



Financing Industrial Districts in Italy, 1971–91: A Private Venture?

Anna Spadavecchia

To cite this article: Anna Spadavecchia (2005) Financing Industrial Districts in Italy, 1971–91: A Private Venture?, *Business History*, 47:4, 569–593, DOI: [10.1080/00076790500133066](https://doi.org/10.1080/00076790500133066)

To link to this article: <https://doi.org/10.1080/00076790500133066>



Published online: 24 May 2006.



Submit your article to this journal [↗](#)



Article views: 75



View related articles [↗](#)



Citing articles: 2 View citing articles [↗](#)

Financing Industrial Districts in Italy, 1971–91: A Private Venture?

ANNA SPADAVECCHIA

University of Reading

Italian economic performance over the last 40 years, since the end of the ‘economic miracle’ and the ‘Hot Autumn’ of 1969, has puzzled experts. The country has considerable weaknesses in advanced industrial sectors and has very few world-class companies. Furthermore, unlike the United Kingdom, Italy does not compensate for its industrial weaknesses with a strong service sector. Last but not least, Italy is plagued by a North–South economic divide, which has defied 40 years of regional policies and is still regarded as the major structural problem of the Italian economy.¹ Yet in spite of all these shortcomings, Italy has managed to thrive.² One of the key elements of its success is the development of industrial districts (henceforth IDs) – clusters of small firms that exploit external economies of scale and economies of specialisation, thanks to the division of labour and flexible production systems.³ These areas provide a major source of Italian export revenues in the textile, clothing, footwear and leather goods industries.⁴

In the conventional wisdom, IDs are associated with the economic boom in the North-East and Centre – the so-called ‘Third Italy’⁵ – since the 1970s. This boom contrasted strikingly with the crisis of state-sponsored and state-owned large companies after the oil shock.⁶ The Third Italy is said to have industrialised through the emergence and development of IDs. While in the 1950s it was less developed than the so-called ‘Industrial Triangle’ (the area of classic industrialisation), the core regions of the Third Italy – Emilia Romagna and the Veneto – have now matched the degree of development of the most advanced region in the Industrial Triangle – Piedmont and Lombardy.⁷ Research on the IDs of the Third Italy, as well as those located in other European regions, has blossomed since the 1980s, but their sources of finance have not been investigated closely. Conti and Ferri claim that this neglect has allowed the long-held assumption regarding the exhaustive role of self-financing within IDs to pass unchallenged.⁸ Previous work stresses that such firms relied entirely on self-financing not only in the initial stage of their trading life⁹ but also in their later stages.¹⁰ However, this understanding raises some scepticism, as it does not take into account the pervasiveness of state intervention in the Italian economy, which spans from Keynesian measures of demand support to countrywide labour regulation and regional intervention.¹¹

Since the early 1950s, the importance of small and medium-sized enterprises (SMEs) in the Italian economy has been recognised by both economic policy makers¹² and academic commentators.¹³ Moreover, both the Bank of Italy and the Association of Industrialists (Confindustria) considered small firms to be at a disadvantage in terms of access to market finance.¹⁴ This awareness contributed to the introduction of financial subsidies in favour of SMEs from the early 1950s, within the framework of national industrial policy, and from the late 1950s through the regional policy, the so-called

'Extraordinary Intervention for the South'.¹⁵ The traditional understanding of the importance of self-financing within IDs denies *a priori* any potential role for such subsidies. This article questions this assumption and investigates whether financial subsidies were significant in the development of Italian IDs.

Italian state support for SMEs has been thoroughly investigated by Weiss from a sociological and institutional perspective.¹⁶ Studying the geographical distribution of soft loans to artisan firms and SMEs from 1945 to 1975, the author pointed out that the North and the Third Italy benefited significantly from such subsidies, and proposed government financial support as an explanation of the survival of flexible specialisation in Italy, an angle that previous work had not considered.¹⁷ In particular, Piore and Sabel acknowledged the role of institutions in the development of Italian IDs, but were mainly concerned with regional institutions. These provided services and infrastructure that SMEs by themselves could not afford and, crucially, balanced co-operation and competition among firms, so as to encourage permanent innovation.¹⁸ This article follows the Weiss argument, and expands it from the historical and economic perspectives. It brings Southern Italy into the broader picture of IDs throughout Italy and, consistently with this choice, it assesses two types of state intervention: state intervention in support of SMEs within an under-industrialised area, and state support for SMEs within the framework of the national industrial policy.

The role of the regional policy for the development of Southern SMEs is still controversial. Lizzeri claims that Southern SMEs developed independently from the system of incentives, and other authors point out that large firms were the main beneficiaries of such subsidies,¹⁹ but other works suggest that the regional policy did contribute to the development of SMEs in the South.²⁰ This article analyses the importance of the regional and national industrial policy in favour of SMEs, from the perspective of recipient firms, rather than focusing on institutions, and compares the importance of state subsidies to other sources of company finance utilised by SMEs within IDs.

The analysis is performed on the basis of two IDs: the Southern ID of Barletta, located in Puglia, and the North-eastern ID of San Mauro Pascoli (henceforth San Mauro) in Emilia Romagna (see map in Figure 1). Section II presents the debate in the literature concerning the access of SMEs to different sources of finance, while section III gives an overview of the overall industrial development in the two IDs. Section IV discusses the construction of a database of company balance sheets for a sample of firms in each ID. Based on this information, sections V and VI analyse the capital structures of the firms in the two samples.

II

Although the sources of finance of SMEs within Italian IDs have not been the object of specific investigation,²¹ general research on SME finance stresses that SMEs are at a disadvantage in securing market finance. Credit represents a *sui generis* commodity traded through the 'promise of paying a certain price', i.e. an interest rate, rather than through a price. The peculiar nature of credit generates incomplete contracts in which the lender bears the risk of default. Increasing the price of credit may increase the risk, as higher interest rates may induce firms to undertake projects with a lower probability of

FIGURE 1
THE REGIONS OF ITALY



Notes: Italian regions: 1 Piedmont; 2 Valle d'Aosta; 3 Lombardy; 4 Trentino-Alto Adige; 5 Veneto; 6 Friuli Venezia Giulia; 7 Liguria; 8 Emilia Romagna; 9 Tuscany; 10 Umbria; 11 Marche; 12 Lazio; 13 Abruzzo; 14 Molise; 15 Campania; 16 Puglia; 17 Basilicata; 18 Calabria; 19 Sicilia; 20 Sardegna. The National Bureau of Statistics (henceforth Istat, Istituto Nazionale di Statistica) divides Italy into: North-West = 1 Piedmont; 2 Valle d'Aosta; 3 Lombardy; 7 Liguria; North-East = 4 Trentino-Alto Adige; 5 Veneto; 6 Friuli Venezia Giulia; 8 Emilia Romagna; Centre = 9 Tuscany; 10 Umbria; 11 Marche; 12 Lazio; South = 13 Abruzzo; 14 Molise; 15 Campania; 16 Puglia; 17 Basilicata; 18 Calabria; Islands = 19 Sicilia; 20 Sardegna.

success but higher returns when successful. There are two main avenues available to lenders to overcome the uncertainty of loan contracts: requests for collateral from firms and the monitoring of borrowing firms. As small firms often lack suitable collateral and have high monitoring costs,²² the literature on sources of finance for SMEs within IDs has stressed the importance of self-financing and of local banks.

Saba claims that due to the high interest rate and requirement of collateral, small firms, particularly those located in less developed areas, have only one channel of finance left

available, i.e. self-financing through reinvested profits.²³ Other work mentions informal circuits of credit, taking various forms from commercial credit to 'interlinking transactions of subcontracting and credit'²⁴ and 'collective self-financing'.²⁵

The established understanding of the exhaustive role of self-financing sharply contrasts with the historical role that banks played in promoting industrialisation, in Italy as in other continental European countries.²⁶ Recent research has begun to investigate the importance of bank capital in the development of Italian IDs.²⁷ This points out that the importance attached to self-financing within IDs ignores the fact that IDs are an ideal environment for local banks. These can monitor borrowers more effectively and with fewer costs than large banks. The latter have their head offices located elsewhere, and have to rely on a steady flow of information between head office and the local branches.²⁸

In the Italian case another type of finance should be considered; namely state subsidies to SMEs. From 1952, SMEs could receive soft loans through the network of the Regional Medium-Term Credit Institutions (RMTICs, *Mediocrediti Regionali*),²⁹ which were able to extend loans at lower interest rates (6.5 per cent, as compared to yields on long-term government bonds amounting to 6.9 per cent)³⁰ because they could refinance themselves under favourable terms at the Central Medium-Term Credit Institution (*Mediocredito Centrale*), established by the Treasury in 1952. Small firms were defined as those employing no more than 500 workers and having net assets below 1.5 billion lire, though for Southern firms the upper limit on assets was three billion lire. Further prominence to the SMEs' financial requirements was granted through the far more generous soft loan scheme launched by the Ministry of Industry (MI) in 1959. While the RMTICs offered small loans of up to 50 million lire, the MI offered larger loans, and on preferential terms to Southern firms. Firms located in the North and Centre could borrow up to 500 million lire, repayable over ten years at five per cent, whereas firms in the South could borrow up to one billion lire, repayable over 15 years at three per cent³¹ – in the same year yields on long-term government bonds were 5.4 per cent.³² In subsequent years, further schemes were introduced through the national industrial policy and more provisions were made available to SMEs in the South through the regional policy.

