

Alma Mater Studiorum Università di Bologna
Archivio istituzionale della ricerca

The 'Duce hometown effect' on local industrial development: The case of Forlì

This is the final peer-reviewed author's accepted manuscript (postprint) of the following publication:

Published Version:

Fauri, F., Troilo, M. (2020). The 'Duce hometown effect' on local industrial development: The case of Forlì. *BUSINESS HISTORY*, 62(4), 613-636 [10.1080/00076791.2018.1472582].

Availability:

This version is available at: <https://hdl.handle.net/11585/640625> since: 2024-06-03

Published:

DOI: <http://doi.org/10.1080/00076791.2018.1472582>

Terms of use:

Some rights reserved. The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. For all terms of use and more information see the publisher's website.

This item was downloaded from IRIS Università di Bologna (<https://cris.unibo.it/>).
When citing, please refer to the published version.

(Article begins on next page)

The 'Duce hometown effect' on local industrial development:

The case of Forlì

Francesca Fauri and Matteo Troilo

Department of Economics, University of Bologna, Bologna, Italy

ABSTRACT

The history of fascist intervention and rescue in support of Italian banks and firms (either through nationalisation or direct aid) in the inter-war years is well known. The case of Forlì adds an important piece of information to the broad literature on state-sponsored development. Benito Mussolini was born in Predappio, a small village in the Apennines in the province of Forlì. And Forlì was meant to become 'la città del Duce' ('the Duce's hometown'). The case of Forlì offers an original perspective: entrepreneurs who chose Mussolini's hometown to obtain special concessions, a novel element in the crowded panorama of special relationships between government and industry in Italy. But on the other hand, this article will also underline the unsuitability of big business to local economic characteristics (and post-war challenges) and the return to a traditional growth path centred around the small-firm model specialising in traditional sectors and family-owned, centralised management. State-sponsored business failed and provided no stimulus to local growth: any talk of 'industrial continuity' in Forlì requires us to acknowledge that it is based on the steady presence and continuous regeneration of locally grown, small family businesses.

Introduction

The history of fascist intervention and rescue in support of Italian banks and firms (either through nationalisation or direct aid) in the inter-war years is well known.¹ In the 1920s Mussolini set up a public firm in the oil sector (Agip, 1924) and municipal sector companies (1925); the fascist government helped Ansaldo (iron, steel, engineering) overcome a significant post-war crisis and, in 1923, organised the Banco di Roma bailout. Similarly, in the 1920s tax advantages and subsidies were granted to highway and shipbuilding companies.² Moreover, following the collapse of the stock market in 1929 and the onset of the depression, the fascist government took drastic steps to avoid industry and bank bankruptcies and introduced a more marked 'entrepreneurial state'. A large public holding company was created in 1933, IRI (Istituto di Ricostruzione Industriale), which gained control over a very wide and heterogeneous range of industries. Italy found itself with the largest public sector in Europe after the Soviet Union.³ IRI took over the main Italian mixed bank shareholdings (Comit, Credit, and Banco di Roma) for a total of 10.3 billion lire, equal to 21.5% of all capital belonging to Italian joint-stock companies. The chain-like nature of shareholding meant that IRI became the major shareholder in companies representing some 42% of all joint-stock company capital.⁴ A widely shared hypothesis holds that state intervention was warranted by the structural weakness underlying a large number of interrelated companies and banks.⁵ At the same time, Italy's largest private firms continued to take full advantage of the opportunities offered by the fascist state in terms of contracts and/or reinforcing protective tariff policy. The common practice of 'bargaining with political power' ensured their survival in the face of increasing international turmoil and stiff competition (the widely studied cases of Fiat, Montecatini, and Terni are alike in this respect).⁶

The case of Forlì adds an important piece of information to the broad literature on state-sponsored development. Benito Mussolini was born in Predappio, a small village in the Apennines in the province of Forlì. And Forlì was meant to become 'la città del Duce' (the Duce's hometown): new avenues, squares, and buildings transformed and modernised Forlì's layout. For the first time, starting already in the mid-1920s, industrial capital was attracted to an 'unattractive', mid-size rural town in the Emilia-Romagna region for political motives. This kind of exogenous development helped innovative firms and industrial sites which flourished in the fascist years. With the advent of autarkic policies in the 1930s, as we shall see, Mussolini sought to turn Forlì into an aviation hub, but fascist industrial development

policy also lavished benefits on Bolzano (1934) and Ferrara (1936), where Mussolini aimed at creating industrial development zones which would help Italy meet the challenge of autarky (and to 'Italianise' the province of Bolzano).⁷

The significance of Forlì's case study relates to the fact that this research will shed light on two topics: the impact of the state on industrial development in a relatively obscure geographical area through the sponsorship of a few big businesses and the long-term resilience of small firms which has characterised the area before (and after) fascism. As to the first topic, during fascism Forlì also developed through the contribution of entrepreneurs who chose to locate their firms there, counting on special treatment from local fascist authorities and Mussolini himself.⁸ Forlì's synthetic fibre and aircraft industries are part of what might be called a state-assisted experiment, since their location in Forlì was deeply influenced by the 'Duce hometown effect'. As to the second topic, historical and socio-economic research in general has shown that the development of local industrial 'systems' has been characterised by a certain degree of 'spontaneous growth',⁹ unprompted development that has accompanied the growth and proliferation of small business and industrial districts in Italy and at the same time generated interest in their history. Their existence is proof of the strength of civil society over politics.¹⁰ In the case of Forlì we can indeed speak of long-term resilience of small-scale family business, which has remained numerically significant up to the present day, still accounts for 94% of all firms, and concentrates in three major fields: processing of agricultural goods, mechanical, and textile sectors.¹¹ Quite interestingly, Forlì's 'core business' has remained the same for over a century. Finally, the case of Forlì offers an original perspective: entrepreneurs who chose Mussolini's hometown to obtain special concessions, a novel element in the crowded panorama of special relationships between government and industry in Italy. But on the other hand, the historical conclusions that can be drawn from the experience of Forlì highlight the possible unsuitability of big business to local economic characteristics (and post-war challenges) and the return to a traditional growth path centred around the small-firm model specialised in traditional sectors, family-owned, centralised management, and limited aptitude for path-breaking innovation.¹²

1. Forlì's industrial development

The first examples of industrialisation in the rural context of Forlì date back to the 1870s and include small businesses directly linked to the agricultural production of flour, hemp, silk, flax, and sugar.¹³ The cultivation and processing of these products were tied to the land or peasant life and were very common in the countryside, since they made it possible to supplement low rural wages by selling products such as silk cocoons and hemp (which were also woven at home for family needs).¹⁴ A landscape of small, scattered flour mills and textile factories developed and employed the largest share of workers outside agriculture. However, two factors triggered a harsh selection process among the myriad small textile factories: (1) the tariff war with France at the end of the 1880s which cut off silk and textile exports to Italy's most important export market;¹⁵ and (2) technological progress: many small artisan firms could not afford steam engines and mechanical looms. Competition from firms in the north and abroad was stiff and, as we can read in the documents of the time, all flax and hemp spinning mills 'slowly went out of business and ceased production altogether in the end'.¹⁶

Yet, as shown in Table 1, there were still 103 textile factories in 1911, the second largest source of employment in Forlì with 1176 workers (an average of over 11 workers per firm). Industry consisted mainly of micro-enterprises employing fewer than 10 workers and processing of agricultural products (the main source of employment), with an average of 3.4 workers per firm. There were a few mid-sized flour mills. However, these were generally family businesses linked to food processing and the agricultural world.

The third sector in order of size was the mechanical/metallurgical sector, with a broad presence of 741 employees and an average of almost 5 workers per firm. Generally these

Table 1. Industry in Forlì in 1911 and 1937 (number of firms and of employees – Census data).

	1911			1937		
	Firms	Employees	%	Firms	Employees	%
Agriculture/Food products	362	1237	27.64	268	1633	14.97
Textiles and clothing	103	1176	26.27	421	2627	24.09
Wood*	–	–	–	135	384	3.52
Leather and hides*	–	–	–	184	1141	10.46
Mechanical engineering/ Metal production	153	741	16.55	262	2371	21.74
Construction and building materials	27	582	13.00	69	2308	21.16
Chemical	15	532	11.89	12	42	0.39
Mining	2	68	1.52	2	27	0.25
Others*	–	–	–	40	266	2.44
TOTAL	662	4336	96.87	1393	10,799	99.03
Public utilities (water, electricity)	16	140	3.13	39	106	0.97
TOTAL	678	4476	100.00	1432	10,905	100.00

*This category did not exist in 1911 Census.; Source: Ministero di Agricoltura, Industria e Commercio, *Censimento degli opifici e delle imprese industriali, 10 giugno 1911*, Vol. III; and Istituto Centrale di Statistica nel Regno d'Italia, *Censimento Industriale e Commerciale 1937*.

were small workshops producing for the local or regional market. However, they characterised Forlì as a relatively highly industrialised town compared with the rest of the Romagna area. Forlì was already showing the typical features of a local industrial system based on family firms and widespread artisan skills, which still characterise it today. As to the number of workers employed in the different sectors, the 1937 Census shows a similar distribution for the textile sector, still employing 24% of the workforce, but a sharp drop of the rate of workers in agriculture (from 27.6 to 15%) and a sharp rise of those employed in the mechanical/engineering sector (from 16.6 to 21.7%) and construction/building material sector (from 13 to 21.1%).¹⁷

What happened to Forlì's industrial infrastructure with the advent of fascism? At first, the same things as happened in the rest of Italy. After the first few years of loose inflation control and rapid export growth which attracted many entrepreneurs, Mussolini decided to introduce 'Quota 90' in 1926: 90 lire to the pound as opposed to the existing exchange rate of 154 lire to the pound.¹⁸ This had a number of major impacts on the Italian economy at the time. First of all, the revaluation of the lira came as a shock to exporting firms, plunging the smaller ones into depression, given their inability 'to cope with the lower prices of foreign competitors'. Many simply went rapidly out of business.¹⁹ Similarly, agricultural prices fell and soon a number of types of agricultural enterprise, such as vineyards, became totally 'uneconomical' in the Romagna region.²⁰ Unemployment rose, and Forlì ranked 25th among Italian provinces in terms of unemployment, with 4887 individuals out of work.²¹

The revaluation of the lira also had a deleterious effect on wages and prices, which fell in order to compensate for the new exchange rate. The government decreed a 10% reduction in all rents (which had a limited, short-lived effect) and urged entrepreneurs to continue with the wage cuts already under way, so that ultimately national wage levels fell by 20%.²² Indeed, between 1926 and 1933 carpenters' and spinners' wages in Forlì fell by 25%. Protest and discontent remained below the surface, for fear of possible repercussions given the abolition of free trade unions to protect workers. Mussolini was able to go through with what contemporaries called 'wild deflation', despite the fact that many foreign observers thought it was just another folly of an eccentric dictator.²³ They included Keynes, who believed that 'The lira does not listen even to a dictator and cannot be given castor oil'.²⁴ He would be forced to change his mind.

