886	1964	0.200	24000	120000	76541	0	Tran_VeneteS
26320	24211	NAVIGAZIONE LIBERA TRIESTINA	TRIESTE(TS)	I61	--	--	Lib. Tries.	1906	1906	1937	--	100000	--	257598	0	Tran_LibTries
20058	24200	NAVIGAZIONE GENERALE ITALIANA	GENOVA(GE)	I61	Navigazione Generale Italiana (gia Florio e Rubattino)	Nav. Gen. Italiana	Nav. G. I.	1881	1880	1949	0.500	150000	300000	429395	9300	Tran_NavGenIt
27828	33898	SOCIETÀ ITALIANA SERVIZI RADIOTELEGRAFICI E RADIOTELEFONICI	ROMA(RM)	I64	Marconi's Wireless Telegraph Co.	Marconi's Wireless	Marconi	1921	1912	1923	0.025	300	12000	318	0	Tcom_Marconi
21672	26123	PIRELLI & C.	MILANO(MI)	J65	Pirelli & C.	Pirelli & C.	Pirelli	1883	1922	--	0.500	120000	240000	180449	9600	Chi_PirelliC
2212	2584	BANCA COMMERCIALE ITALIANA	MILANO(MI)	J65	Banca Commerciale Italiana	Banca Commerc. Ital.	B.C. Ital.	1894	1898	1935	0.500	348786	697572	6675949	41854	Fin_BCItal
2231	2620	BANCA D'ITALIA	ROMA(RM)	J65	Banca Nazionale nel Regno d'Italia (ora Banca d'Italia)	Banca d'Italia	B. d'Italia	1893	1894	1936	0.600	180000	300000	17646199	18000	Fin_BdI
2607	3207	BANCO DI ROMA	ROMA(RM)	J65	Banco di Roma	Banco di Roma	B. Roma	1880	1905	1935	0.100	150000	1500000	3806432	0	Fin_BdRoma
28319	34389	SOCIETÀ PER L'ESPORTAZIONE E PER L'INDUSTRIA ITALO AMERICANA	MILANO(MI)	J65	Italiana d'Esportazione E. Dell'Acqua (poi Societa per l'Esportazione e l'Industria Italo Americana)	Esport. Italo-Amer.	Brasital	1889	1900	1934	0.200	18000	90000	24112	1980	Fin_Brasital, Fin_EspItalAm
6813	8402	CREDITO ITALIANO	MILANO(MI)	J65	Credito Italiano	Credito Italiano	Cred. Ital.	1870	1895	1935	0.500	300000	600000	4682393	27000	Fin_CredItal
2721	33813	SOCIETÀ ITALIANA PER LE STRADE FERRATE MERIDIONALI	FIRENZE(FI)	J65	Italiana Strade Ferrate Meridionali (poi Bastogi-I.R.B.S., ora Bastogi)	Ferr. Meridionali	Fer. Naz.	1862	1863	--	0.500	219585	439170	1104053	6067	Fin_FerNaz