Southern SMEs were eligible not only for specially designed soft loan schemes but also for grants. Grants were available for the purchase of machinery (up to 20 per cent of total expenditure) and construction costs (up to 25 per cent), with the level depending on several factors such as industrial sector, investment per employee, firm size and location.³³ However, while in the North and Centre there were clear size limits for eligible firms, in the South these limits were soon abandoned. By 1962, limits on employees and fixed assets were lifted and any firm of any size could receive soft loans and grants on the first six billion lire of its investment.³⁴

Including state subsidies in the analysis is also important because of their effects on non-subsidised credit. On the one hand, by granting subsidies, the government might act as the initial lender to unseasoned firms. This might crowd in private lenders, as the government has already undertaken monitoring, or because the longer term of the public credit will provide a 'senior' status to non-subsidised credit. On the other hand, government financing of fixed investment might simply underbid private lenders to secure the best clients and might therefore crowd out non-subsidised credit.³⁵

III

The relative importance of state subsidies in the development of IDs is analysed using two case studies – the IDs of Barletta and San Mauro – chosen from a survey that identified 99 IDs across the whole country at the end of the 1980s.³⁶ In order to examine whether the two areas conform to the criteria characterising an ID, the methodology elaborated by Sforzi to define IDs was adopted.³⁷ This emphasises such features as a concentration of workers in manufacturing and in the sector of specialisation higher than the national average, as well as a percentage of SMEs (less than 250 employees) higher than the national average. Moreover, the division of the production process among firms could be studied on the basis of particularly detailed balance sheets (*Relazione di stima*) prepared by inspectors appointed by the relevant Chamber of Commerce on the occasion of companies' change in legal status.³⁸

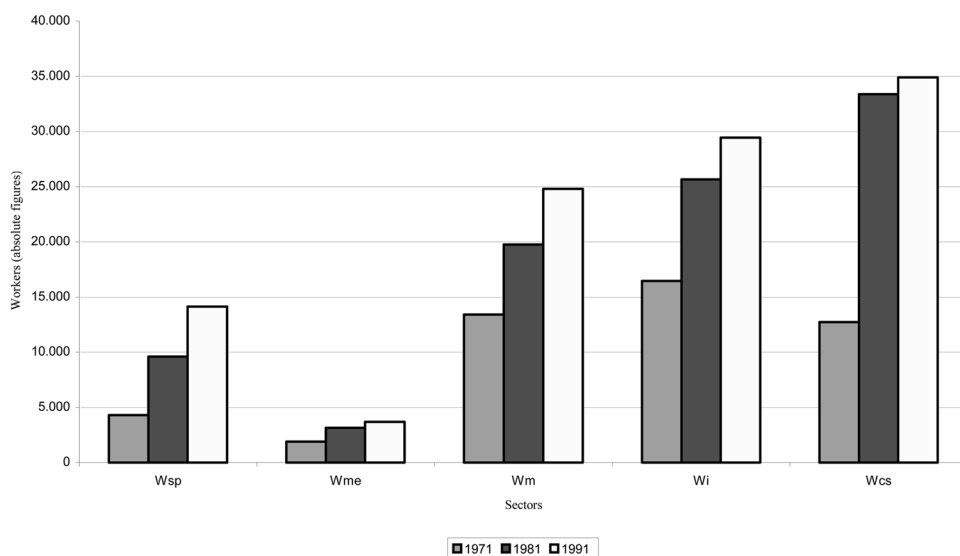
There are various reasons for choosing a Southern case study. Southern IDs are much less studied than North-Eastern ones, and their existence was not even acknowledged until very recently. Therefore, studying a Southern ID may reveal new insights into both the pattern of ID development and the industrialisation of an underdeveloped region. The North-Eastern ID of San Mauro was chosen on the basis of three criteria: location, similarity of products and same period of emergence. It seems appropriate to have a counter-example located in the 'classic' ID region in order to have a meaningful comparison, and San Mauro is located in Emilia Romagna. Both IDs specialised in the production of footwear, clothes and textiles. Moreover, both emerged in the 1950s, which seems an important selection criterion in order to be able to compare the importance attained by each ID during the period under review. Figures 2 and 3 give an overview of the development of the two IDs.

It seems clear that from comparable levels of employment in the sectors of specialisation in 1971, the North-Eastern district saw far smaller growth than its Southern counterpart in the following decades. It should be noted that by 1971 the San Mauro ID had also developed a further specialisation in engineering, less pronounced in the Southern ID. The decreasing trend in footwear and clothing and the expansion of engineering in San Mauro seems to confirm that IDs might develop more than one specialisation, as observed also in other work. A similar case is the Vigevano ID (footwear and engineering, in Lombardy), where alongside the original production of footwear, engineering firms developed in the 1970s, specialising in the production of equipment for the footwear industry.³⁹

The development of San Mauro in the 1970s and 1980s reflects the crisis that affected the Italian footwear and clothing sectors. This had its roots in the increased cost of labour since the 'Hot Autumn' of 1969, the fourfold increase of the oil price in 1973,⁴⁰ the ensuing decrease in the European growth rate of consumption and competition from low-cost Far Eastern producers increasingly moving into higher-quality markets.⁴¹ Moreover, Italy joined the EMS in 1979; thus through most of the 1980s exporting companies could no longer rely on the devaluation of the lira to make their exports more competitive.⁴²

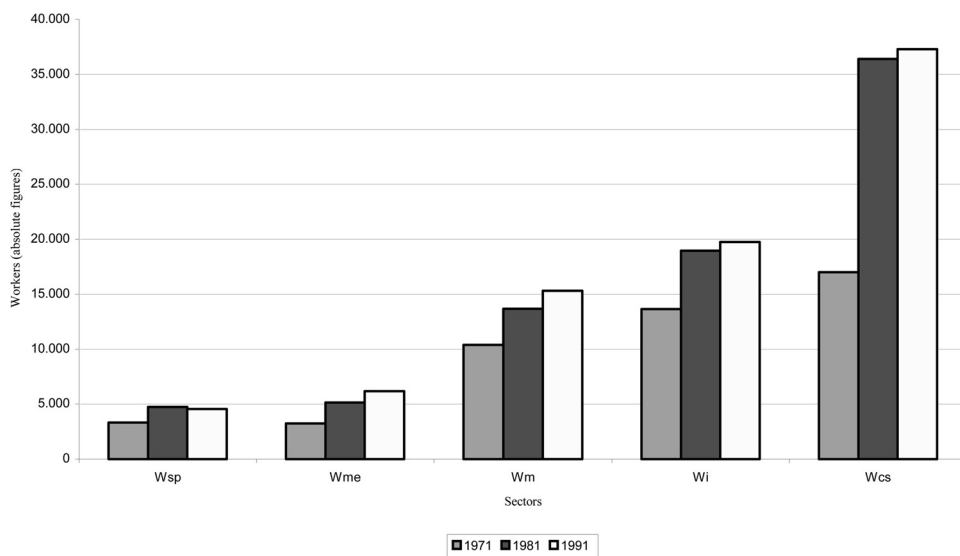
From the second half of the 1970s, a restructuring of the footwear and clothing industries took place in San Mauro. Firms involved in the production of low- to medium-quality shoes either failed or reduced their labour force, whereas firms involved in the production of medium- to high-quality products emerged as the leaders in the sector. The

FIGURE 2
WORKERS BY SECTORS, BARLETTA ID, 1971-91



Notes: Keys: Wsp = sectors of specialisation (43) textiles, (44) leather, (45) shoes and clothing, absolute figures; Wme = workers in the engineering industry, absolute figures; Wm = workers in manufacturing, absolute figures; Wi = workers in industry; absolute figures; Wcs = workers in commerce and services, absolute figures. Source: Istat, *I censimenti delle attività produttive dal 1951 al 1991. Dati comunali*. CD-ROM (Rome, 1998).

FIGURE 3
WORKERS BY SECTORS, SAN MAURO ID, 1971-91



Source: as for Figure 2.

crisis was such that from a situation of full employment until the early 1970s, the area saw unemployment in the late 1970s and 1980s, which particularly hit mature unskilled workers.⁴³ The footwear industry in San Mauro also experienced greater vertical integration of final firms, in the 1980s, due to the higher requirements of quality control. This might be one of the reasons why San Mauro is considered not to have followed the broader trend towards outsourcing outside the district.⁴⁴

Other works have noted the loss of employment in the specialisation industries within Italian IDs during the 1980s, and pointed out that this does not imply a deterioration of the performance of these IDs.⁴⁵ San Mauro shows how the loss of employment coincided with a marked increase in the profitability of footwear firms between 1984 and 1993.⁴⁶ Similarly, in Sassuolo (producing ceramic tiles in Emilia Romagna) and Montebelluna (producing ski boots in the Dolomites), technological innovation led to a rationalisation of production and a decrease in employment growth.⁴⁷ In particular, Southern IDs in footwear and clothing are held to have benefited from the loss of employment in Northern IDs, which might also help explain the labour force growth in the Barletta in the 1980s.⁴⁸