2. The leading enterprises in the 1920s

With regard to 'big business' in the textile sector, we may briefly mention Bonavita (1874) for the production of coarse stuffing for rifles (founded and managed by a woman, Teresa Bonavita),²⁵ and three medium-sized silk spinning mills or *filande* (Brasini, Scanelli, and Panzeri), that were able to survive national and foreign competition by introducing technical

improvements, rigid division, and specialisation of labour (with six separate specialised roles involved in the process: from cocoon selection and preparation to the final step of reeling) and modern machinery. They were also able to count on an extremely low-paid, passive labour force: 98% were women and young girls aged under 14 (a quarter of the total), who worked processing silk cocoons from 5 am to 11 pm during the peak season and earned wages far below the national average (50–60 cents as opposed to an average of 90 cents per day) in unbearable working conditions.²⁶ Lobbying by the owners (threatened by the low prices of Japanese silk) convinced the Prefect of Forlì not only to pass a temporary dispensation in 1907 extending working hours from 10 to 17 but also authorising the *filande* to operate on Sundays.²⁷ Despite the meagre wages and long working hours, the three silk spinning mills in Forlì barely survived, changing hands several times, and by the end of World War I only one of them was still in operation – the new Scanelli factory – which was bought in 1918 by Napoleone Majani, a former employee.²⁸ The days of silk production were numbered. As a result of the revaluation of the lira and Japanese competition, silk production prices fell by a third over the 1920s,²⁹ with the local price for cocoons swiftly following (the price of silk cocoons per kg in Forlì fell from 18.2 to 4.9 lire between 1926 and 1933).³⁰ Forlì had been the largest market for cocoons in Romagna, with silkworm breeding extremely common among peasants. However, it was soon realised that it was no longer economical.³¹

These trends were not so easy to foresee when Majani bought the spinning mill. In one year he was able to pay back his loan to the local bank. Such rapid recovery made him believe there was room for new investment: he bought new machinery and set up new production departments which extended the factory to 9000 square metres. The workforce was expanded to 550 women and output increased to 120 kg of raw silk per day, which was exported to the main European markets and to the US.³² In 1925, on the verge of success and with a buoyant international market, Majani decided to renovate, modernise, and expand the factory in Modigliana (a small town in the hills of Forlì). As the liquidator later wrote, it was a ‘daring, foolhardy act’ since enormous amounts of capital had been invested, depriving Majani of all liquid assets.³³ As Majani himself later testified, he could not foresee the coming international silk crisis or the revaluation of the lira, which, combined, sank the sector for good in a period of slack international prices; despite ‘the entrepreneur’s intelligence, strength and laboriousness’, these developments could neither be anticipated nor overcome.³⁴ Majani was declared bankrupt on 25 May 1929. His debts with the banks were considerable and had increased due to his new investment in Modigliana: according to trustee Piero Bassetti, ‘he should have taken a step back ... and declared sooner his partial defeat in his battle for control of the local silk industry’.³⁵

Negotiations with creditors were complicated and Mussolini’s brother Arnaldo was asked to act as a mediator. The fascist regime pushed for the re-opening of the two spinning mills in the interest of local employment and agriculture. Yet nobody was interested in buying the two factories, the value of which was estimated at 2.5 million lire and which ended up being sold (including Majani’s palace) for 1.45 million lire. This amount fell far short of covering his joint and several liabilities (5.1 million lire). Therefore, Arnaldo Mussolini dealt with the banks, whose claims were made reasonable (all liabilities were to be settled at 10%). Majani paid off his debt when he was released from prison and later became a successful trader in leather and animal fats.³⁶

The final industry closely linked to agriculture was sugar production. When hemp cultivation became uneconomical as a result of the bankruptcy of the spinning mills, peasants in Romagna turned to the growing of sugar beets. The sugar business in Italy owed its origin to the 1887 custom tariff, which imposed a 466% duty on sugar.³⁷ In addition to the intended positive fiscal effects of the duty for Italian government finances, the tariff affected national production. The number of sugar factories increased from 3 to 39. These factories were soon able to satisfy domestic demand and employed 15,000 workers by 1914.³⁸ The biggest company was Eridania (established in Genoa), which eagerly searched for fields and peasants willing to cultivate sugar beets and set up sugar factories and refineries all over the country.

6 F. FAURI AND M. TROILO

In Forlì, Eridania secured local production through an extensive system of rural information and generous incentives and invested more than 6 million lire in the construction of a modern sugar factory.³⁹ With a yearly output of 7 million kg, the Forlì sugar production and

refinery factory became one of the largest in Italy, with a long, successful history.

The other major industrial sector in Forlì, as shown by census data, was the mechanical/metal-producing industry. Bartoletti was a traditional, family-owned mechanical workshop set up in 1873 by Egidio Bartoletti to produce farm wagons. When his three sons returned from the war, after a profitable experience working in the army's motor vehicle division, they put their new-found expertise to work and decided to retool the workshop to build trailers. In 1929 they patented the three-axle trailer, which allowed the trailer to follow the motor vehicle smoothly. This brilliant technical innovation proved to be the company's fortune, and it steadily expanded thanks mainly to state and army commissions.⁴⁰ In 1937 it was authorised to build a new production plant (inaugurated by Mussolini himself in 1939) and invested in new, strictly Italian-made machinery and 20 electric engines. Its labour force grew to 242 and output rose to 300 trailers, 250 carriages, and 200 truck cabins a year.⁴¹ Finally in 1940 it was included in the list of 'auxiliary' war firms (that is, those deemed essential to the war effort), started producing tanks (and was thus authorised to import modern American machinery such as the Cincinnati Centerless grinder), and hired 100 more workers.⁴² On May 1944 Anglo-American planes dropped 25 bombs on the plant, completely destroying it (yet production was resumed after the war).⁴³

Among the many small businesses based on traditional artisan production methods, a few had already developed by the end of the century into medium-sized companies and succeeded in conquering domestic and international markets by the first decade of the twentieth century. When World War I broke out, the largest and best-known companies besides Bartoletti were Becchi and Forlanini. Becchi, founded in 1858, produced terracotta stoves for cooking and heating – 1500 in 1906 – and its market extended from Europe to South America and throughout the Mediterranean basin.⁴⁴ 'Officine di Forlì' was originally founded and owned by the local Cassa dei Risparmi (1863) for the gas lighting business. It was soon after bought by its manager, the engineer Enrico Forlanini, and by the beginning of the war it employed 200 workers and undertook all sorts of engineering work (it specialised in the construction of pipes and machinery for waterworks, gasworks, and sugar factories).⁴⁵ However with the death of Forlanini in 1930, under increasing financial and commercial difficulties, the enterprise went rapidly out of business.⁴⁶

3. The 'Duce hometown effect': new factories and products

The artificial fibre industry

Being the hometown of 'il Duce' invariably meant that in addition to the administrative power which allowed the borders of the province to be extended (at the expense of the province of Florence), Forlì had enormous power to attract companies and capital to open subsidiary production sites or even start new businesses.⁴⁷ Two industrial sectors in particular located there during the fascist period: the artificial fibre industry, with Paolo Orsi Mangelli setting up a factory in Forlì, and the aircraft industry, with Caproni opening a factory in Predappio and SASIB (Società Anonima Innocenti Bologna) in Meldola, which complemented the 'Forlì aviation hub' sparked by the construction of the new airport in Forlì and the establishment of a pilot training school.

Mangelli, a member of Forlì's wealthy nobility, lived in Milan and was a pioneer in many sectors: he modernized agriculture, introducing – and anticipating the success of – largescale fruit tree farming (in particular peach orchards) and overhead irrigation on his properties in Romagna. He became involved in the textile industry when in 1916 he married Giselda Girolimini, whose dowry included a spinning mill in Jesi (near Ancona). He also opened Italy's first stud farm near Bologna (1924), which soon became the most important racehorse breeding facility in Europe.⁴⁸ Paolo Orsi Mangelli soon expanded the spinning mill business by buying six more factories in Lombardy and Piedmont (the mills were located in small towns: Rasica, Villa d'Adda, Terno d'Isola, Gessate, Osio Sotto, Sezzadio) employing a total of 3500 workers. However, it took him just a few years to realise that the silk spinning business was in decline and seize the opportunity offered by the artificial fibre industry, inspired by the success of Riccardo Gualino (who set up SNIA Viscosa in 1917 to produce cellulose-based fibres) and by high prices and profit margins offered by this new production sector.⁴⁹ SNIA became one of the world's four largest rayon producers by the middle of the 1920s and a notable exception to the typically small-scale production model for Italian firms.⁵⁰ The success of SNIA and later on of Mangelli is also to be related to the fact that the

pertinent patents, the cost of which would have been 'unsustainable otherwise', had mostly expired by the end of World War I.⁵¹

When Paolo Orsi Mangelli decided to open his new production plant in Forlì in 1925, he promptly informed Mussolini,⁵² and asked the municipality to freely grant him a large plot of land near the new railway station, an area of 35,000 square metres, which the Agrarian Consortium had donated to the municipality in 1920. In exchange he offered to hire 800 people to work in the new production plant. In a letter to the Mayor of Forlì dated April 1925, Mangelli underlined how

despite the fact that I have received, from other Municipalities, more advantageous offers, and in more favourable locations, as regards both required necessary water resources and cost of the electricity, in order to favour my hometown I forsake these benefits as long as the Municipality facilitates my tasks.⁵³