Panel (B). *Firms listed in the MSE without full data availability*

IMITA.db-identifiers					De Luca (2002)	IlSole	IlSole	Found.	MSE	MSE	1922 Balance sheet and MSE data (in thsd. LIRA)					MSE
Id-Orig	Id-Soc	Descriptor	Headquarters	Ateco	Descriptor	Weekly-Id	Daily-Id	Year	Listed	Cancel	NV	Share-Cap	Outs-Shares	Assets	Dividend	Ticker
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
28346	34421	SOCIETÀ PER LA BONIFICA DEI TERRENI FERRARESI E PER IMPRESE AGRICOLE	TORINO(TO)	A01	Bonifica Terreni Ferraresi	Bonif. Terr. Ferraresi	--	1872	1902	--	0.200	32700	163500	62401	3270	
19824	23920	MONTE AMIATA SOCIETÀ MINERARIA PER AZIONI	ABBADIA SAN SALVATORE(SI)	CB13	Monte Amiata (poi SIFA, ora Finmeccanica)	Min. Moro. M. Amiata	--	1897	1920	--	0.050	16200	324000	34232	--	
1185	1387	AMIDERIA ITALIANA	MILANO(MI)	DA15	Amideria Italiana	Amideria It., Milano	--	1906	1906	1940	0.080	1136	14200	2576	170	
14820	17852	INDUSTRIA BUDELLA AFFINI	MILANO(MI)	DA15	Industria Budella e Affini	Indus. Budella e affini	--	1906	1907	1931	0.100	1000	10000	2296	120	
19666	34181	MOLINI E PASTIFICIO PANTANELLA	ROMA(RM)	DA15	Molini Pastificio Pantanella	Molini e Past. Pantanella	--	1882	1898	1931	0.125	10000	80000	29890	680	
20924	25230	OLIERIE E SAPONERIE MERIDIONALI	BARI(BA)	DA15	Oliere e Saponerie Meridionali	Oliere e Sapon. Mer.	--	1905	1908	1923	0.085	8000	94118	17119	--	
26924	32469	SOCIETÀ DI MACINAZIONE MOLINI CERTOSA	MILANO(MI)	DA15	Macinazione Molini Certosa	Macin. Certosa nuove	--	1889	1903	1980	0.250	5500	22000	23167	400	
6755	8307	COTONIFICIO VERBANESE	MILANO(MI)	DB17	Cotonificio Verbanese	Cotonificio Verbanese	--	1906	1907	1931	0.200	2500	12500	9867	250	
6913	8537	CUCIRINI CANTONI COATS	MILANO(MI)	DB17	Cucirini Cantoni Coats (poi Coats Cucirini, ora Ciccolella)	Fil. Cucir. Cantoni	--	1890	1896	--	0.125	25000	200000	58572	3890	
15454	18548	INDUSTRIE RIUNITE DI FILATI	MILANO(MI)	DB17	Industrie Riunite Filati (gia Tosi e Albini)	Ind. Riunite Filati	--	1901	1904	1925	0.250	5000	20000	17022	700	
18958	22879	FABBRICA MAGLIERIE P. MARTINENGO	MILANO(MI)	DB17	Martinengo e Tazzini (poi Martazz)	Martinengo e Tazzini	--	1907	1912	1931	0.130	2704	20800	7126	406	
25898	30280	IL TRUCIOLO	CARPI(MO)	DB18	Il Truciolo	«Il Truciolo», Milano	--	1904	1905	1934	0.100	2400	24000	13864	168	
18655	22489	MANIFATTURA ITALIANA CINGHIE MASSONI & MORONI	MILANO(MI)	DC19	Manifattura Italiana Cinghie Massoni & Moroni	Manif. Massoni e Moroni	--	1906	1921	1955	0.100	3000	30000	6807	--	
3088	30439	BORTOLO LAZZARIS STABILIMENTI PER L'INDUSTRIA DEL LEGNO	SPRESIANO(TV)	DD20	Bortolo Lazzaris	An. Bortolo Lazzaris	--	1907	1920	1923	0.070	5600	80000	14436	0	