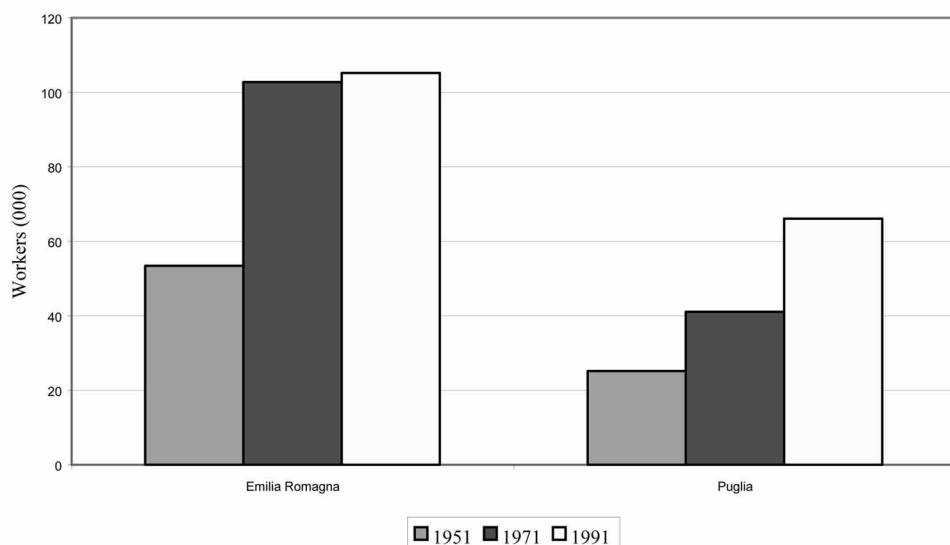
The crisis in footwear and clothing had repercussions also in the Barletta ID. The largest firms of the area emerged as leaders and spearheaded a general increase in the quality of the local output. This was made possible also by the introduction of new materials (polyurethane) and technology.⁴⁹ The greatest expansion of the Barletta ID took place from the second half of the 1970s to the end of the 1980s, when leading companies expanded their range of products from sports shoes (mainly tennis and training shoes) to a broader range of casual footwear, and managed to access new export markets. Moreover, at the end of the 1970s and beginning of the 1980s, the ID experienced a period of high entrepreneurial spin-offs. The proliferation of firms was also related to the progressive fragmentation of the production process, due not only to increasing productivity and cutting costs, but also to the limited managerial skills of entrepreneurs in Barletta, who were poorly equipped to deal with a centralised production process and high volumes of production.⁵⁰

The workforce dynamics in Barletta and San Mauro reflect a much wider trend. A study has concentrated on the location of production of 'Made in Italy', including in this definition textiles, leather, footwear and clothing, and furniture.⁵¹ In the 1980s, employment in these sectors decreased throughout the country, with the exception of the South, where there were fewer workers, in absolute numbers, but where the sectors kept expanding in the 1980s. Moreover, a more geographically detailed analysis shows that Puglia, where the Barletta ID is located, was one of the regions where the increase in the 1980s was more pronounced.⁵² Figure 4 shows the size of 'Made in Italy' in Emilia Romagna and Puglia. It does not show the employment trend in the 1980s, but it seems clear that the trend observed in the two IDs in the specialisation industries is similar to the one taking place in their regions, which adds significance to the analysis of the two case studies.

IV

The importance of state subsidies in the development of the two IDs was assessed using two relatively small samples of companies (53 overall), the records of which are held at the Chambers of Commerce in Forlì (for the San Mauro ID) and Bari (for the Barletta ID). The samples consist of limited liability and public share companies alone, as these are the only ones legally obliged to deposit their balance sheets at the local Chamber of

FIGURE 4
WORKERS IN 'MADE IN ITALY', EMILIA ROMAGNA AND PUGLIA, 1951, 1971 AND 1991



Source: Viesti, *Come nascono*, p.51, data source Istat.

Commerce. The analysis presented is based on raw balance sheets, reclassified according to financial criteria. Therefore, this dataset allows the isolation of subsidies from other components of liabilities, such as soft loans from long-term borrowed funds and grants from reserves, which was not possible in previous works based on reclassified balance sheets, made available by institutions.⁵³

At various points in time, the first sample includes 32 manufacturing companies located in Barletta and the second sample includes 21 manufacturing companies located in San Mauro. The two samples provide 681 observations – annual balance sheets – over time, 460 for Southern companies and 221 for the North-Eastern samples. The smaller number of companies in the North-Eastern sample is related to the smaller size of the manufacturing sector in the San Mauro ID. The smaller number of annual observations was also determined by the fact that these companies did not have public status or were not trading during the whole 1971–91 period; most were established as public companies or went public in the 1980s in the San Mauro sample, whereas most companies in the Barletta sample did so in the second half of the 1970s. More information about companies in the samples is provided in the Appendix.

The initial intention was to collect a random sample of at least 30 companies for each ID, in the sectors of specialisation. If 30 such companies could not be found, the samples would have been expanded to include companies in other manufacturing sectors (henceforth *man1*).⁵⁴ However, the scarcity of data was such that the two samples were compiled collecting all available records of public companies in the manufacturing sectors mentioned, with records starting before 1984 in the case of Barletta, and before 1988 for San Mauro, to provide a sufficiently long period of

TABLE 1
NUMBER OF COMPANIES IN THE SAMPLES, TOTAL NUMBER OF COMPANIES WITHIN THE IDs
AND SIZE OF PUBLIC COMPANIES

Barletta				San Mauro		
	Sample	Census	Public Companies	Sample	Census	Public Companies
1971	17	2,090 (4.1) ^a	114 (69.1) ^a	3	948 (6.8) ^a	105 (49.8) ^a
1981	30	2,552 (5.8) ^a	309 (35.1) ^a	17	1,408 (5.9) ^a	184 (50.6) ^a
1991	25	6,393 (3) ^a	613 (25.5) ^a	16	1,595 (5.4) ^a	268 (35.4) ^a

Notes: All figures refer to man1; figures concerning public companies refer to the provinces of Bari (for the Barletta ID) and Forlì (for the San Mauro ID). Provinces are the smallest administrative units for which information about the juridical status of companies is provided.

Keys: Man 1 = including footwear and leather goods, clothing, textiles, food processing, wood, furniture, paper, publishing, photography and rubber. Sectors such as metal and mineral processing, oil refining and construction have not been included; a = average number of employees by plant.

Source: Chamber of Commerce in Bari (henceforth CCB) company records, Chamber of Commerce in Forlì (henceforth CCF) company records, for full archival reference see Appendix B; Istat, *Censimento dell'Industria*, 1971, 1981, 1991.

analysis.⁵⁵ Table 1 compares the number of companies in the two samples with the number of companies in the two IDs; it also presents information on the size of public companies.

A precise comparison based on the number of employees is not feasible, as companies in the sample give only occasional information about their workforce. From census data, it emerges that both IDs contain a large number of companies, most of which are very small, and that the average size of public companies is higher than the average company size in the sectors of specialisation. Thus, companies in the samples should also capture a larger portion of the ID workforce than their sheer number suggests.

The inclusion of public companies alone introduces some biases into the sample, particularly in terms of capital structure. Their larger size and their legal status might give them easier access to market capital and access to a wider range of types of finance, such as bonds, which can only be issued by public companies. Thus, market finance is likely to be higher for the sample companies than for small and medium-sized companies as a whole in the two IDs. This bias can be magnified by the computation of weighted averages, rather than a simple average. Nevertheless, weighted averages have been preferred in the analysis of the capital structure (Tables 3, 5 and 6) as the purpose of the capital structure analysis is to offer a broader picture of the IDs. It thus seemed correct to allocate greater weight to the sources of finance of larger companies than, for instance, to those of a small start-up company.

The samples contain a further bias. Far more records in the Southern sample date back to the 1970s than in the North-Eastern one. Considering that the 1980s saw more stable economic growth than the 1970s, this might affect the differences emerging from the comparison of the two samples. This bias does not affect the comparison of the capital structure and performance of the two samples in Tables 3, 5 and 6, as in those tables the overall period of analysis is broken into sub-periods, e.g. 1971–75, 1976–80. Table 2 shows the size, in terms of net capital stock, and the turnover of the companies in the two samples.

Despite the larger dimension of the Southern companies in terms of fixed net capital, they are considerably smaller in terms of turnover. The largest Southern company, in terms

TABLE 2
NET CAPITAL STOCK AND TURNOVER OF FIRMS IN THE SAMPLES, 1971–91 (million lire, 1980)

	Net Capital Stock		Turnover	
	Barletta	San Mauro	Barletta	San Mauro
Range	12–1,849	8–1,646	55–13,680	49–11,058
Average	464	307	1,788	3,101
Median	285	155	580	1,967
Std dev.	478	418	2,895	3,350

Note: Capital stock has been transformed into constant prices by using the index of annual gross investment in R. Golinelli and M. Monerastelli, *Un Metodo per la Ricostruzione di Serie Storiche Compatibili con la Nuova Contabilità Nazionale* (Rome, 1990); for 1990 and 1991, the index of annual gross investment Istat, *Conti Economici Nazionali, Anni 1970–97* (Rome, 1998); turnover deflated by using consumer price index, Istat, *Indice dei Prezzi al Consumo* (Rome, 1999).

Source: CCB and CCF, company balance sheets.

of assets, also determines the upper limit of turnover. Without this company, the upper limit of turnover for Southern companies would be 8.5 billion. The lower limit of turnover in the San Mauro sample derives from one company that traded for four years, after which it went bankrupt. Excluding this company, the lower limit would be 236 million lire.