Besides, Mangelli knew he could count on an ample workforce made up of very young, inexpensive females who had previously worked in the silk-spinning mills in Forlì.⁵⁴ Given his personal acquaintance with the Mussolini family (he was also particularly keen on keeping up correspondence with Rachele, Mussolini's wife, who also came from Forlì) and the difficult employment situation at the time, the agreement was immediately signed. However, a clause was added nullifying the agreement if Mangelli failed to hire 'at least 600, and potentially 800, workers'.⁵⁵ The free conveyance of the plot, which was very near the city centre, cost the municipality more than a million lire, a considerable sum at the time.⁵⁶

The limited-stock company Società Anonima Orsi Mangelli (SAOM) was founded in August 1925 for processing wood pulp and similar products and producing artificial silk. Registered capital totalled 50,000 lire (with 45,000 lire owned by Mangelli and 5000 entrusted to Anna Rozzi, his housekeeper).⁵⁷ Construction operations were soon under way and production started in 1927. Mangelli invested 20 million lire in the construction, organisation, and mechanisation of the factory. Mangelli came from a very wealthy family whose fortune was based on agriculture for the most part and had been accumulated over the years. It was in fact in agriculture that he invested from 1911 (as mentioned above, he introduced fruit orchards in Romagna – a long success story – but also spray irrigation systems and the cultivation of tobacco and the dryer facilities employing 70 workers). He used family money to set up his business: in one of the many letters to Mussolini he writes that: 'I have persuaded my father, who has always been reluctant to undertake any industrial endeavour, and my wife to invest all our means in the Forlì plant'.⁵⁸

The new company, however, needed greater influxes of capital. The local branches of the Bank of Italy in Bergamo and Forlì and local banks in Forlì generously financed his effort in the beginning and from the 1930s also two newly founded national financial institutions such as IMI (Istituto Mobiliare Italiano, 1931) and IRI (1933) did. At the Central Archive in Rome there are two letters Paolo Mangelli wrote to Mussolini asking for his intercession with a few financial institutions. In the first case, the bank involved did extend its credit facilities to the new company, while in the second case, when Mangelli asked for fresh capital to broaden his business, Mussolini answered that he preferred not to get involved. However, just a few years later a third letter – from Alberto Beneduce (head of two state-run credit bodies – Consorzio di Credito per le Opere Pubbliche and Istituto di Credito per le Opere di Pubblica Utilità – and of IRI itself in 1933),⁵⁹ who acted as economic advisor to Mussolini – reflects the regime's support for Mangelli's expanding industrial activities.

In the first letter of May 1926 Mangelli reminds the fascist dictator how, in their prior encounter, the Duce was 'dreaming about the rise of the new factory of artificial silk in Forlì'; he then underlines how after investing 20 million lire in building a new plant he was still

in need to borrow money for his factory ... Yet, given the current financial time, banks ask for exorbitant rates and I dare address Your Excellency to help me by spending your authoritative word towards Doctor Stringher so that he will authorise the Bank of Italy of Bergamo to double the opening credit I have enjoyed so far.⁶⁰

The doubling of the credit line was granted in 1928.⁶¹

In the second letter, dated November 1927, Mangelli asked Mussolini to intervene with the president of the National Insurance Institute for a 7 million lire mortgage to cover his investment needs in order to expand the plants in Forlì and hire more workers (from 800 to

1200).⁶² In this case, despite the prefect of Forlì's encouraging words regarding the company and its important role in ensuring employment to the town, Mussolini's secretary let him know that 'the head of government does not intend to address the issue of Earl Mangelli'.⁶³ However, as already mentioned, IMI and IRI financed his effort from 1932.

In 1928 Paolo Orsi Mangelli decided to expand his business, but chose a new strategy. He looked abroad and in 1928 secured a new cutting-edge business partner in Belgium to expand his artificial silk production activities into a related field: the processing of wood-pulp derivatives. A chemical factory was built next to the SAOM plant in 1929 by a new company, SIDAC (Società Italiana di Applicazione Cellulosa), in which the majority shareholder and provider of technical assistance was the Belgian Compagnie Internationale des Industries Chimiques Interchimie (with 25,000 lire), followed by Mangelli (with 20,000 lire), who also actually ran the company for the first four years.⁶⁴ The main by-product was cellophane: daily production soon increased from 1000 to 2500 kg and the new plant provided 469 new jobs by the early 1930s.⁶⁵ The international joint venture was proving viable and its product was a novelty in Italy. And indeed for some time in Italy cellophane was known as Sidac, from the name of the only cellophane company operating in the country. Even in the reports of Bank of Italy we can read: 'This Sidac is a kind of luxury, clear paper, suitable for wrapping. Cut into small colored slips, Sidac is now commonly used to make women's hats and is becoming a must in female fashion'.⁶⁶ Cellophane was edging out straw goods (hats and accessories), a fact of which Mangelli was proud:

Sidac allowed to end our import dependence ... and today straw is being replaced by cellophane yarn, which is strong and water resistant, comes in sparkling colours and can be woven into different forms allowing polychromes which natural straw could never provide.⁶⁷

When the international depression set in, it was SAOM which suffered the most: world demand had decreased, export markets were significantly less buoyant than before, and overproduction crises were springing up everywhere. In order to emerge successfully from the crisis Orsi Mangelli based his strategy on two policies: he lowered workers' wages (as did most industrialists in Italy at the time) and found new credit lines.⁶⁸

It was Orsi Mangelli's solid network of political and banking acquaintances which helped him obtain generous government funding. In a letter to Mussolini in February 1934, Beneduce, the head of IRI, after an analysis of the company's financial situation, stated: 'I think that the board of directors of IRI will want to deliver a positive response to a 6 million loan request over a period of 10 years'.⁶⁹

In the end, on the basis of potentially inaccurate archival data, Mangelli's financial liabilities with different financial institutions were as follows:

- The Bank of Italy: in 1926 the Bergamo branch doubled its credit line and SAOM capital increased from 6 to 20 million by 1928; over the same years the Forlì branch increased its financial exposure towards Mangelli to 4.4 million lire, rising to 6.4 million by 1931.⁷⁰ The Bank of Italy had a long tradition of acting as a development bank and a lender of last resort in the hands of the government; moreover from 1914 it set up the Industrial Loan Consortium involved in massive banking and industrial salvage operations.⁷¹
- Local banks: Mangelli's outstanding liabilities amounted to 3.5 million with the Cassa dei Risparmi di Forlì and an indefinite amount with the Banca Ambrosiana di Milano.⁷²
- IMI and IRI issued two mortgages: IMI for 7 (1932) and IRI for 6 million lire.⁷³

If Mangelli had secured enough credit lines for his plants, working conditions grew worse and the 'unbreathable air' which plagued not only the factory but all the nearby areas caused letters of complaint to be sent to the mayor. In practice, nothing could be done, since the firm complied with the scant existing legislation concerning occupational health.⁷⁴ The issue was familiar to national authorities as well, which still in 1942 were complaining about how 'so great a misfortune' (pollution) 'was affecting the very town of Forlì and could not be solved'.⁷⁵

SAOM had become Forlì's largest firm: in 1938 the value of its plants had more than doubled since 1927 (from 20.8 to 54.3 million lire) and it employed 1200 workers (431 male and 778 female workers). As can be seen in Table 2, the firm's structure and organisation was Mangelli's personal take on the American multi-unit business,⁷⁶ with a division of administrative and technical tasks and even a managerial hierarchy being created for this multi-unit enterprise (managing director, managers, and chief foreman). However, the owner's personal

contribution can be seen in the distinction between ‘indispensable’ (*indispensabili*) and ‘irreplaceable’ (*insostituibili*) personnel, the latter consisting of the core human capital running the synthetic fibres enterprise, which was clearly transversal and referred both to managers and labour, the former comprising seven employees without whom the enterprise could not function. Women were neither ‘indispensable’ nor ‘irreplaceable’.

As fascist autarkic policy grew harsher, the situation deteriorated for all enterprises in Italy, especially those dependent upon foreign imports. The coal and wood-pulp imports allocated annually to SAOM and SIDAC (which had wound up its foreign partner in the meantime) did not even meet their requirements at the outbreak of World War II. A letter addressed by SIDAC to the Prefect of Forlì in 1938 complained of the situation of extreme inconvenience due to the scant cellulose allocations, ‘which were an entirely unreasonable quantity and did not cover our needs’.⁷⁷ The only real guarantee of survival was to be included in the list of ‘auxiliary’ firms: these were free from import constraints but had to produce something that the state and the army needed for the war. Forlì’s synthetic fibres firms did not produce anything viable for warfare, but they asked to be included in the list since ‘Our department for the production of nitrocotton could be easily turned into the production of nitrocellulose [an explosive] for war purposes’.⁷⁸ The argument was weak and it took two more very difficult years and a series of letters and gifts to Donna Rachele to finally obtain the highly coveted desired status of ‘auxiliary firm’ in 1942.

Amid the chaos of these years and the echoes of war, Paolo Orsi Mangelli did not lose his ‘animal spirits’ and his urge to action led him to accomplish two new entrepreneurial feats. In 1942 he set up a new company, OMSA (Orsi Mangelli Società Anonima) in the nearby town of Faenza, producing women’s nylon stockings, which would naturally complete the cellulose supply chain. Construction work proceeded swiftly and Mussolini himself visited the building site in the summer of 1942. In 1943 Orsi Mangelli also set up a new SAOM factory producing sulphuric acid outside Forlì city centre (this time the municipality made it clear that the new chemical factory with its foul emissions was not to be built near the city centre).⁷⁹ In the meantime, the war had reached the outskirts of Forlì. In May 1944 the city was bombed and by October a new provisional administration had been established.

What became of the artificial fibre industry after the end of World War II? SAOM was able to commence operations again in 1946, under the management of Pierfrancesco Orsi Mangelli, Paolo’s son, and concentrated on the production of rayon. The reconstruction years were difficult, with profits reinvested in the modernisation of the factory, the machinery of which had become obsolete.⁸⁰ Labour protests, public demonstrations and strikes temporarily diminished its capacity in 1949. Yet by the end of the decade both SAOM and SIDAC had managed to achieve balanced budgets.⁸¹ In the 1950s their production in Forlì was boosted once again, thanks to a new product called Forlion, while rayon and staple production started declining (due to the proliferation of competing firms and market saturation). In 1967 SAOM and SIDAC merged to become Società Azionaria Orsi Mangelli SAOM-SIDAC and offered a wide range of products: rayon, staples, Forlion, cellophane, and polyethylene. However, despite the merger, the company’s policy was to deliver constant profits to

Table 2. Organisational structure of Orsi Mangelli in 1938.