12205	17538	IGAP IMPRESA GENERALE D'AFFISSIONI E PUBBLICITÀ	MILANO(MI)	DE22	Impresa Generale Affissione e Pubblicita	Imp. Gen. Affiss. Pub.	--	1905	1908	1934	0.100	1500	15000	3678	105
18028	31417	LUBRIFICANTI ERNESTO REINACH	MILANO(MI)	DF23	Lubrificanti Ernesto Reinach	Lubr. Ern. Reinach	--	1905	1905	1934	0.100	3500	35000	16836	455
392	457	ACHILLE BRIOSCHI & C.	MILANO(MI)	DG24	Achille Brioschi & C. (poi A. Brioschi, quindi Brioschi Finanziaria, ora Brioschi Sviluppo Immobiliare)	Achille Brioschi & C.	--	1907	1914	--	0.100	3500	35000	5896	512
19398	31498	MIGONE & C.	MILANO(MI)	DG24	Migone & C. (poi Immobiliare Orefici)	Migone & C.	--	1899	1900	1961	0.100	1950	19500	4526	127
26537	31929	TENSI	MILANO(MI)	DG24	Tensi - Carta Fotografica e Affini	Tensi (carta fot e aff.)	--	1906	1922	1934	0.100	6250	62500	13100	750
27942	33844	SOCIETÀ ITALIANA PRODOTTI AZOTATI	ROMA(RM)	DG24	Italiana Prodotti Azotati	Ital. Prodotti azotati	--	1904	1906	1931	0.150	9900	66000	18115	--
9938	37058	UNIONE ITALIANA CEMENTI	TORINO(TO)	DI26	Unione Italiana Cementi	Uniione Ital. Cementi	--	1906	1920	1932	0.050	25000	500000	41378	1500
10939	30997	SOCIETÀ ANONIMA GALOTTI PER MATERIALE DA COSTRUZIONE	BOLOGNA(BO)	DI26	Galotti per Materiale da Costruzione	An. Galotti (Mat. Cos)	--	1907	1912	1928	0.100	2580	25800	4495	181
321	12264	FONDERIA MILANESE DI ACCIAIO	MILANO(MI)	DJ27	Fonderia Milanese Acciaio (poi Fonderie Acciaierie Milanesi Vanzetti e quindi Acciaierie Crucible Vanzetti)	Fond. Milan. Acciaio	--	1895	1905	1934	0.100	5000	50000	11112	--
338	390	ACCIAIERIE E FERRIERE LOMBARDE FALCK	MILANO(MI)	DJ27	Acciaierie e Ferriere Lombarde Falck (poi Falck)	Acc. Ferr. Lombarde	--	1906	1907	2001	0.200	40000	200000	98208	147
16986	20429	LA MAGONA D'ITALIA	FIRENZE(FI)	DJ27	La Magona d'Italia	«La Magona d'Italia»	--	1900	1905	1997	0.200	20000	100000	59217	2200
24583	33729	ITALIANA PER CONDUTTORI ELETTRICI ISOLATI E PRODOTTI AFFINI	LIVORNO(LI)	DL31	Italiana Conduttori Elettrici Isolati Prodotti Affini	Ital. Cond. El. Isolati	--	1906	1918	1955	0.140	4991	35650	12282	0
79	95	A. REJNA	MILANO(MI)	DM34	A. Rejna (poi Rejna)	A. Rejna	--	1906	1907	1998	0.040	8000	200000	20450	800
16139	19403	ITALA FABBRICA DI AUTOMOBILI	TORINO(TO)	DM34	Fabbrica Automobili Itala	Automobili Itala	--	1904	1922	1928	0.025	12500	500000	75629	--
19932	20476	LA MOTOMECCANICA	MILANO(MI)	DM34	La Motomeccanica - Brevetti Ing. Pavesi	La Moto-Aratrice	--	1914	1918	1923	0.125	1000	8000	14436	--
25376	30378	AUTOMOBILI DIATTO	TORINO(TO)	DM34	Fabbrica Automobili Diatto	Fabbrica Aut. Diatto	--	1905	1920	1924	0.005	10000	2000000	38271	--
19789	25083	OFFICINE MONCENISIO	TORINO(TO)	DM35	Officine Moncenisio	Off. Mecc.	--	1906	1920	1943	0.100	20000	200000	27106	1400