V

This section addresses the core issue of the article, namely the relative importance of state subsidies as a source of company finance, by examining the capital structure of the companies within the two samples using their annual balance sheets. The use of such sources requires caution. Balance sheets, like any other information disclosed by companies, are not necessarily unbiased and impartial as compared to information available to internal parties.⁵⁶ The attempt to complement balance sheet data with information collected directly from entrepreneurs proved unfruitful, as entrepreneurs were unwilling to provide financial information. However, it should be considered that components of liabilities such as debts to private and state institutions, which are the main concern of this paper, are also the most difficult to tamper with as they can be cross-checked through the lending institutions' records.

The analysis of the capital structure considers short-term bank credit (STB); commercial credit (CD); long-term borrowed capital (LTBC), which includes subsidised and non-subsidised medium-term loans (bonds and loans from medium-term credit institutions); equities (E) which include paid-up capital, funds from directors and reserves. Companies in the two samples include two types of reserves: deriving from profits or from grants. The first type indicates the companies' ability to self-finance.

For a more precise estimation of the financial subsidies enjoyed by companies within the sample, tables also present the estimated value of the implicit subsidy in a subsidised loan, which has been calculated in the following way:⁵⁷

$$S = L \left\{ 1 - [r_A(1 + r_A)^N / (1 + r_A)^N - 1] [(1 + r_M)^N - 1 / r_M (1 + r_M)^N] \right\} \quad (1)$$

where L = loan; r_M = market long-term interest rate; r_A = subsidised interest rate; N = length of the loan

According to this formula, the absolute amount of implicit subsidy within a subsidised loan depends on the absolute amount of the loan, the differential between subsidised and non-subsidised interest rates and the redemption period. It seems important to estimate the implicit subsidy because subsidised interest rates and redemption periods were more favourable towards Southern firms.

The analysis includes also some ratios. Long-term capital divided by fixed net assets (LTC/FNA) is used to assess whether companies are in financial equilibrium. This ratio indicates the ability of companies to cover their fixed assets with long-term capital.⁵⁸ The ratio of fixed net assets to total net assets (FNA/TNA where TNA is defined as total assets minus total depreciation funds) is used here as a proxy for capital intensity, as the standard definition could not be applied due to the lack of information on labour force in the sample companies. The values of the proxy are compared to a larger sample analysed by the Bank of Italy, which allows us to test that the proxy and the standard indicator (fixed assets divided by labour force) show consistent results.⁵⁹

The analysis covers the overall period 1971–91. It has been broken into sub-periods in the attempt to identify possible changes in the capital structure of these companies. Moreover, as not all 53 companies in the two samples traded or remained public from 1971 to 1991, this choice allows a clear identification of the number of company records available in each sub-period.

The components of liabilities have been calculated as a weighted average. The share in total liability of each source of finance (short-term bank loans, commercial debts, long-term borrowed capital, equity, loans and contributions by directors, paid-up capital) has been computed for each district in each sub-period using the following formula (e.g. 1971–75):⁶⁰

$$\frac{\sum_{t=1971}^{t=1975} i_t^j}{\sum_{t=1971}^{t=1975} I_t} \quad (2)$$

Where i_t^j denotes the amount of finance of type j in year t , $I_t = \sum_{j=1}^n i_t^j$ there are n different types of finance).

Table 3 displays the greater reliance of companies in the Barletta sample on subsidies. Not only do subsidised loans represent a higher percentage of total liabilities, but also the implicit subsidy within soft loans was much higher for Southern firms. This reflects the higher differential between the medium-term non-subsidised interest rate and the average subsidised interest rate in the South, than in the Centre and North and the longer redemption period. The variation in the implicit subsidy within each sample and across sub-periods is not affected by the redemption period, which remained constant throughout the whole period of analysis, but rather reflects the fluctuations in the differential between non-subsidised and average subsidised interest rates in the South and in the Centre and North.

Southern firms display higher shares of long-term debts, mostly consisting of subsidised loans, whereas non-subsidised medium-term credit is a more important source of finance for companies in the North-Eastern sample. It therefore seems clear that companies in the Southern sample reach shares of long-term capital comparable to the

TABLE 3
BARLETTA AND SAN MAURO SAMPLES, SELECTED BALANCE SHEET INDICATORS, 1971–91 (figures expressed as a percentage of total liabilities)

Companies			STB	CD	LTBC ^c	IS	Reserves ^d	Directors	Paid-up	RR
Barletta sample	Subs ^a	NS ^b								
1971–75	7	11	28.0	19.9	7.7 (7.74)	3.90	4.5 (3.3) ^c	6.2	22.3	– 0.7
1976–80	21	3	22.7	22.1	6.3 (3.16)	1.94	13.2 (7.9) ^c (0.1) ^f	6.0	20.1	5.5
1981–85	23	6	15.4	33.4	5.6 (4.26)	2.30	17.3 (6.3) ^c (0.4) ^f	5.7	12.2	2.8
1986–91	19	6	14.4	37.3	7.8 (3.95)	2.12	20.5 (8.3) ^c (0.7) ^f	2.2	8.1	3.6
San Mauro sample	Subs ^a	NS ^b								
1971–75	1	2	15.8	24.4	1.8 (0.62)	0.30	3.3	3.1	24.8	7.8
1976–80	3	4	13.5	27.5	2.1 (1.61)	0.84	4.6 (0.01) ^f	2.2	17.7	5.6
1981–85	9	8	6.3	25	5.7 (0.87)	0.38	14.6 (0.015) ^c (0.01) ^f	3	17.4	12.8
1986–91	5	12	6.3	23.5	5.8 (0.18)	0.07	24 (0.1) ^c (0.02) ^f	3.2	14.7	9.3

Notes: Keys: a=number of subsidised companies; b=number of unsubsidised companies; c=of which subsidised loans in brackets; d=of which reserves built with subsidies in brackets; e=grants; f=fiscal subsidies; STB=short-term bank loans; CD=commercial debts; LTBC=long-term borrowed capital; IS=implicit subsidy, approximate value computed as explained above; RR=rate of return on long-term capital, calculated dividing net profit by long-term capital.

Source: CCB company balance sheets and CCF company balance sheets.

North-Eastern sample only with the substantial help of subsidies, consistent with the regional policy's aim of increasing the availability of long-term capital in the South.

Reserves are a key element in this analysis for two reasons. First, reserves include grants and, secondly, they are built up with undistributed profits, hence reserves represent the company's ability to self-finance that is so strongly stressed in the ID literature. For the 1971–75 and 1976–80 periods, companies in the North-Eastern sample show a low level of reserves. This is due to the presence of start-up companies in these periods (two in 1971–75 and two in 1976–80). Moreover, the reserves of the largest company in each period were sharply decreasing while their fixed net assets were increasing, indicating that both were using reserves to finance investment. For the later periods, the higher percentage of reserves and the higher rates of return in the North-Eastern sample demonstrate a greater ability to self-finance by reinvesting profits, whereas Southern companies reached comparable percentages of reserves only with the considerable help of grants. The higher rates of return displayed by the San Mauro sample in the 1980s are consistent with the findings of the survey of Brusco *et al.*, which points out an increase in profitability in the footwear industry in San Mauro. However, it should be borne in mind that the sample used in this article includes other manufacturing sectors.

Commercial debts represent the single largest component of companies' liabilities. This is not surprising considering the long period over which companies can pay their suppliers. Between 1985 and 1987 Southern firms paid their suppliers after a period varying from a minimum of 60 days for the food-processing sector, to 150 and 200 days respectively in clothing/textiles and the engineering sectors. In the same years, firms in the same sectors in the Centre and North paid their suppliers after 62, 130 and 190 days.⁶¹ Therefore, the balance sheets of companies in the clothing/textile sector, which are relatively numerous in the Southern sample, include goods and services bought in the last five months.

The difference between the values of short-term borrowed funds (STB) and non-subsidised long-term credit (LTBC minus subsidised loans) in the Southern sample seems particularly high. If the level of savings in the South represented the main constraint to the availability of credit, there should be shortages of both short-term and long-term credit. Previous studies have shown that the Southern balance of payments was close to equilibrium from 1965, due to public transfers and remittances from migrants.⁶² Furthermore, the 1970s have seen a growing outflow of long-term capital from the South towards other areas of the country.⁶³ The Southern economy is riskier for the banking system, so savings collected in the South can be more profitably invested in the rest of the country.⁶⁴ It seems plausible that this phenomenon is less pronounced on the short-term credit market, as the local banks possess much better knowledge of local companies. The entrepreneur is also a depositor at the local bank and has a continuing business relationship with it. Instead, the contact between small or medium-sized firms and medium-term credit institutions is occasional, with the institution assessing the project having little knowledge of the company.⁶⁵ Moreover, the higher level of fixed assets might make the medium-term lending institutions sceptical as to the profitability of new investment in fixed assets. On the other hand, despite the difference in interest rates small companies might prefer overdrafts from local banks rather than medium-term loans from institutions, as the second option involves collaterals and bureaucratic procedures.