		Indispensabili	Insostituibili	Men	Women
Direttore generale			1	1	
Ufficio amministrativo	Direttore		1	1	
	Personale	6	4	10	25
Ufficio tecnico	Direttore		1	1	
	Personale	5	1	6	8
Officine	Direttore		1	1	
	Personale	10	2	12	
Maestranze	Capi operai	20	20	40	20
	Operai	359		359	725
TOTAL	1209	400	31	431	778

Source: ASB, Ispettorato del lavoro, b. 41.

shareholders (200 million lire in the early 1960s) while ignoring the need to invest in internal

modernisation and growth.⁸²

The company's competitiveness deteriorated and 800 workers were laid off in 1969. Labour relations deteriorated too. When an overproduction crisis hit the world nylon and cellophane markets in the early 1970s, leading to a rapid price slump, the company was plunged into crisis. Although still efficient in terms of plant and equipment, the factory was no longer economically viable in terms of scale. New capital inputs were needed to restructure and upgrade the factory, but they never materialised given the company's difficult financial situation which led to bankruptcy in 1977. The failure of the Forlì fibre industry dragged the OMSA factory in Faenza down with it. However, in this case the Mangelli family was able to sell the factory to the Golden Lady group in 1977.

The aeronautical industry

In the 1930s Mussolini and the local administration resolved to turn Forlì into an aviation hub. Autarky policies certainly played a fundamental role in this decision: on the one hand autarky aimed to achieve self-sufficiency and lessen dependency on international trade; on the other, the strengthening of all the measures to promote innovative/import-substituting industries was to work as an engine of growth. The 'città del Duce' also received an industrial boost from autarky.

Two companies decided to build subsidiary factories in the province of Forlì, while the municipal authority invested substantial sums in the building of a new airport along the via Emilia with a school for civilian pilots, modern premises for the Regia Aeronautica Militare (Royal Air Force) nearby, and an aviation college in the city centre to train future pilots. Construction work on the airport was completed in 1936 (the airport was named after Luigi Ridolfi, a famous pilot and instructor who died in a plane accident in 1919) and the flying school was inaugurated in the same year. It was managed by the Royal National Aeronautical Union and issued 22 pilot's licences in 1937.⁸³ The airport infrastructure developed at the same time: hangars and new premises were built to host the Royal National Aeronautical Union headquarters, which had decided to move its 30th Squadron to Forlì along with a repair workshop. The aviation college was built in the city centre and was designed to host up to 290 young students aged from 12 to 19. It was finished in 1941 but never opened.⁸⁴

With regard to Caproni and SASIB, both companies decided to invest in Forlì for a number of reasons. In the first place, to gain prestige with the regime, in view of the fact that they could please Mussolini (who, in the case of Caproni, had personally asked the businessman to open a production site in his native village, Predappio).⁸⁵ Secondly, they chose the province of Forlì since their investment was guaranteed by the promise of substantial government orders.

The Caproni group was founded by Gianni Caproni, an Italian engineer born in Trento and graduated from Munich Polytechnic, who started building the first prototypes in 1910 near Malpensa (Milan) and set up his first company in 1911. He built an innovative three-engine bomber in 1913. The first orders were placed by the army in 1914 and from 1915 (when Italy entered the war) to 1918 some 1000 Caproni bomber models participated in fighting. The war proved crucial in the accumulation of capital, which was reinvested after 1918. Accordingly, in the inter-war period the Caproni group expanded and incorporated other engineering firms (Cantieri Aeronautici Bergamaschi, Isotta Fraschini, Officine Meccaniche Reggiane), registered more than 160 patents, and designed 179 aircrafts.⁸⁶ State support through constantly growing military orders was the reason behind its success in the interwar period.⁸⁷

The Caproni group started building the Aeronautica Caproni Predappio factory in 1933: the work was very expensive since the plant was built three kilometres inside the rocky ridges surrounding Predappio for security reasons and to protect it against aerial bombing, while the former Zolfi premises were used outside. The buildings were donated to Gianni Caproni by Cesare Castelli, a local small businessman, in exchange for the position of general manager at Aeronautica Caproni Predappio.⁸⁸ The factory was ready in a couple of years and started producing aeroplane parts and repairing civilian and military planes.⁸⁹ Production gradually shifted towards training biplanes (with Isotta-Fraschini engines), 150 of which had been built by 1937 (thanks to long, 10-hour working days and 25 working days per month). Test flights were conducted at Forlì's new airport, where the company leased four hangars

from the Regia Aeronautica.⁹⁰

With the outbreak of World War II, the factory was declared 'auxiliary' and thus assured government procurement contracts and supplies of raw materials. Mussolini ordered 80 Caproni Ca 164s for pilot training in 1940 and visited the factory twice (in 1940 and 1942). Not only that: in these early years of the war, the factory's general manager Cesare Castelli requested and obtained permission to expand the facilities to better meet the orders of the Ministry, which absorbed almost all of the plant's production capacity. Aeronautica Caproni Predappio employed 1133 workers (175 in the offices and 958 in the factory) but this number was destined to increase in view of the fact that it had to 'respond to the urgent war needs for fighters commissioned by the Air Ministry'.⁹¹ Approximately 340 more people (110 men and 230 women) were necessary for the simultaneous preparation of the various parts required to build the aircraft, the stroking and shaping of metal sheets, the manufacture of basic components and duralumin and steel components, and the assembly of the various aircraft parts: fuselage, wings and ailerons, tails, tanks, and finally engines. The company planned to expand output from 30–35 to 150–160 aircraft per year. To achieve this goal, it also decided to buy new machines in 1941: 320 new machines for manufacturing light alloys, including 150 drills, 105 pneumatic riveting machines, and 75 engines, with a total power output of 200/50hp, all of which helped the Caproni factory to increase productivity.⁹² Even in February 1943, when the fate of the war effort was sealed, Aeronautica Caproni Predappio, which in the meantime had continued to expand, sought permission – readily granted by the regime – to install foreign machinery: specifically a German automatic lathe made by Index (costing 130,000 lire). At that time the factory employed 1498 workers – 365 more than in 1941 – and in a letter to Mussolini the company confirmed 'the positive economic situation'. In the spring of 1943, however, war orders were running out: only seven airplanes were repaired and two planes (a fighter and a Re-2001 for air reconnaissance) were built. These were the very last items manufactured by the Caproni factory in Predappio, which was deprived of all its machinery during the German army's retreat in the autumn and never again became operational.

The second aircraft factory was built in Meldola, in the province of Forlì, by a Bolognabased mechanical engineering firm, SASIB. The workshop, originally founded by Scipione Innocenti, started by building bicycles and machine parts but soon expanded into electrical and automatic railway safety systems (in 1922) and installation of all the railway signalling equipment. In 1936 the State Monopolies Administration asked Scipione Innocenti to build a cigarette packaging machine which could replace imported products. He bought an American licence, set up a new plant for line production in Corticella (near Bologna) and then started to build the first cigarette packaging machines as well as machines for automatically filling rifle cartridges in 1937.⁹³ That said, it should come as no surprise that, in view of the excellent performance of his multifaceted company and counting on the fact that it was very soon included in the list of 'auxiliary' firms (1936), Scipione Innocenti decided to set up an aircraft department for servicing and repairing Isotta-Fraschini, Piaggio, and Fiat aircraft engines (which were typically overhauled after 120–150 hours of flight).⁹⁴

By 1938, one-third of the company's revenue came from overhauling aircraft engines and, having received permission to expand its premises, Scipione Innocenti quickly decided to relocate the aircraft department to Meldola. As clearly emerges from the archives, Meldola was chosen for political, military, industrial, and social reasons. Politically, Meldola was a poor rural town in the Apennines, in the province of Forlì, and the choice pleased both Mussolini and the local government. From a military perspective, Meldola was a naturally protected site and could serve the airports of Romagna and the Adriatic Coast. From an industrial perspective, the factory could count on a highly skilled but cheap workforce. Socially, the employment opportunities offered by the new plant factory would contribute to increasing the prosperity of rural workers, who were unemployed for most of the winter. SASIB invested 1.3 million lire in Meldola (using its own liquid assets) to buy modern machinery for overhauling aircraft engines and to start manufacturing new parts to replace damaged ones.⁹⁵

A large share of this investment, 600,000 lire, was used to build the factory, while 700,000 lire paid for the necessary equipment and working capital. Scipione Innocenti told Mussolini that only a grinder was imported, while all of the other machinery was bought (and made) domestically. The facilities extended over 11,959 square metres (5050 indoors) and initially

employed a number of workers and technicians from Milan but soon hired 69 people locally, increasing the number of engines serviced annually for the Air Ministry from 300 to 900.⁹⁶ Renzo De Grandis was the general manager and oversaw the work of four managers in charge respectively of the technical department, servicing department, the testing division, and the warehouse. The war brought new orders but also severe shortages of raw materials, especially steel: 'In order to save on steel consumption, it was decided to weld steel plates onto scrap material'.⁹⁷ As the conflict intensified, so did overhauling and engine repair work: both facilities, in Bologna and Meldola, were working flat out and working hours often extended to 14 a day. Unfortunately, labour fatigue caused by overwork soon led to a drastic decline in the accuracy of servicing and overhauling work, to the extent that 'planes equipped with engines serviced by SASIB were not able to take off and often crashed in flight'.⁹⁸ As word spread in the aviation field, many pilots refused to board SASIB-serviced aircraft. A military investigation was ordered in 1943 but came to nothing. In 1943, the Bologna-based company received permission to transfer all aircraft engine-related activities to Meldola, in order to reduce the workload on the Bologna factory. However, in the same year the establishment in Meldola closed down for good.

At the end of the war, while the SASIB factory in Bologna continued working in the mechanical sector as it had previously done, the facilities in Predappio and Meldola were quickly dismantled. Caproni did not survive the conflict: it was one of the largest, most famous aircraft manufacturers in Italy, but it was severely hampered by the terms of the armistice and, above all, inadequate economic (and political support. In 1943 Caproni had followed Mussolini in joining the Republic of Salò,⁹⁹) and the new government, which helped most struggling mechanical (and metal) engineering companies, allowed Caproni to go bankrupt in 1947 (denying it the financial aid which the owners had hoped to obtain from the Fondo Industria Meccanica and the Marshall Plan).¹⁰⁰ The evolution of the two biggest companies based in Forlì regarding number of employees is shown in Table 3.