					(gia Bauchiero)	Moncenisio									
17877	32370	SOCIETÀ DEL LINOLEUM	MILANO(MI)	DN36	Linoleum	Linoleum	--	1898	1905	1965	0.100	4500	45000	14577	405
7960	32152	SOCIETÀ BRIOSCHI PER IMPRESE ELETTRICHE	MILANO(MI)	E40	Brioschi per Imprese Elettriche (poi Elettrica Piacentina)	Brioschi per imp. El.	--	1907	1921	1946	0.250	20000	80000	41295	2000
10573	31743	FORZE IDRAULICHE DI TREZZO SULL'ADDA BENIGNO CRESPI	MILANO(MI)	E40	Forze Idrauliche Trezzo Adda Benigno Crespi	Forze Idr. B. Crespi	--	1904	1905	1938	0.250	10000	40000	21994	1000
11069	32933	GENERALE ELETTRICA DELLA SICILIA	TAORMINA(ME)	E40	SGES - Generale Elettrica Sicilia	Gen. Elettr. Sicilia	--	1903	1921	1972	0.100	45320	453200	122538	4079
26881	32406	SOCIETÀ DELLE FORZE IDRAULICHE DEL MONCENISIO	TORINO(TO)	E40	Forze Idrauliche Moncenisio	Forze Idr. Moncenis.	--	1900	1908	1924	0.100	40000	400000	181482	--
27519	33295	SOCIETÀ INDUSTRIALE ITALIANA	ROMA(RM)	E40	Industriale Italiana	Industr. Ital. (Roma)	--	1905	1921	1930	0.100	24000	240000	29257	--
26770	32243	SOCIETÀ COLONIALE ITALIANA SCI	MILANO(MI)	G51	Coloniale Italiana	Coloniale Italiana	--	1899	1903	1928	0.100	4000	40000	13740	400
27857	33713	SOCIETÀ ITALIANA PEL COMMERCIO DELLE MACCHINE ED ISTRUMENTI AGRARI	PIACENZA(PC)	G51	Italiana Commercio Macchine e Istrumenti Agrari	Macchine Agr. Piac.	--	1902	1905	1928	0.075	2250	30000	16749	225
5039	7031	CIGA COMPAGNIA ITALIANA DEI GRANDI ALBERGHI	VENEZIA(VE)	H55	Compagnia Italiana Grandi Alberghi (poi Cigahotels, dopo CIGA)	Gr. Alberghi-Venezia	Gr. Alber.	1906	1906	2000	0.050	12000	240000	31205	2400
28463	34594	SOCIETÀ ROMANA TRAMWAYS OMNIBUS	ROMA(RM)	I60	Romana Tramways-Omnibus	Romana Tram Omn.	--	1884	1905	1928	0.175	8400	48000	17923	0
30340	37078	UNIONE ITALIANA TRAMWAYS ELETTRICI	GENOVA(GE)	I60	Unione Italiana Tranvie Elettriche	Un. It. Tram. Genova	--	1895	1905	1931	0.500	23000	46000	77591	1150
30733	34759	VARESINA PER IMPRESE ELETTRICHE	VARESE(VA)	I60	Varesina per Imprese Elettriche	Varesina Impr. Elettr.	--	1894	1902	1942	0.085	12325	145000	24779	761
17940	21591	LLOYD SABAUDO	GENOVA(GE)	I61	Lloyd Sabaudo	Lloyd sabaudo	--	1906	1918	1934	0.250	60000	240000	247279	3600
18329	22067	MAGAZZINI GENERALI MILANESI	MILANO(MI)	I63	Magazzini Generali Industrie Diverse	Mag. Gen.In Diverse	--	1920	1920	1923	0.100	3000	30000	4449	0
2228	2612	BANCA D'AMERICA E D'ITALIA	ROMA(RM)	J65	Banca dell'Italia Meridionale (poi Banca d'America e d'Italia)	Banca dell'It. Merid.	--	1917	1921	1930	0.100	50000	500000	371154	3000
16045	19270	ISTITUTO ITALIANO DI CREDITO MARITTIMO	ROMA(RM)	J65	Istituto Italiano Credito Marittimo	Ist. Ital. Credito Mar.	Cr. Marit.	1916	1920	1935	0.100	90000	900000	234631	4875
5623	6871	COMPAGNIA FONDIARIA REGIONALE	MILANO(MI)	K70	Compagnia Fondiaria Regionale	Comp. Fond. Reg.	--	1917	1921	1939	0.100	16343	163430	23314	981
16109	19360	ISTITUTO ROMANO DI BENI	ROMA(RM)	K70	Istituto Romano	--	Rom. B.	1904	1904	1979	--	60000	--	80158	4500

43

		STABILI			Beni Stabili		S.								
28074	34029	SOCIETÀ LOMBARDA DI BENI STABILI	MILANO(MI)	K70	Lombarda Beni Stabili	Lombar. Beni Stabili	--	1905	1905	1925	0.100	1250	12500	2194	50
29231	31917	SUVINI ZERBONI	MILANO(MI)	O92	Suvini-Zerboni	Suvini e Zerboni	--	1905	1905	1938	0.100	2554	25540	7424	308

Source: Own computations based on IMITA.db, Il Sole Financial Newspaper, De Luca (2002).

Table B.3. Descriptive Statistics by Security, 13 weeks before (Jul, 1922 - Oct, 1922) and 13 weeks during and after (Oct, 1922 - Feb. 1923) the March on Rome (Oct, 28, 1922)