The rate of return on long-term capital clearly shows the lower profitability of Southern companies in the sample (particularly low during 1971–75, mainly due to a large number of start-up companies), which can be explained in both micro- and macro-economic terms. Southern small firms (20–100 employees) show a slower turnover of inventories (for the textile and footwear sectors – 108 days in the South and 68 in the rest of the country) and a lower utilisation of production capacity – a consequence of the more limited market in the South and smaller export opportunities.⁶⁶ Compared to firms in more developed areas of the country, Southern industry was less able to exploit scale economies internal and external to the firm.⁶⁷ In addition, the literature claims that Southern companies did not exploit economies of specialisation, as the Southern manufacturing sector relied far less on vertical specialisation.⁶⁸ Furthermore, it is possible that the lower productivity of Southern companies could also be due to the use of more obsolete equipment. A study of depreciation rates for companies within the sample reveals that in the 1980s North-Eastern companies – which were then enjoying particularly high rates of return – were replacing their equipment more quickly than their Southern counterparts.⁶⁹

These results can be compared with those of a 1987 Bank of Italy study of 9,000 small manufacturing companies, 650 located in the South and 8,350 in the rest of the country.⁷⁰ Following this study, components of the balance sheets of the sample companies have been recalculated as simple averages. However, it is possible to compare only some figures because the Bank of Italy study gives a less detailed capital structure of companies; for example, soft loans are not isolated from long-term borrowed capital and grants are not separated from other types of reserves.

The values presented by the ID samples obviously differ from those of the national study, but what seems to be more important is that differences between the ID samples are confirmed by the Bank of Italy sample. This demonstrates that such differences are not accidental, and that the two ID samples, though small, highlight key issues in the study of Southern and Northern SMEs, and are a reflection of the North–South divide.

Table 4 also highlights two issues strongly related to the capital structure, namely that fixed assets represent a higher percentage of total assets (FNA/TA) for Southern

TABLE 4
COMPARISON BETWEEN THE BARLETTA AND SAN MAURO SAMPLES, 1987–91, AND BANK OF ITALY SAMPLE, 1987 (simple average)

	Barletta Sample		San Mauro Sample		Bank of Italy	
	Average	Median	Average	Median	South	North/Centre
FNA/TNA	33.2	33.5	21.7	15.1	35.7	25.5
STB	17.1	14.4	10.6	6.2	16.3	15.5
Bonds	0.45	0	1.5	0	0.8	2.5
LT loans ^a	4.73		3.06		9.6	5.6
LTBC ^b	10.4	6.4	10.4	3.3	13.3	10.5
E	35.2	32.6	32.3	27.4	34.7	27.3
LTC/FNA	218	135	234	270	163.4	200.7

Notes: Keys: a=includes subsidised and non-subsidised long-term loans; b=includes bonds, LT loans, leasing and loans from directors; E=equity capital, which includes reserves and paid-up capital; other keys as above.

Sources: CCB and CCF company balance sheets and Siracusano and Tresoldi, 'Le piccole imprese', pp.155–6.

companies and the lower coverage of such assets with long-term capital (LTC/FNA). Interpreting the FNA/TA as a proxy for capital intensity, both the ID and Bank of Italy samples indicate that Southern small firms are more capital-intensive,⁷¹ this is a surprising result as small firms in traditional sectors, located in underdeveloped areas are expected to be labour-intensive. The higher capital intensity of Southern SMEs has passed unnoticed in the general literature on Italian economic history, which highlights the higher capital intensity of Southern industry as a whole, interpreting it as due to the greater relative weight of large state-owned plants in capital-intensive sectors. However, specialist works offer a plausible explanation of such features: subsidies to capital (financial incentives) affected the relative cost of factors of production and, in particular, lowered the relative cost of capital.⁷² This in turn feeds into a lower degree of financial capitalisation in Southern firms (LTC/FNA), as the larger share of fixed assets is not coupled with a higher availability of long-term finance.

VI

The previous section provided a broad view of the capital structure of the two samples. In this section, each sample has been divided into three groups – subsidised, non-subsidised (where non-subsidised companies include firms that were never subsidised and firms that did not receive subsidies in that specific period, but had received them in previous years) and failed companies. This is in order to analyse whether the capital structure of subsidised companies differs in any significant way from the other two groups, and whether subsidised firms attain higher levels of capitalisation in financial terms, not only because of the direct effect of subsidies but also because these might have a crowding-in effect on market capital.⁷³

Subsidies appear to have a crowding-in effect as both samples show that subsidised companies access long-term market finance to a greater extent than the non-subsidised ones (indicator LTBC). A more detailed analysis of the capital structure shows that long-term market capital is mainly represented by bonds and to a smaller degree by medium-term non-subsidised credit.

As Tables 5 and 6 show, failed companies in both samples display some subsidies. It is surprising that companies about to close their activity could still benefit from soft loans and grants. In the case of the North-Eastern company it is not possible to assess whether the soft loans were old loans or whether they had been extended only a few years before bankruptcy as available records only cover the last five years of activity.⁷⁴ In the case of Southern companies, for which annual records were available for several years prior to their bankruptcy, it became clear that soft loans and grants had been received five to eight years before the end of their activity. At that stage these companies were already making considerable losses and it does not seem that their bankruptcy would have been unpredictable.

Of course, examples like these cast serious doubts on the management of the subsidies, particularly as to whether they were used to bail out troubled firms, which was not the official purpose of the policy. On the companies' side the possibility of accessing subsidies even when performing badly might have encouraged the choice of keeping the company trading even though it was no longer profitable, particularly if this option was

TABLE 5
BARLETTA SAMPLE, 1971–91: SELECTED BALANCE SHEET INDICATORS

	Comp	STB	CD	LTBC ^a	IS	Reserves ^b	Directors	Paid-up	RR
Subsidised									
1971–75	7	24.9	16.0	12.4 (12.39)	6.25	6.2 (5.3) ^c	7.7	21.8	– 0.9
1976–80	19	22.7	21.1	7.2 (3.64)	2.24	14.3 (9) ^c (0.2) ^d	4.7	21	5.8
1981–85	22	14.9	34.7	6.1 (4.58)	2.47	18 (6.9) ^c (0.4) ^d	5.4	12.1	4.3
1986–91	17	14.3	37.5	8.4 (4.41)	2.37	22.2 (9.4) ^c (0.8) ^d	2.2	7.2	4.2
Non-subsidised									
1971–75	13	35.1	26.2	0.1		1.6	3.8	22.6	0.04
1976–80	12	24.6	27	0		5.2	12.6	15.6	6.6
1981–85	8	15	29.6	0		11.6	3.3	13.3	1.1
1986–91	6	13.2	37.9	3.1		8.3	2	14.7	3
Failed									
1971–75	1	14.2	27.2	0		3.6	0	27.5	– 72 (– 9.9)*
1976–80	4 (1B)	10.5	39.3	0		13 (7.6) ^c	21.3	10.1	– 9.4 (– 1.4)*
1981–85	7 (3B)	22	20.4	3.5 (3.35)	1.78	12.3 (2.2) ^c	11.7	12.7	– 15 (– 13.8)*
1986–91	4 (1B)	31.8	13.3	6.9 (6.87)	3.48	4.5	10.9	16.6	– 43.2 (– 43.2)*

Notes: Keys: a = of which subsidised loans in brackets; b = of which reserves built with subsidies in brackets; c = grants; d = fiscal subsidies; STB = short-term bank loans; CD = commercial debts; LTBC = long-term borrowed capital; IS = approximate value of implicit subsidy computed as explained above; Failed: includes figures referring to the last five years of activity of bankrupt and liquidated companies. The number of bankrupt companies is given in brackets. RR = Rate of return on long-term capital, calculated as profit or loss divided by long-term capital; * = RR calculated considering the whole trading life of failed companies.

Source: CCB company balance sheets.

TABLE 6
SAN MAURO SAMPLE, 1971–91: SELECTED BALANCE SHEET INDICATORS

	Comp	STB	CD	LTBC ^a	IS	Reserves ^b	Directors	Paid-up	RR
Subsidised									
1971–75	1	28.4	27	1.9 (1.92)	0.93	8.7	–	2.2	18.1
1976–80	4	13.2	32.2	2.8 (2.14)	1.12	3.4 (0.01) ^d	1.7	21.7	7.3
1981–85	8	3.9	24.2	7.9 (1.25)	0.54	11.2 (0.02) ^c (0.02) ^d	2.9	22.1	11.1
1986–91	5	2.8	27.5	9.8 (0.60)	0.24	19.8 (0.3) ^c (0.07) ^d	–	17.9	6.6
Non-subsidised									
1971–75	3	9.8	23.2	1.8		0.7	4.5	35.5	6.2
1976–80	4	13.6	30.1	0		13.6	9.2	12.2	– 4.1 ^c
1981–85	10	7.6	25.9	2.3		20.9	2.5	11.5	19.5
1986–91	10	7.9	21.7	4.1		26.1	4.7	13.2	10.6
Failed									
1971–75	–								
1976–80	–								
1981–85	4 (2B)	21.7	29.0	1.3 (1.33)	0.53	17.5	5.2	10.1	0.33 (1)*
1986–91	3 (1B)	6.9	27.2	0		17.6	3.9	34.2	5.8 (10.7)*

Notes: Keys = ^c this value is due to a newly established firm, which made considerable losses in the first two years of its activity; if this firm is excluded, the value is 7.4; other keys as for Table 5.

Source: CCF company balance sheets.

coupled with low opportunity costs, meaning a scarcity of job alternatives and business opportunities.