Concluding remarks about Forlì's special status

The role of Mussolini in fostering the industrial development of Forlì worked to a limited extent and above all for a limited time-span. Certainly, being the hometown of Mussolini permitted Forlì to have a sort of special status. Yet paradoxically, as previously mentioned, other towns had more advantages in the 1930s in terms of industrial development.¹⁰¹ Thanks to fiscal incentives and land confiscation two industrial zones were swiftly built next to the centre of Ferrara and Bolzano. According to Mussolini's plans, Ferrara was to become a centre for the chemical industry and in 1939 the newly founded Società Anonima Italiana Gomma Sintetica (SAIGS, financed equally by IRI and Pirelli) built its first premises in Ferrara.¹⁰² The SAIGS plant was to become the most important producer of synthetic rubber during the war. In the case of Bolzano, 20 companies had set up premises by 1942, and thanks to 25 million lire made available by the law for hiring Italian workforce the population grew by 18,730 units (88% due to immigration from the Italian neighbouring regions). The aim was also that of carrying on a process of assimilation initiated in 1923 with the 'Italianization of the territory and the political and cultural re-education of the German speaking inhabitants'.¹⁰³ All German-language schools were closed and the only accepted language became Italian. Furthermore, the entire workforce employed in the newly built plants came from Veneto, spoke Italian as a first language, and resided in a specific area (Rione Dux), where 328 new autarkic houses (with small gardens and the possibility to raise animals) were built. Along with the 20 new industrial plants built as branches of businesses already well established elsewhere, a new Italian-speaking microcosm was created.

Forlì was instead 'la città del Duce': it had a special status of its own and was largely rebuilt to live up to its new role and upgrade it from an architectural, logistical (the new train station was built in 1926), and definitely industrial point of view.¹⁰⁴ In the early 1920s Forlì already attracted the interest and investments of Orsi Mangelli, who was undeniably favoured by local fascist authorities, and local and national financial institutions. By the way, we should also not forget Bartoletti, which also constantly grew thanks to state and army orders during the inter-war years (Mussolini inaugurated its new plants in Forlì in 1939) and turned to the production of tanks during the war. However, Forlì also cultivated, on Mussolini's invitation, completely 'artificial' plants such as the ones connected with the aircraft business.

Table 3. Number of employees: SAOM, SIDAC, and Caproni.

	1938	1941	1952
SAOM and SIDAC	1443	1287	1474
Caproni Predappio	1333	1498	0

Source: Census Data, ASFO, Fondo Prefettura, Archivio Gabinetto busta 442 Orsi Mangelli and Camera di Commercio di Forlì, *Indici della vita economica della Provincia di Forlì 1952–57*, Forlì 1958.

The fascist leader himself urged two aeronautical firms to set up branches in the hills of Forlì. Yet the Duce hometown effect proved short-lived and both the SASIB and Caproni plants in Meldola and Predappio were dismantled at the end of the war. The artificial fibre industry, the most successful and longest-lived experiment, owed its success to Paolo Orsi Mangelli. It is undeniable that he was extremely well-connected politically and was granted special treatment by local fascist authorities.¹⁰⁵ Yet he was also an ingenious, enterprising, and brilliant businessman. The new company was not built on the technical expertise of its founder, nor was it dependent on a skilled workforce that was able to manage the whole production process. Instead it was built on Mangelli's innate qualities of imagination and foresight and on his 'imitative entrepreneurship' skills. In Baumol's definition, the most important 'novel' element in the activity chosen by an imitative entrepreneur is the selection of a new location for a process that was well-established and 'routine' elsewhere, thus depriving the original innovator of a source of monopoly power.¹⁰⁶ Orsi Mangelli chose Forlì for the above-mentioned reasons, and his entrepreneurial qualities did the rest.

At the end of the conflict, the most important business in Forlì closely reflected the industrial heritage of the fascist years: SAOM-SIDAC still employed 1474 workers in 1952, but it did not survive into the 1980s as all lender banks imposed credit ceilings and the management of the company became problematic. The company declared bankruptcy in 1977, with the loss of 1050 jobs. It was one of the blackest moments in the economic life of Forlì since the end of the war. The municipal authorities made every possible effort to convince the government that nationalisation was worthwhile, but despite the promises of eminent politicians, Orsi Mangelli never became a state-owned enterprise.¹⁰⁷ The Mangelli firm also embodied the Italian model of family business, in which the key issue is not only ownership, but control, and in which the founder directly manages all the strategic activities of the group with only a small degree of decentralised decision-making.¹⁰⁸ This also helps explain why his death after the war, together with the inability of his heirs to attain the same success, and the apparent loss of political support, condemned Forlì's artificial fibre industry to a slow yet inevitable decline. Finally, if competition with much larger, financially more powerful foreign competitors inevitably sealed their fate, we should underline that the synthetic fibre industry failed to stimulate the establishment of similar businesses in the area.

Today Forlì belongs to the typical 'Third Italy' fabric of small enterprises and has grown by developing its internal potential (endogenous development). The Third Italy – including Emilia-Romagna, where Forlì is located – was identified in the 1970s when statistical data highlighted the swift and rather unexpected development of regions outside the country's traditional industrial triangle (Piemonte, Lombardia, and Liguria). These areas grew quickly thanks to diffused family entrepreneurship, dynamism of small firms, and widespread social cohesion of local communities.¹⁰⁹ Forlì's Chamber of Commerce has recorded a steady increase in the number of small businesses opening in the province of Forlì since the 1950s, in line with the typical development pattern in the 'Third Italy'.¹¹⁰ What seemed a weakness at the time soon became an enduring strength of Forlì's industrial fabric. The ease with which new small businesses flourished in the area also greatly facilitated the transition from a predominantly agricultural setting to an industrial one.¹¹¹ Endogenous small businesses quickly adapted to changes in demand and, with a much more flexible labour force, proliferated over the years.¹¹² This distinctive feature of Forlì's economy became even more marked in subsequent years, denoting an original process of 'light' industrialisation based on family-managed firms.¹¹³ State-sponsored business failed and provided no stimulus to local

16 F. FAURI AND M. TROILO

growth: any talk of 'industrial continuity' in Forlì requires us to acknowledge that it is based on the steady presence and continuous regeneration of locally grown, small family

Notes

1. Toniolo, *L'economia dell'Italia fascista*; Zamagni, *Dalla periferia al centro*; and the six volumes on the history of IRI: Castronovo, *Storia dell'IRI*.
2. Cosulich from Trieste and Cantieri Orlando from Livorno. See dell'Orefice, "La politica industriale del fascismo," 217.
3. In the post-war period growing dissatisfaction with state ownership culminated in a wave of privatisations in the early 1990s, which in turn caused increasing disillusionment with some of its outcomes and has kept alive the debate on the pro and cons of state enterprises. See Maraffi, "State/Economy Relationship," 509; Toninelli, *The Rise and Fall*; Woods, "The Crisis (Collapse)"; Bortolotti and Siniscalco, *The Challenges of Privatization*; Roland, *Privatization: Success and Failure*; Barocci and Pierobon, *Le privatizzazioni in Italia*; Colli and Vasta, *Forms of Enterprise*; Amatori, Millward, and Toninelli, *Reappraising State-Owned Enterprise*.
4. It controlled 100% of Italian steel production for the war effort, 90% of shipyards, 80% of shipping and locomotive- building companies, 30% of electricity, most telephone companies, and several engineering firms (including Alfa Romeo). Zamagni, *The Economic History of Italy*, 300–1.
5. Toniolo, *L'economia dell'Italia fascista*, 268; Di Martino and Vasta, *Ricchi per caso*.
6. Amatori, Bulgamelli, and Colli, "Technology, Firm Size and Entrepreneurship," 477–8. See also Harold and Tanner, *Enterprise in the Period of Fascism*, contributions of Franco Amatori and Luciano Segreto.
7. The case of Forlì is different but it is part of this large framework consistently studied by Petri, *La frontiera industriale*, 140–3 and 169–88.
8. In general, we should remember that in those years a perverse interaction between business and fascist general directors developed and brought about 'a mentality of personal favors and incorrect behavior by the officials and the high bureaucrats ... and of request for protection by industrialists, both large and small ones'. Segreto, "Industrial Capitalism and Political Constraints," 234.
9. In the case of Italy, political intervention has traditionally performed an indirect and not wholly intentional role, restricting itself to creating favourable preconditions for local industrial development – a sort of benign neglect allowing local systems to prosper and entailing loose fiscal and trade union control. Colli, *I volti di Proteo Storia*, 23.
10. Alaimo, "Le regole del gioco," 702–3; Bagnasco, *Tracce di Comunità*, 101–2. An extensive literature exists on Italy's industrial districts: see, for example, Brusco and Paba, "Per una storia dei distretti italiani"; Sabel and Zeitlin, *Worlds of Possibilities*.
11. Of firms based in Forlì 94% have fewer than 10 employees Find the relevant data: <https://www.romagna.camcom.gov.it/>.
12. Colli, Rinaldi, and Vasta, "The Only Way to Grow?," 41; Perugini and Romei, "Small Firms and Local Production."
13. Fauri, *Lo sviluppo industriale*.
14. Tarozzi, "Artigianato e industria a Forlì," 204.
15. Fauri, "La politica doganale italiana."
16. Archivio storico dell'industria italiana, *Le condizioni industriali*, 42–3. See also Zamagni, *Dalla periferia al centro*, 154–8.
17. ISTAT, *Censimento industriale e commerciale*, 1937.
18. For reasons of international prestige, driven by the need to regain lost credibility, and the fear of losing the support of the middle class, Mussolini was pushed in this direction. See Zamagni, *Dalla periferia al centro*; Sarti, "The Battle of the Lira," 2; Castronovo, *Storia economica d'Italia*, 258–9; and Amatori and Colli, *Impresa e industria in Italia*, 172–3.
19. Censimento, Provincia di Forlì, *Considerazioni generali*.
20. See Perdisa, *I redditi dell'agricoltura emiliana*; Cazzola, "Lavoro agricolo"; Lodovici, "Il potere sull'aria"; and Cazzola, *La ricchezza della terra*, 53–123.
21. D'Attorre, "Una dimensione periferica"; and Balzani, *Un comune imprenditore*, 237–9.
22. Gualerni, *Industria e fascismo*; Castronovo, *Storia economica d'Italia*, 256–62; and Amatori and Colli, *Impresa e industria in Italia*, 171–82.
23. 'They did not understand that an authoritarian regime could force a discipline on the markets which democratic systems could not impose'. Tortella, *Origins of the Twenty-First Century*, 181.
24. Keynes, "A Tract on Monetary Reform," 119. See also Toniolo, *L'economia dell'Italia fascista*.
25. In 1914 Bonavita employed 250 workers (one-third of them women). War orders enabled it to grow constantly during the conflict to the extent that in 1918 it was one of the few businesses in Forlì which was allowed to increase its credit from 94 to 500 lire with the local credit institution (Cassa dei Risparmi di Forlì). See Balzani, *Il forziere della città*, 188.
26. Safeguarding female workers' health was not a priority at the time: women and young girls

had to work in rooms filled with ‘hot and queasy fumes’ in the words of a doctor of the time; they stood for hours ‘with their clothes soaking wet from the continuous sprinkling’. These conditions caused various diseases: ‘from chloral-anaemia to dyspepsia and premature vascular diseases such as phlebitis and varicose veins’. See *Il Risveglio*, March 1, 1901. In Turin, for instance, specialised female workers in silk factories earned up to lira 1.30 a day. See: Spriano, *Storia di Torino operai e socialista*.