Panel (A). Connected Firms

MSE Ticker	Cluster	Before			After		
		mkt_cap	div_yield	log_return	mkt_cap	div_yield	log_return
Agr_FonRust	1	51679327	0.0697	0.0125	60633029	0.0594	0.0075
Chi_Bonelli	1	9296154	0.0000	0.0126	10949231	0.0000	0.0192
Cot_Trobaso	1	13805846	0.0000	0.0048	14064308	0.0000	0.0103
Cot_Turati	1	28567179	0.1230	0.0183	31592308	0.1109	0.0030
Cot_Venez	1	45542051	0.1319	0.0158	50823333	0.1183	0.0036
Elett_Adriatica	1	110200000	0.0909	0.0081	121698718	0.0822	0.0050
Elett_UnEsEl	1	57902385	0.0945	0.0083	60932846	0.0897	0.0038
Equip_Ansaldo	1	2500077	0.0000	0.0201	2724808	0.0000	-0.0006
FB_Distillerie	1	58264744	0.1032	0.0162	66672436	0.0901	0.0080
FB_Eridiana	1	102728077	0.0586	0.0146	117882308	0.0509	0.0086
FB_Gulinelli	1	70782051	0.1131	0.0107	81462564	0.0983	0.0084
FB_IndZuc	1	95529692	0.0588	0.0126	112674329	0.0498	0.0115
FB_MolAltaIt	1	59622500	0.0306	0.0326	78272308	0.0230	0.0044
FB_Raffinerie	1	98896795	0.0608	0.0126	106757853	0.0562	0.0043
Fin_BdI	1	401669231	0.0448	0.0054	441726923	0.0408	0.0057
Fin_BdRoma	1	156201923	0.0000	-0.0001	156000000	0.0000	0.0001
Tess_CascSeta	1	116750769	0.0861	0.0213	154104359	0.0650	0.0100
Tess_UnManiff	1	43019308	0.1049	0.0175	42511038	0.1060	-0.0010
Tran_VeneteS	1	15624215	0.0000	0.0183	19371462	0.0000	0.0081
N_con = 19							
Average		80978017	0.0616	0.0138	91097587	0.0548	0.0063

Panel (B). Other Firms

MSE Ticker	Cluster	Before			After		
		mkt_cap	div_yield	log_return	mkt_cap	div_yield	log_return
Cot_ValOlon	0	18040462	0.0834	0.0196	19360000	0.0778	-0.0036
Tran_FerMed	2	17154481	0.1878	0.0225	24466082	0.1313	0.0115
Tess_Tosi	2	36163200	0.1001	0.0209	41443385	0.0870	0.0086
Fin_BCItal	2	604074994	0.0693	0.0036	641828395	0.0652	0.0053
Elett_Terni	2	130296720	0.0549	0.0088	136150426	0.0524	0.0035
Chi_Montecat	2	301087179	0.1001	0.0189	344857692	0.0871	0.0004
Chi_Elettroc	2	18477692	0.0000	0.0039	19267308	0.0000	0.0000
TE_Reggiane	2	26336538	0.0571	0.0073	27631410	0.0543	0.0000
Min_Elba	2	26430769	0.0536	0.0293	30447115	0.0460	-0.0007
RT_Rinasc	2	91694712	0.0000	-0.0010	88042788	0.0000	-0.0008
Fin_EspItalAm	2	44913115	0.0442	0.0131	46602115	0.0425	-0.0010
Tess_Targetti	2	5991769	0.1009	0.0232	6904154	0.0870	-0.0028
Tss_ManDini	2	10696346	0.0960	0.0145	11952115	0.0855	-0.0053
Fin_Brasital	2	31069154	0.0638	0.0067	29919692	0.0663	-0.0068
Met_Ilva	2	179692308	0.0193	0.0245	182740385	0.0188	-0.0105
Cer_RichGin	3	17094359	0.0359	0.0325	16577308	0.0377	-0.0230
Elett_LigTosc	4	80455487	0.0877	0.0019	91481744	0.0773	0.0100
Fin_CredItal	4	387704615	0.0697	0.0058	423993846	0.0637	0.0046
Chi_PirelliC	4	121584923	0.0790	0.0008	127092769	0.0756	0.0041
Tcom_Marconi	4	2831585	0.0000	0.0094	2590477	0.0000	0.0038
MV_FIAT	4	471176923	0.0318	0.0064	519151282	0.0289	0.0029
TE_MianiSilv	4	39999487	0.1001	0.0108	42783077	0.0935	-0.0011
Elett_Vizzola	4	76565138	0.0679	0.0064	77614818	0.0669	-0.0014
Met_Metalli	4	43464615	0.0049	0.0125	47728974	0.0044	-0.0066
Fin_FerNaz	5	129024768	0.0470	0.0040	147992689	0.0411	0.0081
Elett_Adamello	5	90634683	0.0706	0.0005	98464391	0.0650	0.0070
Tran_NavGenIt	5	156756154	0.0594	0.0056	168914423	0.0551	0.0049
Elett_Edison	5	240173785	0.0640	0.0090	263198554	0.0584	0.0045
Elett_Negri	5	68037115	0.0000	0.0000	64044327	0.0000	0.0019
Elett_Conti	5	87677036	0.0749	0.0025	91665523	0.0717	0.0016
Elett_Bresciana	5	33922564	0.0000	0.0083	34587436	0.0000	-0.0072
MV_Bianchi	5	20291385	0.0967	0.0120	21954154	0.0893	-0.0076
MV_IsFrasc	5	1049908	0.0000	0.0060	895292	0.0000	-0.0261