Failed companies also have a high percentage of short-term bank capital, particularly in the Southern sample. This is not surprising, considering that failed companies generally present higher levels of leverage and the inability to meet their financial commitments is one of the causes of failure.⁷⁵ This situation on the borrower's side corresponds to a high-risk situation on the lender's side. Research has shown that in 1988 Southern short-term banks, which lent 80 per cent of their credit in the region, had a ratio of bad loans to total loans as high as 11.3 per cent, whereas banks in the Centre and North had a ratio of only 6.6 per cent.⁷⁶

Failed companies in the Southern sample differ strikingly from their North-Eastern counterparts. The former are financially distressed, as they present very high losses and very high levels of undercapitalisation. This is not the case for North-Eastern failed companies, for these were still overcapitalised and making profits. Clearly, Southern companies cease activity only after a long period of losses, as shown by the rate of return on long-term capital calculated for the whole trading life. They find themselves in this situation for various reasons, either because of an excessive number of employees that cannot be reduced because of the opposition of trade unions to restructuring,⁷⁷ or because their use of fixed assets is inefficient, and thus production costs are so high that they cannot achieve good profit margins.⁷⁸ At the opposite end, North-Eastern companies decide to close as soon as their turnover and profits are decreasing and market trends are unfavourable.⁷⁹ The rate of return on long-term capital, calculated for the whole trading life of failed companies, supports the qualitative evidence.⁸⁰

This key difference should be reflected in a higher number of bankruptcies in the Southern sample, which does not happen. Out of the nine Southern liquidated companies, only three went bankrupt and six liquidated their activity deliberately, whereas out of the six companies ceasing their activity in the North-Eastern sample three went bankrupt. It seems plausible that in order to avoid the legal complications of bankruptcy, directors refinanced the company with 'contributions' immediately before starting liquidation procedures, as the considerable share of funds provided by directors in Table 5 suggests.⁸¹

The comparison of the rate of return of subsidised and non-subsidised companies in the two samples in the 1980s (when the North-Eastern sample also includes a good number of observations) show that subsidised firms are more profitable in the Southern sample, whereas the opposite applies to North-Eastern firms. This is because the best performing companies in the San Mauro sample were no longer being subsidised as they had exceeded the size limit for accessing the system of incentives. With the absence of any size limit in the South, the best performing companies never abandoned the system of subsidies during the period of analysis. Such companies were not only larger than the best performing North-Eastern sample firms in terms of fixed net assets, but they were also enjoying rates of return higher than the market interest rate. This demonstrates *ex post* that subsidies were not necessary to make their investment profitable. Once again, these considerations cast doubts on the efficient management of subsidies in the framework of the regional policy and their ability to promote a 'self-sustaining' growth.⁸²

VII

Much attention has been devoted to the conditions leading to the development, or the demise, of IDs and flexible production systems.⁸³ This article contributes to this debate by analysing the contribution of state intervention to the development of Italian IDs and placing this contribution within a comparative perspective. The analysis of the capital structure shows that companies in both IDs benefited from state subsidies, but these were a far larger source of finance for companies in the Southern ID. Subsidised loans, grants and fiscal subsidies extended to companies in the Southern sample were not only extended more frequently, but were also larger in absolute terms.

The analysis of the relative weight of subsidies to SMEs, both in the Southern and North-Eastern samples, confirms Weiss's central thesis concerning the non-neutrality of the state in the capitalist pattern, but it refines her findings. According to Weiss, the North and Centre benefited more from subsidies to SMEs than the South, but this is not confirmed either by the analysis of the capital structure of the two IDs or by the Bank of Italy sample. Firms in the North-Eastern sample (San Mauro) benefited from financial subsidies to a lesser, but still significant extent.

The analysis of the capital structure of the two ID samples supports previous works, which have flagged the contribution of local banks to the development of IDs, from the institutional perspective. Credit from local banks, included in the short-term bank credit, represents a significant share of companies' liabilities. The considerable weight of commercial credit offers an indication of the importance of internal circuits of credits, something to which previous authors have already paid attention, particularly for British IDs. If the analysis of the capital structure confirms the variety of sources of finance utilised by companies within the two ID samples, it also confirms the importance of internally generated funds, particularly in the North-Eastern sample in the 1980s.

The comparison of the two ID samples with the larger Bank of Italy sample, and the similarity between employment trends in sectors of specialisation in the two IDs and their regions provide reasonable grounds to expand the results of this analysis beyond the limits of the two IDs. The great relative weight of state subsidies as a source of finance for companies in the Barletta ID indicates that subsidies might have played a considerable role in promoting the growth of these firms in the South. However, the diffusion of 'Made in Italy' sectors in Puglia is likely to derive from a combination of factors, such as pre-existing handicraft traditions, low entry barriers in these sectors as well as external subcontracting of production by Northern firms, rather than from subsidies alone, as those were available across sectors.⁸⁴

Although employment growth in these traditional industries is surely to be welcomed in an area as heavily affected by unemployment as Southern Italy, it is possible that the faster expansion of the labour force in 'Made in Italy', in regions like Puglia and Abruzzi, is yet another indicator of Southern backwardness. The decreasing labour force in these sectors might indicate either outsourcing to areas with lower labour costs,⁸⁵ a more efficient organisation of production,⁸⁶ or a shift to other, more profitable, sectors in the face of reduced profit margins in traditional sectors. These firms might have preferred moving to more profitable sectors rather than lowering profits, which seems a possible rationale behind the faster growth of engineering in the San Mauro ID.

In the South, the lower cost of labour and fewer alternative business opportunities might determine a situation whereby even companies facing declining profits prefer to remain in the same sector. In other words, entrepreneurs in Barletta, and in the South, might not abandon traditional sectors even when facing declining profits, because their opportunity costs are lower than those of their colleagues located in the North and Centre of Italy. The striking difference between the distressed economic conditions in which firms in the Southern sample cease their activity, as opposed to the profitability – albeit low – displayed by their North-Eastern counterparts seems to support this interpretation.

NOTES

I wish to thank Peter Hart, Geoffrey Jones, Peter Scott and two anonymous referees of this journal for their helpful comments on this article. Special thanks also to Max-Stephan Schulze, Terry Gourvish, Giovanni Federico and Steven Rosevear for their comments on my research.

- 1 I wish to thank Giovanni Federico for these points. See also V. Zamagni, 'Italy', in M.S. Schulze (ed.), *Western Europe: Economic and Social Change since 1945* (Harlow, 1999), pp.321–35.
- 2 See for instance the Italian GDP per capita as compared to other countries in A. Maddison, *Monitoring the World Economy, 1820–1992* (Paris, 1995).
- 3 The brief definition mentioned in the text captures two key elements of the Marshallian discussion of IDs, namely the concentration of firms in the same locality and the division of labour among such firms, see *Principles of Economics* (London, 1890, Ninth Variorum edn. 1961), vol.1, p.271; and also *The Early Writings of Alfred Marshall, 1867–1890*, edited by J.K. Whitaker (London, 1975), vol.2, pp.197–8. However, there are various definitions of IDs emphasising various features of this model of business organisation. For a definition more attentive to socio-economic features see G. Beccattini, 'Sectors and/or Districts: Some Remarks on the Conceptual Foundations of Industrial Economics', in E. Goodman, J. Bamford and P. Saynor (eds), *Small Firms and Industrial Districts in Italy* (London and New York, 1989), pp.123–52; for a definition placing more emphasis on the division of labour see M.J. Enright, 'Organization and Coordination in Geographically Concentrated Industries', in N.R. Lamoreaux and D.M.G. Raff (eds), *Coordination and Information. Historical Perspectives on the Organization of Enterprises* (Chicago, IL, 1995), pp.103–42.
- 4 P. Guerrieri and C. Milana, *L'Italia e il commercio mondiale* (Bologna, 1990), pp.102–10.
- 5 The area including North-Eastern regions is called 'Third Italy' as it displays a pattern of industrialisation characterised by SMEs, which makes them stand apart from the industrial triangle, the North-West and from the under-industrialised South. See A. Bagnasco, *Tre Italie. La problematica territoriale dello sviluppo italiano* (Bologna, 1977).
- 6 M. Bellandi and G. Dei Ottati, 'Per una << rilettura territoriale delle trasformazioni dell'economia italiana >>: cronaca di un progetto', in G. Becattini, M. Bellandi, G. Dei Ottati and F. Sforzi (eds), *Il caleidoscopio dello sviluppo locale. Trasformazioni economiche nell'Italia contemporanea* (Turin, 2001), pp.29–39.
- 7 A. Rinaldi, *Distretti ma non solo. L'industrializzazione della provincia di Modena (1945–1995)* (Milan, 2000), p.32.
- 8 G. Conti and G. Ferri, 'Banche locali e sviluppo economico decentrato', in F. Barca (ed.), *Storia del capitalismo italiano dal dopoguerra ad oggi* (Rome, 1997), pp.429–65.
- 9 The possession of land is considered of particular importance in the transformation of the agricultural family into an entrepreneurial unit as the sale of the land provides the initial capital to invest in the family business. See for instance M. Paci, *La Struttura Sociale Italiana* (Bologna, 1982), p.118; Bull and Corner point out a similar dynamic behind the emergence of family business in the second half of the nineteenth century, whereas Colli refers more broadly to family capital. A. Bull and P. Corner, *From Peasant to Entrepreneur* (Oxford, 1993), pp.144–5; A. Colli, *The History of Family Business, 1850–2000* (Cambridge, 2003), p.57.
- 10 A. Saba, *Il modello italiano* (Milan, 1995), p.132; in other studies the argument of the importance of self-financing is implicit, see for instance G. Fuà and C. Zaccchia (eds), *Industrializzazione senza fratture* (Bologna, 1983); Bagnasco, *Tre Italie*.
- 11 For an overview of the extent of state intervention in the Italian economy see F. Padoa Schioppa Kistoris, *Italy, the Sheltered Economy: Structural Problems in the Italian Economy* (Oxford, 1993).
- 12 See for instance the report by the study centre of the Bank of Italy commissioned by the governor Menichella, which shows that firms with less than 100 workers employed almost 37 per cent of the national