27. ASF (Archivio di Stato di Forlì – State Archive of Forlì), Prefect, Women and child labour. Dispensation for silk industry during silk cocoon processing. Prefect of Forlì to unions of Province of Forlì, May 24, 1907. See also Cattaneo, *Cinquant’anni di tessitura serica nazionale*.

28. ASF, Comune, Busta 68-VII-3, Diario di Guarini; ASF, Tribunale, Sezione Fallimenti Busta 104, fallimento Scanelli.

29. Federico, *Il filo d’oro*.

30. *Bollettino mensile di statistica agraria e forestale del 1933*.

31. CCIAA Forlì, *Relazione sull’andamento economico della provincia*, 57–8.

32. Mazzei, *La lavorazione della seta a Forlì*, 21–3.

33. ASF, bankruptcy court, Busta 362 Majani.

34. Ibid.

35. ASF, bankruptcy court, Busta 362. Report by liquidator Piero Bassetti to meeting of creditors, June 13, 1929.

36. He was sentenced to prison for three years. See ASB (Archivio di Stato di Bologna – State Archive of Bologna), Labour Inspectorate, Busta 18, Majani, “Informazioni dei carabinieri.”

37. It was reduced to 126% only in 1911. See Fauri, *L’integrazione prematura*, 73.

38. Istat, *Annuario*, various issues; and Bianchi-Tonizzi, “L’industria dello zucchero in Italia,” 271–2.

39. ASF, “Zuccherificio ex Eridania.”

40. Fauri, *Lo sviluppo industriale*, 97.

41. ASB, Ispettorato regionale del lavoro, Busta 41 Bartoletti.

42. Ibid.

43. Camera dei Deputati, Atti parlamentari, XVI legislatura allegato B ai resoconti seduta del 26 maggio 2004, 14386.

44. ACC (Archivio del Camera di Commercio di Forlì – Forlì Chamber of Commerce Archive), Busta Becchi. See also Caruso, *Forlì città e cittadini*.

45. For fuller details, see Conti, “Amministratori, tecnici, imprenditori,” 396 ff.; Comune di Forlì, *Monografia industriale di Forlì*, 207.

46. ACC, Busta Forlanini.

47. Balzani, *La Romagna*, 168–71.

48. D’Attorre, “Ceto padronale e classi lavoratrici.”

49. SNIA survived the risk of financial collapse in 1929 and in the post-war years was still one of the largest producers of artificial fibres, together with Montedison. See Zamagni, “The Rise and Fall,” 354.

50. The lack of large-scale financing and thus long-term research projects had generally condemned Italian chemical firms to fragmentation and small size. Da Rin, “Financial Systems and Corporate Strategy,” 91. On SNIA Viscosa see Cerretano, “The ‘Benefits of Moderate Inflation’.” See also Fauri, “The ‘Economic Miracle’.”

51. Falchero, “‘Quel filo serico impalpabile.’”

52. D’Attorre, *Le fabbriche del Duce*, 38.

53. ASF, Fondo del Comune, Busta 135, letter dated April 30, 1925 from Mangelli to the Mayor of Forlì.

54. According to the 1929 SAOM employment contract, female workers under 15 years of age (the majority of the workforce) were earning 0.50 lire per hour, versus 1.40 lire per hour for older women and 1.95 lire per hour for male spinners. Bernabini, *Storia di impresa e gestione aziendale*, 114.

55. ASF, Fondo del Comune, Busta 137.

56. Ibid.

57. ACC, Busta “Orsi Mangelli.”

58. Ibid.

59. Zamagni, *Dalla periferia al centro*, 378–80; Amatori, “Italy’s Futile Search for a Third Way,” 143–4.

60. Archivio Centrale dello Stato (ACS), Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Letter of Paolo Orsi Mangelli to Mussolini, May 8, 1926. Also Bernabini, *Storia d’impresa e gestione aziendale*, 100.

61. In particular, the Forlì branch of the Bank of Italy extended his credit by 4.4 million lire and the decision was ultimately based on trust: ‘On the moral principles of the Orsi Mangelli family and on their laboriousness which make us hope for the best as to their active debts’. ASB, Ispettorato generale, pratica n. 245 Fascicolo 1, 1931.

62. ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Letter of Paolo Orsi Mangelli to Mussolini, November 22, 1927.

63. ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Note of November 23, 1927 and also ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli Letter of Alexander Chiavolini, Secretary to the Prefect of Forlì of November 30, 1927.
64. ACC, Anagrafe, Registro denunce n. 5510.
65. ASB, Fondo Ispettorato del Lavoro, Busta 41.
66. ASB, Ispettorato generale, pratica n. 245, Fascicolo 1, 1931.
67. D'Attorre, *Le fabbriche del Duce*, 39.
68. The practice was common throughout Italy and endorsed by the regime since the 1926 revaluation of the lira. In February 1931 the Prefect of Forlì confirmed to the Duce that the anonymous letter he received from a SAOM worker denouncing the lowering of wages was reflecting a common practice based on 'the fictional dismissal and immediate re-recruiting of the same workers within the minimum wage category'. ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Letter to the Secretary of the Prefect of the Duce of May 7, 1931.
69. ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Letter of Beneduce to Mussolini of February 3, 1934.
70. In 1929 Bank of Italy inspectors estimated his personal assets at 40 million lire and SAOM plants at 17 million. Archivio storico della Banca d'Italia (ASBI), Ispettorato generale, pratica n. 245 fascicolo 1. Visita di ispezione alla filiale di Forlì del 30 giugno 1929 – Rapporto sugli affari. And also Archivio di Stato di Bologna (ASB), Ispettorato generale, pratica n.245 fascicolo 1, 1931.
71. Zamagni, *The Economic History of Italy*, 181
72. Balzani, *Il forziere della città*, 203–4.
73. Lombardo, *L'Istituto Mobiliare Italiano*, 425.
74. Working conditions were terrible, especially for those workers who had to handle carbon sulphate: only in 1942 would a medical study conducted on SAOM workers demonstrate the infertility problems (and in some extreme cases madness) that it could cause. D'Attorre, *Una dimensione periferica*, 756.
75. ACS, Segreteria particolare del Duce, Corrispondenza ordinaria, Fascicolo Orsi-Mangelli, Letter of De Cesare to the Cabinet of the Minister of Corporations, July 30, 1942.
76. Chandler, *The Visible Hand*.
77. ASF, Fondo Prefettura, archivio Gabinetto, Busta 442.
78. ASB, Ispettorato del lavoro, Busta 41.
79. Bernabini, *Storia d'impresa e gestione aziendale*, 138.
80. ACC, Registro Bilanci, Fascicolo Orsi Mangelli, various years.
81. "Le vertenze Mangelli e Becchi," *Il Manifesto*, April 12, 1949. See also "La verità sulla vertenza Mangelli," published by the Associazione industriali di Forlì in 1949 (and only available at the Biblioteca Saffi in Forlì).
82. Bernabini, *Storia d'impresa e gestione aziendale*, 274–5.
83. Paolo Orsi Mangelli donated 10,000 lire for the purchase of a school training plane. See Sangiorgi and Tassinari, *Tutti i colori del cielo*, 45–50.
84. Occupied during the war and subsequently used for other purposes, the legacy of the college was taken up in 1968, when the government agreed to open the Istituto Tecnico Aeronautico (in just three cities: Forlì, Catania, and Rome). Nevertheless, in this case it would be more accurate to speak of a completely new institution than of its origin, the result of Gianluigi Testoni's stubbornness in obtaining authorisation for this new school, the only one of its kind in northern Italy. See Istituto Tecnico Aeronautico Statale, "F. Baracca," 18–20.
85. Proli, "Industrie in guerra," 136.
86. Mencarelli, *Gianni Caproni*, 12–14.
87. Abate et al., *Aeroplani Caproni*.
88. Sangiorgi and Tassinari, *Tutti i colori del cielo*, 70.
89. Proli, "Industrie in guerra," 136.
90. ASB, Ispettorato del Lavoro, Busta 41 "Aeronautica Predappio."
91. ASB, Ispettorato regionale del Lavoro, Busta 18 anno 1933–1938.
92. ASB, Busta 19 anno 1939–1941.
93. D'Attorre, *Piccola industria e classe operaia*, 795.
94. D'Attorre, *Una dimensione periferica*, 742.
95. ASB, Busta 18 SASIB.
96. ASB Busta 18 anno 1933–1938.
97. ASB, Ispettorato, Busta 37.
98. Brini, *SASIB (AMF) Story*, 15–16.
99. He built the Mori-Torbole tunnel after 1943, where innovative bombers and rockets were planned and constructed with the Nazis. Bianchessi, *Gianni Caproni*, 211.
100. In the case of Aereo Caproni Trento, the two owners, Mr and Mrs Caproni, had placed all of

the share capital in the hands of the new public financial institution the FIM (Fondo Industria Meccanica), as collateral against its very high debts (182 million lire). Yet the FIM Committee, faced with three alternatives: nationalising the company, awarding a loan of 130 million lire, or closing the firm down, decided on the latter. Italy's aircraft industry, which had probably developed beyond its means in the 1930s and which was producing up to 300 planes a month during the war, was no longer a priority in the new era. See Fauri, "From Financial Aid to Nationalization." As to the Marshall Plan, the ERP dollar loan was denied because the Ministry of Defense stepped in and vetoed the loan: 'Despite the fact that a four engine aircraft (BZ 308) has been built and it is suitable for intercontinental flights, we don't think we can expect Caproni to produce the number of aircrafts we need in due time. Therefore this Ministry thinks we should face the current situation through imports of four-engine aircrafts from the USA with ERP loans'. Archivio IMI Rome (ASMI), Busta 8, Caproni.