Cot_Merid	6	53083077	0.0905	0.0084	56539487	0.0849	0.0027
Tess_DeAngeli	7	56889667	0.1355	0.0087	61416667	0.1258	0.0114
Met_FrGreg	7	26835819	0.0000	0.0073	29768779	0.0000	0.0031
Tess_Pacch	7	14834769	0.0973	0.0170	18181385	0.0792	0.0026
Met_Camona	7	5486410	0.0697	0.0077	5769551	0.0663	0.0020
Cot_Furter	7	9118654	0.0608	-0.0026	8502115	0.0650	0.0017
TE_Breda	7	95886667	0.0939	0.0007	97800256	0.0920	0.0013
Tess_Rossi	7	66365962	0.0697	0.0087	69179254	0.0668	0.0010
Tess_Rotondi	7	22635000	0.0931	0.0144	23669231	0.0889	0.0005
Cot_Cant	7	33110154	0.0610	0.0229	37957538	0.0528	0.0005
Tess_RossVarz	7	37584000	0.0858	0.0203	39753846	0.0807	-0.0042
Cot_ValTicino	7	14370462	0.0753	0.0151	14233154	0.0762	-0.0051
Tess_Gavardo	7	35526154	0.0545	0.0091	35649231	0.0541	-0.0069
Cot_ValSer	7	28715692	0.0597	0.0226	30808000	0.0547	-0.0100
Man_Mira	8	15364641	0.0912	-0.0005	14114333	0.0992	-0.0016
Tess_CanapNaz	8	118798974	0.0675	0.0100	136525128	0.0591	-0.0087
Min_Petroli	9	7190513	0.1044	-0.0035	6719744	0.1119	0.0014
Tess_Bernasc	9	28276923	0.0849	0.0168	33035769	0.0727	-0.0009
N_ncon =51							
Average		83934069	0.0650	0.0105	90430738	0.0600	-0.0006

Table B.4 Reference Table: [Sector Details] Number of Firms, Assets and Share Capital for ATECO Sectors in IMITA.db and Milano Stock Exchange (MSE), *Year: 1922*

Columns [2]-[5], [7]-[10] expressed in thsd. LIRA.