- workforce in 1947. P.F. Asso and G. Raitano, 'Trasformazione e sviluppo del credito mobiliare negli anni del governatorato Menichella', in F. Cotula (ed.), *Stabilità e sviluppo negli anni cinquanta*, vol.3: *Politica bancaria e struttura del sistema finanziario* (Rome-Bari, 1999), pp.309–589.
- 13 See G. Scimone, 'The Italian Miracle', in J. Hennessy, V. Lutz and G. Scimone, *Economic Miracles* (Leavensden, 1964), pp.179–82. The author considers the proliferation of small firms as one of the bases of the Italian 'economic miracle'.
 - 14 D. Menichella, 'Memoria sottoposta dall'IRI all'esame della Corporazione dell previdenza e del credito' (Rome, 1937), published in F. Cotula, C.O. Gelsomino and A. Gigliobianco (eds), *Donato Menichella. Stabilità e sviluppo dell'economia italiana 1946–1960*, vol.1: *Documenti e discorsi* (Rome-Bari, 1997), pp.128–52.
 - 15 This article does not investigate the evolution of the economic and political reasons behind the support to SMEs in the framework of the national industrial policy or the regional policy. For a discussion of the economic reasons see A. Spadavecchia, 'State Subsidies and the Sources of Company Finance in Italian Industrial Districts, 1951–1991' (unpublished Ph.D. thesis, University of London, 2003), pp.94–163 and bibliography therein. For a critical discussion of the political reasons see L. Weiss, *Creating Capitalism. The State and Small Business since 1945* (Oxford, 1988), pp.104–58.
 - 16 Weiss, *Creating Capitalism*.
 - 17 Ibid.
 - 18 M.J. Piore and C.F. Sabel, *The Second Industrial Divide: Possibilities for Prosperities* (New York, 1984), pp.29–30 and 228–9; C. Sabel and J. Zeitlin, 'Historical Alternatives to Mass Production: Politics, Markets and Technology in the Nineteenth Century Industrialization', *Past and Present*, Vol.108 (1985), pp.133–76.
 - 19 G. Lizzeri, *Mezzogiorno possibile. Dati per un altro sviluppo* (Milan, 1983); G. Federico and R. Giannetti, 'Italy: Stalling and Surpassing', in J. Foreman-Peck and G. Federico, *European Industrial Policy: The Twentieth-Century Experience* (Oxford, 1999), pp.124–51 and bibliography therein.
 - 20 A. Del Monte, 'The Effects of Regional Policy on the Industrial Development of the South of Italy', *Mezzogiorno d' Europa*, Vol.4 (1984), pp.563–83; R. Garavini, F. Calistri and O. Ciloni, *La quarta Italia* (Rome, 1988).
 - 21 The sources of finance of British IDs have received more attention than those of their Italian counterparts. See for instance P. Hudson, *The Genesis of Industrial Capital* (Cambridge, 1986). Several works have provided evidence of the existence of inter-firm circuits of credit within the cluster in addition to bank–industry relations. Recent works include A. Popp, *Business Structure, Business Culture and the Industrial District* (Aldershot, 2001), *passim* and p.226; J. Smail, 'The Culture of Credit in Eighteenth-Century Commerce: The English Textile Industry', *Enterprise and Society*, Vol.4 (2003), pp.299–325; L. Newton, 'Regional Bank–Industry Relations during the Mid-Nineteenth Century: Links between Banks and Manufacturing in Sheffield, c.1850 to c.1885', in A. Godley and D.M. Ross (eds), *Banks, Networks and Small Firm Finance* (London, 1996), pp.65–83. However, this work has limited implications for Italian IDs in the second half of the twentieth century, due to the all too evident historical contrasts and the different importance of commercial credit and bank capital in the two countries since their industrialisation. Commercial credit played a key role in the industrialisation of Britain. In Italy and other continental European countries, bank capital was of fundamental importance in promoting industrialisation, see A. Gerschenkron, *Economic Backwardness in Historical Perspective* (Cambridge, MA, 1966), pp.11–16; M. Collins, *Banks and Industrial Finance in Britain, 1800–1939* (Houndmills, 1991), pp.22–32; J.S. Cohen, 'Financing Industrialization in Italy, 1894–1914: The Partial Transformation of a Late-Comer', *Journal of Economic History*, Vol.27 (1967), pp.363–82.
 - 22 J.E. Stiglitz and A. Weiss, 'Banks as Social Accounts and Screening Devices for the Allocation of Credit', *Greek Economic Review*, Vol.12 Supplement (1990), pp.85–118. J.E. Stiglitz and A. Weiss, 'Credit Rationing in Markets with Imperfect Information', *American Economic Review*, Vol.71 (1981), pp.393–410; D.J. Storey, *Understanding the Small Business Sector* (London, 2000); D.M. Ross, 'Information, Collateral and British Bank Lending in the 1930s', in Y. Cassis, G.D. Feldman and U. Olsson (eds), *The Evolution of Financial Institutions and Markets in Twentieth-century Europe* (Aldershot, 1995), pp.273–94, and bibliography therein; F. Carnevali, 'Between Markets and Networks: Regional Banks in Italy', in Godley and Ross, *Banks, Networks*, pp.84–100.
 - 23 Saba, *Il modello*, p.132.
 - 24 G. Dei Ottati, 'Trust, Interlinking Transactions and Credit in Industrial Districts', *Cambridge Journal of Economics*, Vol.18 (1994), pp.529–46.
 - 25 Saba, *Il modello*, pp.136–7.
 - 26 See Gerschenkron, *Economic Backwardness*, pp.11–16; Cohen, 'Financing Industrialization in Italy'.
 - 27 Conti and Ferri, 'Banche locali', pp.429–65; G. Ferri and M. Messori, 'Bank–Firm Relationships and Allocative Efficiency in Northeastern and Central Italy and in the South', *Journal of Banking and Finance*, Vol.24 (2000), pp.1067–95. A similar line of research has been undertaken to investigate the role of bank finance in the production of woollen goods, J. Cuevas, 'Banking Growth and Industrial Financing in Spain during the Nineteenth Century', *Business History*, Vol.44 (2002), pp.61–94.