101. Thanks to a large set of incentives which ranged from subsidies for infrastructures to tax exemption, by the end of 1942 20 industrial plants had been set up at Bolzano (6500 workers) and 24 in Ferrara (4200 workers). Petri, *Storia di Bolzano*, 287; Petri, *Storia economica d'Italia*, 369.

102. Besides autarky, the choice of Ferrara relates to other reasons, including the fact that Ferrara was the hometown of Italo Balbo, who joined the National Fascist Party in 1921 (before it came to power in 1922). In Ferrara he organised fascist gangs who violently attacked demonstrating agricultural labourers and left-wing opponents. In 1924 Mussolini nominated Balbo to the post of General Commander of the Fascist Militia, and Minister of Aviation in 1926. He was one of Mussolini's closest collaborators.

103. Petri, *Storia economica d'Italia*.

104. Guiso, *La "città del Duce."*

105. He surely was a 'negotiator', in the definition of Amatori, placing himself 'in a position of major bargaining force with the political power'. See Amatori, "Determinants and Typologies of Entrepreneurship," 22–3.

106. Baumol, *Entrepreneurship, Management, and the Structure of Payoffs*, 10.

107. The Mayor of Forlì, Angelo Satanassi, was a fervent believer in state intervention. He presented and discussed at length a feasibility study with the state company ENI, which was already operating in the chemical sector through ANIC, one of its subsidiaries, in the nearby town of Ravenna. See Fauri, "La metamorfosi dell'economia forlivese."

108. Colli, *The History of Family Business*, 63.

109. Some scholars, in order to avoid the excessively simplistic north–south divide, have identified 'three Italies'. The First Italy has traditionally included the regions which industrialised first (Piemonte, Lombardia, and Liguria), the Second Italy corresponds to the less developed south, while the Third Italy encompasses Tuscany, Umbria, Marche, Emilia-Romagna, Veneto, Friuli, and Trentino-Alto Adige. Bagnasco, *Le Tre Italie*; Bartolini, *La Terza Italia*.

110. CCIAA, *L'economia della provincia di Forlì*, 10–14.

111. Barbieri, "Relazioni virtuose."

112. 'Their competitive advantage', in the words of Aurelio Alaimo, 'became evident especially in the most difficult stages of the economic cycle, when the inevitable rigidities of the larger companies became an obstacle to the introduction of industrial and management innovations'. Alaimo, *Un'altra industria?*

113. The family firm has increasingly been interpreted as a network of trust as a response to external uncertainty. See Colli and Rose, "Families and Firms." The shared values and attitudes of Italy's small family firms provided a set of informal rules and networks which helped the birth of new enterprises within 'a weak central state'; the latter's laws on taxation, limited liability, and inheritance have undoubtedly reinforced the presence of small family business in Italy. See Colli, Fernandez Perez, and Rose, "National Determinates."

114. Historical research has highlighted the importance of the long-term presence of small firms in the ongoing Italian economic development. Federico, Giannetti, and Toninelli, "Size and Strategy"; Colli, *Il quarto capitalismo*.

References

Abate, R. et al. *Aeroplani Caproni, Gianni Caproni ideatore e costruttore di ali italiane*. Trento: Museo Caproni, 1992.

Alaimo, A. *Un'altra industria? Distretti e sistemi locali nell'Italia contemporanea*. Milan: Franco Angeli, 2002.

Alaimo, A. "Le regole del gioco: Il governo dei sistemi locali in una prospettiva storica." In *Comunità di imprese. Sistemi locali in Italia tra Ottocento e Novecento*, edited by F. Amatori and A. Colli, pp. 695–721. Bologna: Il Mulino, 2001.

Amatori, F. "Italy's Futile Search for a Third Way." In *The Rise and Fall of State-Owned Enterprise*, edited by Toninelli, 128–56.

Amatori, F., and A. Colli. *Impresa e industria in Italia, dall'Unità a oggi*. Venezia: Marsilio, 1999.

Amatori, F. "Determinants and Typologies of Entrepreneurship in the History of Industrial Italy." In *The Determinants of Entrepreneurship: Leadership, Culture, Institutions*, edited by José L. Garcia-Ruiz and Pier Angelo Toninelli, 1–24. New York: Routledge, 2010.

Amatori, F., R. Millward, and P. A. Toninelli, eds. *Reappraising State-Owned Enterprise. A Comparison of the UK and Italy*. New York, NY: Routledge, 2011.

Amatori, F., M. Bugamelli, and A. Colli. "Technology, Firm Size and Entrepreneurship." In *The Oxford Handbook of the Italian Economy Since Unification*, edited by G. Toniolo. USA: Oxford University Press, 2013.

Archivio storico dell'industria italiana. *Le condizioni industriali della provincia di Forlì 1888-1900*. Bologna: Li Causi ed., 1983.

Associazione industriali di Forlì, La verità sulla vertenza Mangelli. Forlì, 1949.

Bagnasco, A. *Le Tre Italie, La problematica territoriale dello sviluppo italiano*. Bologna: Il Mulino, 1984.

Bagnasco, A. *Tracce di Comunità*. Bologna: Il Mulino, 1999.

Balzani, R. *Un comune imprenditore. Pubblici servizi, infrastrutture urbane e società a Forlì (1860-1945)*. Milano: Franco Angeli, 1991.

Balzani, Roberto. *Il forziere della città La Cassa dei risparmi e la società forlivese dalle origini al secondo dopoguerra*. Bologna: Il Mulino, 2000.

Balzani, R. *La Romagna Storia di un'identità*. Bologna: Il Mulino, 2012.

Barbieri, P. "Relazioni virtuose: Imprese e imprenditori." In *Nodi, reti, ponti. La Romagna e il capitale sociale*, edited by Raimondo Catanzaro. Bologna: Il Mulino, 2004.

Barocchi E. e F. Pierobon. *Le privatizzazioni in Italia*. Roma: Carrocci, 2007.

Bartolini, F. *La Terza Italia*. Roma: Carrocci, 2016.

Baumol, William J. *Entrepreneurship, Management, and the Structure of Payoffs*. Cambridge: The MIT Press, 1993.

Bernabini, A. M. *Storia d'impresa e gestione aziendale: Il setificio Orsi Mangelli di Forlì*. Forlì: Tesi, Facoltà di Economia, 2004.

Bianchessi, F. *Gianni Caproni una storia italiana*. Varese: Macchione, 2014.

Bianchi-Tonizzi, M. E. "L'industria dello zucchero in Italia dal blocco continentale alla vigilia della Grande guerra (1807-1914)." *Annali di storia dell'impresa* 4 (1988), 211–278.

Bollettino mensile di statistica agraria e forestale del 1933.

Bortolotti, B. e D. Siniscalco. *The Challenges of Privatization. An International Analysis*. Oxford: OUP, 2004.

22 F. FAURI AND M. TROILO

Brini, G. *SASIB (AMF) Story*. Bologna: Steb, 1969.

Brusco, S., and B. Paba. "Per una storia dei distretti italiani dal secondo dopoguerra agli anni Novanta." In *Storia del capitalismo italiano dal dopoguerra ad oggi*, edited by Fabrizio Barca, 165–181. Rome: Donzelli, 1997.

Camera dei Deputati, Atti parlamentari, XVI legislatura allegato B ai resoconti seduta del 26 maggio 2004.

Caruso, Elio. *Forlì città e cittadini*, Forlì. Città e cittadini tra Ottocento e Novecento. Vol. 1: I luoghi e l'Economia. Forlì: Edizioni del Girasole, 1990.

Castronovo, Valerio. *Storia economica d'Italia. Dall'Ottocento ad oggi*. Torino: Einaudi, 1995.

Castronovo, V., ed. *Storia dell'IRI*. Laterza: Bari, 2012.

Cattaneo, Giuseppe. *Cinquant'anni di tessitura serica nazionale (1870–1920)*. Como: Tip. P. Cairoli, 1922.

Cazzola, Franco. *La ricchezza della terra. L'agricoltura emiliana fra tradizione e innovazione in Storia d'Italia. Le regioni dall'Unità ad oggi. L'Emilia-Romagna*. Torino: Einaudi, 1997.

Cazzola, F. "Lavoro agricolo, imponibili di mano d'opera e meccanizzazione in area padana." In *La campagna a vapore. La meccanizzazione agricola nella pianura padana*, edited by Angelo Varni. Rovigo: Minelliana, 1990.

CCIAA. *L'economia della provincia di Forlì*. Castrocaro, 1962.

CCIAA (Camera di Commercio, Industria e Artigianato). *Relazione sull'andamento economico della provincia 1927-1928*. Forlì: It's an annual review, 1929.

Censimento, Provincia di Forlì. *Considerazioni generali*. Roma: Failli, 1927, 165–181.

Cerretano, V. "The 'Benefits of Moderate Inflation'. The Rayon Industry and Snia Viscosa in the Italy of the 1920s." *Journal of European Economic History* 33 (2004), 233–284.

Chandler, Alfred D. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Harvard University Press, 1977.

Colli, Andrea. *I volti di Proteo Storia della piccola impresa in Italia nel Novecento*. Torino: Bollati Boringhieri, 2002.

Colli, Andrea. *Il quarto capitalismo. Un profilo italiano*. Venice: Marsilio, 2002.

Colli, Andrea. *The History of Family Business 1850–2000*. UK: Cambridge University Press, 2003.

Colli, A., and M. B. Rose. "Families and Firms The Culture and Evolution of Family Firms in Britain and Italy in the Nineteenth and Twentieth Centuries." *Scandinavian Economic History Review* 47 Winter 1999, 24–47.