Panel (A). Sectors with full data availability in the MSE

			Firms in IMITA.db					Firms with full data availability in the MSE, 1922					MSE/IMITA.db Total			MSE/IMITA.db Average	
			Industry-Total		Industry-Average			Industry-Total		Industry-Average							
			Assets	Share Capital	Assets	Share Capital		Assets	Share Capital	Assets	Share Capital	N	Assets	Share-Cap	Assets	Share-Cap
ATECO	Descriptor	N					N					[11]=	[12]=	[13]=	[14]=	[15]=
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[6]/[1]	[7]/[2]	[8]/[3]	[9]/[4]	[10]/[5]
A01	Agriculture	78	678820	352663	8703	4521	1	68051	45000	68051	45000	1.28	10.02	12.76	7.82	9.95
CA11	Petroleum-Gas	5	43379	24368	8676	4874	1	13927	10000	13927	10000	20.00	32.11	41.04	1.61	2.05
CB13	Metal-ores	21	236101	121424	11243	5782	1	61552	20000	61552	20000	4.76	26.07	16.47	5.47	3.46
DA15	Food-beverages	228	2500016	1086948	10965	4767	6	483713	240000	80619	40000	2.63	19.35	22.08	7.35	8.39
DB17	Textiles	254	3973031	1419747	15642	5590	22	1329818	516050	60446	23457	8.66	33.47	36.35	3.86	4.20
DG24	Chemicals	167	2371437	1106775	14200	6627	4	880865	426000	220216	106500	2.40	37.14	38.49	15.51	16.07
DI26	Non-metallic-mineral	126	664077	364584	5270	2894	1	23872	10000	23872	10000	0.79	3.59	2.74	4.53	3.46
DJ27	Basic-metals	69	2092312	661093	30323	9581	3	900751	220450	300250	73483	4.35	43.05	33.35	9.90	7.67
DJ28	Fabricated-metals	59	341766	143895	5793	2439	1	9024	5000	9024	5000	1.69	2.64	3.47	1.56	2.05
DK29	Machinery-equipment	44	1291238	661616	7317	3673	1	969301	500000	969301	500000	2.27	75.07	75.57	132.48	136.13
DM34	Motor-vehicles	19	909377	341633	47862	17981	3	471209	217600	157070	72533	15.79	51.82	63.69	3.28	4.03
DM35	Transport-equip	76	1969981	588203	25921	7740	3	374333	165000	124778	55000	3.95	19.00	28.05	4.81	7.11
DN36	Manufacturing-nec	38	342715	149864	9019	3944	1	56882	14000	56882	14000	2.63	16.60	9.34	6.31	3.55
E40	Electricity-gas	202	5340372	2386982	26437	11817	10	1642705	859276	164271	85928	4.95	30.76	36.00	6.21	7.27
G52	Retail-trade	9	256224	116839	28469	12982	1	164408	90000	164408	90000	11.11	64.17	77.03	5.77	6.93
I60	Land-transport	137	1896281	640588	13841	4676	2	449904	117443	224952	58722	1.46	23.73	18.33	16.25	12.56
I61	Water-transport	71	3180502	1033082	44796	14550	2	686993	250000	343497	125000	2.82	21.60	24.20	7.67	8.59
I64	Post-Telecomm	16	43579	21481	2724	1343	1	318	300	318	300	6.25	0.73	1.40	0.12	0.22
J65	Finance	274	58739778	3691835	214379	13474	7	34119587	1336371	4874227	190910	2.55	58.09	36.20	22.74	14.17
	Sub-Total	1893	86870986	14913620	27978	7329	71	42707213	5042490	416719	80307	3.75	49.16	33.81	14.89	10.96
	% IMITA.db Total	64.9	90.7	81.6												

Panel (B). Sectors for which there are no firms in the MSE with full data (*Firms in IMITA.db)*

ATECO	Descriptor	N [1]	Industry-Total		Industry-Average	
			Assets [2]	Share Capital [3]	Assets [4]	Share Capital [5]
A02	Forestry	5	31473	21560	6295	4312
B05	Fishing	8	64959	14540	8120	1818
CA10	Coal-lignite-peat	17	182639	100995	10743	5941
CB14	Other-mining	38	232181	137093	6110	3608
DB18	Wearing-apparel	31	201408	86505	6497	2790
DC19	Leather-footwear	36	241143	119137	6698	3309
DD20	Wood	31	165119	74338	5326	2398
DE21	Pulp-paper	30	307645	123713	10255	4124
DE22	Publishing-printing	52	199313	81652	3833	1570
DF23	Refined-petroleum	6	88270	19775	14712	3296
DH25	Rubber-plastic	5	308605	160510	61721	32102
DL30	Office-machinery	1	1233	1000	1233	1000
DL31	Electrical-machinery	44	495015	234129	11250	5321
DL32	Communication-equip	3	86495	14000	28832	4667
DL33	Precision-equip	8	51264	16044	6408	2006
E41	Water	17	188957	118140	11115	6949
F45	Construction	53	525404	171728	9913	3240
G50	Repair-fuel	1	2254	1000	2254	1000
G51	Wholesale-trade	205	2162714	643299	10550	3138
H55	Hotels-restaurants	60	216672	102570	3611	1710
I62	Air-transport	1	233	200	233	200
I63	Supporting-transport	46	252782	120200	5495	2613
J66	Insurance	82	1496045	173529	18244	2116
K70	Real-estate	180	1130189	647458	6279	3597
K71	Renting-machinery	2	10886	4930	5443	2465
K74	Other-business-acts	7	23946	10250	3421	1464
M80	Education	5	10239	5726	2048	1145
N85	Health	5	13469	8133	2694	1627
O92	Recreation-culture	28	203172	115073	7256	4110
O93	Other-services	17	64553	32865	3797	1933
	Sub-Total	1024	8958277	3360092		
	% IMITA.db Total	35.1	9.3	18.4		
	IMITA.db Total	2917	95829263	18273712		