Colli, A., and M. Vasta, eds. *Forms of Enterprise in 20th Century Italy. Boundaries, Structures and Strategies*. Cheltenham: Edward Elgar, 2010.

Colli, A., P. Fernandez Perez, and M. B. Rose. "National Determinates of Family Firm Development? Family Firms in Britain, Spain, and Italy in the Nineteenth and Twentieth Centuries." *Enterprise & Society* 4, no. 1 (2003). 28–64.

Colli, A., A. Rinaldi, and M. Vasta. "The only way to grow? Italian Business groups in historical perspective." *Business History* 58, no. 1 (2016), 30–48.

Comune di Forlì. *Monografia industriale di Forlì*. Forlì: edita a cura del Municipio, 1926.

Conti, Fulvio. "Amministratori, tecnici, imprenditori: Il mercato delle infrastrutture e la modernizzazione del territorio (1860-1914)." In *Una borghesia di provincia*, edited by Roberto Balzani and Peter Hertner. Bologna: Il Mulino, 1998.

D'Attorre, P. P. "Una dimensione periferica. Piccola industria, classe operaia e mercato del lavoro in Emilia Romagna. 1920-1940." *Annali della Fondazione Giangiacomo Feltrinelli* XX (1981), 772–818.

D'Attorre, P. P. "Le fabbriche del Duce. L'industria forlivese tra le due guerre." *Memoria e Ricerca* 26 (1993), 29–69.

D'Attorre, Pier Paolo. "Ceto padronale e classi lavoratrici: Due situazioni a confronto: Lombardia ed Emilia." In *Agricoltura e forze sociali in Lombardia nella crisi degli anni trenta*, edited by Paola Bertolini. Milano: Franco Angeli, 1983.

Da Rin, M. "Financial Systems and Corporate Strategy in The Global Chemical Industry." In *The Global Chemical Industry in the Age of the Petrochemical Revolution*, edited by Louis Galambos, Takashi Hikino, and Vera Zamagni, 82–113. Cambridge: CUP, 2007.

Dell'Orefice, Anna. "La politica industriale del fascismo." In *Intervento pubblico e politica economica fascista*, edited by D. Fausto. Milano: Franco Angeli, 2007.

Di Martino, P., and M. Vasta. *Ricchi per caso. La parabola dello sviluppo economico italiano*. Bologna: Il Mulino, 2017.

Falchero, A. M. "'Quel filo serico impalpabile...'. Dalla Soie de Châtillon a Montefibre (1918-1972)." *Studi storici* 1 (1992), 217–233.

Falco, G., and M. Storaci. "Fluttuazioni monetarie alla fine degli anni Venti: Belgio, Francia, Italia." *Studi storici* 2 (1975), 57–101.

Fauri, F. *Lo sviluppo industriale della provincia di Forlì-Cesena*. Forlì: Grafiche MDM, 1996.

Fauri, F. "The 'Economic Miracle' and Italy's Chemical Industry 1950-1965: A Missed Opportunity." *Enterprise and Society* 2 (2000), 279–314.

Fauri, F. "La politica doganale italiana e i suoi effetti sull'economia e sulle relazioni commerciali internazionali (1861-1913)." *Italia Contemporanea* 238 (2005), 61–86.

Fauri, F. *L'integrazione prematura: Le relazioni commerciali europee dalla metà dell'Ottocento alla Grande Guerra*. Bologna: Clueb, 2005, 61–86.

Fauri, F. "From financial aid to nationalization: The history of the Fondo Industria Meccanica (FIM)." *Journal of Business History* 2 (2010), 161–179.

Fauri, Francesca. "La metamorfosi dell'economia forlivese nel secondo dopoguerra. Dalla grande impresa all'industrializzazione diffusa." In *Un riformista lungimirante Angelo Satanassi (1925-2011)*, edited by Gudio Gambetta, 15–39. Bologna: Il Mulino, 2011.

Federico, Giovanni. *Il filo d'oro, l'industria mondiale della seta dalla restaurazione ad oggi*. Venezia: Marsilio, 1996.

Federico, G., R. Giannetti, and P. Toninelli. "Size and strategy of Italian industrial enterprises (1907-1940): Empirical evidence and some conjectures." *Industrial and Corporate Change* 3 (1994), 491–512.

Gualerni, Gualberto. *Industria e fascismo Per una interpretazione dello sviluppo economico italiano fra le due guerre*. Milano: Vita e pensiero, 1976.

Guiso, Andrea. *La «città del Duce». Stato, poteri locali ed élites a Forlì durante il fascismo*. Forlì: Marco, 2010.

ISTAT, Istituto centrale di statistica, *Annuario statistico italiano*, Roma: G. Bertero, 1915.

ISTAT Istituto centrale di statistica del Regno d'Italia). *Censimento industriale e commerciale 1937*, Roma: Failli, 1937.

Istituto Tecnico Aeronautico Statale "F. Baracca" 1968-1988. *I vent'anni dell'Istituto Aeronautico*. Forlì: Istituto tecnico aeronautico statale Francesco Baracca, 1989.

James, Harold, and J. Tanner. *Enterprise in the period of fascism in Europe*. Aldershot: Taylor and Francis, 2002.

Il Risveglio, 1 March 1901.

Il Manifesto, 12 April 1949.

Keynes, J. M. "A Tract on Monetary Reform." In *The Collected Writings of John Maynard Keynes*. IV vols., edited by D. Moggridge. London: Macmillan, 1971.

Kobrak, K., and P. H. Hansen. *European Business, Dictatorship and Political Risk 1920–1950*. N.Y.-Oxford: Berghahn Books, 2004.

Lodovici, Massimo. "Il potere sull'aia. Le campagne forlivesi tra mito della ruralità e modernizzazione." *Memoria e Ricerca*, 1 no. 2 (1993): 25–59.

Lombardo, Giorgio. *L'Istituto Mobiliare Italiano. Modello Istituzionale e indirizzo operativi: 1931-1936*. Bologna: Il Mulino, 1998.

Maraffi, Marco. "State/Economy Relationship: The Case of Italian Public Enterprise." *British Journal of Sociology* 31 (1980), 507–524.

Mazzei, Raffaele. *La lavorazione della seta a Forlì dal 1806 al 1929*. Forlì: Camera di commercio industria artigianato e agricoltura, 1983, 507–524.

Mencarelli, Igino. *Gianni Caproni*. Roma: Ufficio storico Aeronautica militare, 1969.

Ministero di Agricoltura, Industria e Commercio. *Censimento degli opifici e delle imprese industriali, 10 giugno 1911*. III vols, 1913.

Perdisa, L. *I redditi dell'agricoltura emiliana. Primo contributo: I risultati economici di aziende agrarie*. Faenza: Stabilimento Grafico Lega, 1933.

Perugini, M., and V. Romei. "Small Firms and Local Production Systems (1900–1960)." In *Forms of Enterprise in 20th Century Italy*, edited by A. Colli and M. Vasta. Cheltenham: Edward Elgar, 2010.

Petri, Rolf. *Storia di Bolzano*. Padova: Il Poligrafo, 1989.

24 F. FAURI AND M. TROILO

Petri, R. *La frontiera industriale. Territorio, grande industria e leggi speciali prima della Cassa per il Mezzogiorno*. Franco Angel: Franco Angeli, 1990.

Petri, R. *Storia economica d'Italia. Dal fascismo al miracolo economico (1918-1963)*. Bologna: Il Mulino, 2002.

Proli, M. *Industrie in guerra in Forlì tra guerra e ricostruzione* edited by Elena Cortesi e Mario Proli, Cesena: Il Ponte Vecchio, 1996.

Roland, G. *Privatization: Success and Failure*. New York: Columbia University Press, 2008.

Sabel, C. F., and J. Zeitlin. *World of Possibilities*. Cambridge, England and New York: Cambridge University Press, 1997.

Sangiorgi, C., and Sauro Tassinari. *Tutti i colori del cielo*. Forlì: Storia del volo a Forlì, 2004.

Sarti, R. "The battle of the Lira, 1925-27." *Past and Present* XLVII (1970), 97–102.

Segreto, L. 'Industrial capitalism and political constraints: the bureaucratization of economic life during the fascist regime.' In *European Business, Dictatorship and Political Risk 1920–1950*, edited by K. Kobrak and P. H. Hansen. New York, NY: Berghahn Books, 2004, 223–234.

Spriano, P. *Storia di Torino operai e socialista*. Torino: Einaudi, 1972.

Tarozzi, Fiorenza. "Artigianato e industria a Forlì tra Ottocento e Novecento." In *Storia di Forlì. Età contemporanea*, edited by Angelo Varni. Bologna: Il Mulino, 1992.

Toninelli, Pier Angelo. *The Rise and Fall of State-Owned Enterprise in the Western World*. Cambridge: Cambridge University Press, 2000.

Toniolo, Gianni. *L'economia dell'Italia fascista*. Roma; Bari: Laterza, 1980.

Tortella, Gabriel. *The Origins of the Twenty-First Century*. London: Routledge, 2010.

Woods, Dwayne. "The crisis (collapse) of Italy's public enterprise system: A revised property rights perspective." *Journal of Modern Italian Studies* 3 (1998), 22–41.

Zamagni, Vera. *Dalla periferia al centro*. Bologna: Il Mulino, 1993.

Zamagni, V. *The Economic History of Italy 1860–1990*. Oxford: OUP, 1993.

Zamagni, V. "The Rise and Fall of the Italian Chemical Industry 1950s-1990s." In *The Global Chemical Industry in the Age of the Petrochemical Revolution*, edited by Louis Galambos, Takashi Hikino, and Vera Zamagni. Cambridge: CUP, 2007, 347–367.

ARCHIVAL SOURCES

ACC: Archivio del Camera di Commercio di Forlì – Forlì Chamber of Commerce Archive, Forlì.

ACS: Archivio Centrale dello Stato - State Central Archive, Rome.

ASB: Archivio di Stato di Bologna – State Archive of Bologna, Bologna.

ASBI: Archivio Storico della Banca d'Italia, Historical Archive of the Bank of Italy, Rome.

ASF: Archivio di Stato di Forlì – State Archive of Forlì, Forlì.

ASIMI: Archivio storico IMI – Rome.