- 28 F. Carnevali, 'Finance in the Regions: The Case of England after 1945', in Y. Cassis, G.D. Feldman and U. Olsson (eds), *The Evolution of Financial Institutions and Markets in Twentieth Century Europe* (Aldershot, 1995); Conti and Ferri, 'Banche locali'.
- 29 From the Bank Reform Law of 1936 until the wave of privatisation started in 1992–93, the Italian banking system was fragmented geographically, meaning that banks could operate on a smaller or wider territory according to the size of their deposits. It was also fragmented in market terms as banks could collect and lend money on the short-term market only (less than one year), and Medium Term Credit Institutions could collect and lend money on the medium-/long-term market only (more than five years). The two markets are closely connected, as banks are among the establishing partners of the Medium Term Credit Institutions and finance them by purchasing their bonds.
- 30 Mediocredito Centrale, *Bilancio 1955* (Rome, 1956), p.13; Banca d'Italia, *Bollettino 1964* (Rome, 1965).
- 31 ABI, *Credito speciale all'industria* (Rome 1963), pp.193–4.
- 32 Banca d'Italia, *Bollettino 1964* (Rome, 1965).
- 33 K. Allen and M.C. MacLennan, *Regional Problems and Policies in Italy and France* (London, 1970), pp.55–7.
- 34 For the implication of the abandonment of size limits for eligible firms in Southern Italy see S. Conti, 'Industrialization in a Backward Region: The Italian Mezzogiorno' (unpublished Ph.D. thesis, University of London, 1979), p.126; M.F. Dunford, *Capital, the State and Regional Development* (London, 1988), p.149; Federico and Giannetti, 'Italy'.
- 35 C.W. Calomiris and C.P. Himmelberg, 'Government Credit Policy and Industrial Performance (Japanese Machine Tool Producers, 1963–91)', The World Bank, *Policy Research Working Paper* no.1434 (Washington, 1995).
- 36 Garavini *et al.*, *La quarta*; for an updated account of the evolution of the Barletta ID see M. D'Ercole, 'Il distretto barlettano della calzatura', in G. Viesti (ed.), *Mezzogiorno dei distretti* (Rome, 2000).
- 37 Istat, *Rapporto Annuale. La situazione economica del Paese nel 1995* (Rome, 1996). Using the Sforzi methodology, the Istat report identified 199 IDs. About the Sforzi methodology see also S. Brusco and S. Paba, 'Per una storia dei distretti industriali italiani dal secondo dopoguerra agli anni novanta', in Barca (ed.), *Storia del capitalismo italiano*, pp.265–333.
- 38 As mentioned in note 4 there are various definitions of IDs. The methodology referred to in the text captures the Marshallian concept of concentration of similar industries in the same locality, source of external economies of scale, and division of labour, source of economies of specialisation. For the discussion and implementation of the Sforzi methodology on the Barletta and San Mauro IDs see Spadavecchia, 'State Subsidies', pp.223–33.
- 39 P. Crestanello, 'La trasformazione in 10 distretti industriali durante gli anni '80', in R. Varaldo and L. Ferrucci (eds), *Il distretto industriale tra logiche di impresa e logiche di sistema* (Milan, 1977), p.253.
- 40 L. Segreto, 'La storia, le storie. Imprese e imprenditori a Reggio Emilia dal 1945 agli anni Settanta', in G.L. Basini and G. Lugli (eds), *L'affermazione dell'industria. Reggio Emilia 1940–1973* (Rome-Bari, 1999), pp.293–482.
- 41 Crestanello, 'La trasformazione', p.246.
- 42 M. Fratianni and F. Spinelli, *A Monetary History of Italy* (Cambridge, 1997), pp.235–9 and 250–51; Rinaldi, *Distretti*, p.176.
- 43 R. Garavini, F. Calistri and O. Cilona, *La Quarta Italia* (Rome, 1988), pp.240–42.
- 44 S. Brusco, G. Cainelli, F. Forni, M. Franchi, A. Malusardi and R. Righetti, 'The Evolution of Industrial Districts in Emilia-Romagna', in F. Cossentino, F. Pyke and W. Sengenberger (eds), *Local and Regional Response to Global Pressure: The Case of Italy and its Industrial Districts* (Geneva, 1996), pp.17–36. Concerning the changes in the industrial structure of IDs in Emilia Romagna see A. Rinaldi, 'The Emilian Model Revisited After Twenty Years Later', *Business History*, Vol 47 (2005), pp.244–66.
- 45 S. Brusco and S. Paba, 'Per una storia dei distretti industriali italiani dal secondo dopoguerra agli anni novanta', in Barca (ed.), *Storia del capitalismo italiano*, pp.265–333; Crestanello, 'La trasformazione', pp.247–50.
- 46 Brusco *et al.*, 'The Evolution of Industrial Districts', p.30.
- 47 Crestanello, 'La trasformazione', pp.247–50.
- 48 Brusco and Paba, 'Per una storia', p.290.
- 49 Garavini *et al.*, *La quarta*, p.356.
- 50 Unioncamere, *Imprese ed istituzioni nei distretti industriali che cambiano* (Milan, 1995), pp.288–90.
- 51 G. Viesti, *Come nascono i distretti industriali* (Rome-Bari, 2000).
- 52 *Ibid.*, pp.49–55.
- 53 F. Siracusano and C. Tresoldi, 'Le piccole imprese manifatturiere nel Mezzogiorno: diseconomie esterne, incentivi, equilibri gestionali e finanziari', in Banca d'Italia, *Il sistema finanziario nel Mezzogiorno*, Numero Speciale dei *Contributi all'analisi economica* (Rome, 1990), pp.103–43; M. Bagella and A. Caggese, 'Struttura del capitale, finanziamenti agevolati e redditività delle imprese manifatturiere italiane', *Rassegna*

- Economica*, Vol.59 (1995), pp.813–37; M. Bagella, L. Becchetti and A. Caggese, 'Financial Constraints on Investments: Evidence from the Direct Revelation of Italian Firms', *Rivista di Politica Economica*, Vol.86 Nos.11–12 (1996), pp.35–62; R. Faini, G. Galli and C. Giannini, 'Finance and Development: The Case of Southern Italy', in A. Giovannini (ed.), *Finance and Development: Issues and Experience* (Cambridge, 1992), pp.158–214.
- 54 Including food processing, wood, furniture, paper, publishing, photography and rubber. Sectors such as metal and mineral processing, oil refining and construction have not been included.
- 55 The different closing dates for the collection of data are due to the availability of records. Having collected records of 32 companies in the Barletta ID, it seemed unnecessary to collect records starting after 1984, as these would offer only seven years of analysis. The smaller number of records available for the San Mauro Pascoli ID suggested the extension of the closing date to 1988.
- 56 G. Foster, *Financial Statement Analysis* (Englewood Cliffs, 2nd edn. 1986), pp.2, 24.
- 57 R. Faini, 'Incentivi e piccole e medie imprese nel Mezzogiorno', *Ricerche Economiche*, Vol.39 (1985), pp.318–36.
- 58 Siracusano and Tresoldi, 'Le piccole', p.133.
- 59 Ibid., pp.127, 159.
- 60 J. Edwards and K. Fisher, *Banks, Finance and Investment in Germany* (Cambridge, 1994), p.60.
- 61 Siracusano and Tresoldi, 'Le piccole', p.136.
- 62 A. Fazio, 'Credito ed attività produttiva nel Mezzogiorno', Banca d'Italia, *Bollettino Economico*, No.5 (1985), pp.27–42.
- 63 F. Marzano and A. Murolo, 'The Role of the Credit System in the Development of Southern Italy: A Few Critical Observations', *Journal of Regional Policy*, Vol.5 (1985), pp.52–3.
- 64 N. D'Amico, G. Parigi and M. Trifilidis, 'I tassi d'interesse e la rischiosità degli impieghi bancari nel Mezzogiorno', in Banca d'Italia, *Il sistema finanziario*, pp.305–43.
- 65 Faini *et al.*, 'Finance', pp.199–200.
- 66 Siracusano and Tresoldi, 'Le piccole', pp.113–19 and 125–7.
- 67 N. Rossi and G. Toniolo, 'Italy', in N.F.R. Crafts and G. Toniolo (eds), *Economic Growth in Europe since 1945* (Cambridge, 1995), p.430.
- 68 A. Giannola, 'Mezzogiorno, Industrializzazione e Imprese', in Banca d'Italia, *Il Sistema Finanziario nel Mezzogiorno*, p.181. The theoretical foundations of this argument are in G.J. Stigler, 'The Division of Labour is Limited by the Extent of the Market', *Journal of Political Economy*, Vol.59 No.3 (1951), pp.185–93; and A. Leijonhufvud, 'Capitalism and the Factory System', in R.N. Langlois (ed.), *Economics as a Process: Essays in the New Institutional Economics* (Cambridge, 1986), pp.203–23.
- 69 Spadavecchia, 'State Subsidies'.
- 70 Siracusano and Tresoldi, 'Le piccole', pp.103–67.
- 71 The Bank of Italy sample allows the verification of this point also on the basis of the appropriate indicator. Siracusano and Tresoldi, 'Le piccole', pp.127, 159.
- 72 Siracusano and Tresoldi, 'Le piccole', p.112; a different interpretation is provided in A. Del Monte and A. Giannola, *Istituzioni Economiche e Mezzogiorno* (Rome, 1997), p.288.
- 73 Ibid., pp.122–3.
- 74 CCF, 4351, Company Nvi, Sentenza di Fallimento del Tribunale di Forlì, 28 May 1987; the company became public in 1983 and went bankrupt in 1987.
- 75 W.H. Beaver, 'Financial Ratios as Predictors of Failure', *Journal of Accounting Research*, Supplement, *Empirical Research in Accounting: Selected Studies in 1966* (1966), pp.71–127.
- 76 D'Amico *et al.*, 'I tassi', p.331.
- 77 CCB, 2169, Company Ser, Report to the balance sheet 1984 and 1985.
- 78 CCB, 3094, Company Smo, Report to the balance sheet 1979 and 1980.
- 79 CCF, 6934, Company Nrm, Report to the balance sheet 1986; CCF, 8146, Company Nal, Report to the balance sheet 1992.
- 80 The company was declared bankrupt in 1981. CCF, 5581, Company Nwi, Sentenza di Fallimento del Tribunale di Forlì, 9 April 1981.
- 81 The 'apparent' exception of the 1971–75 sub-period is due to one company. This started the liquidation procedure in 1977 and as late as 1976 partners had financed the company (the contribution by directors was 95 million current lire, representing 20 per cent of the total liabilities of the company and equal to 70 per cent of the company's equities); CCB, 1786, Company Sma.
- 82 These issues are further discussed in A. Spadavecchia, 'State Subsidies, Investment Behaviour and Risk in Italian Industrial Districts, 1971–1991' (paper presented at the Economics and Business Historical Society Conference, Anaheim, 2004).
- 83 C. Sabel and J. Zeitlin, 'Historical Alternatives to Mass Production: Politics, Markets and Technology in Nineteenth-Century Industrialization', *Past and Present*, No.108, pp.133–76; M.J. Piore and C.F. Sabel, *The Second Industrial Divide. Possibilities for Prosperity* (New York, 1984).

- 84 For an overview of the variety of pattern of development of IDs in the South see Viesti, *Come nascono*; G. Viesti (ed.), *Mezzogiorno dei distretti* (Rome, 2000).
- 85 S. Brusco and D. Bigarelli, 'Regional Productive Systems in the Knitwear and Clothing Sectors in Italy: Industrial Structure and Training Needs', Centre for Business Research, University of Cambridge, Working Paper No. 51 (March 1997).
- 86 Crestanello, 'La trasformazione', pp.250–58.

APPENDIX

List of companies and records available

Companies are designated with three letters, of which the first refers to the area (North or South), while the following two are the initials of the company's name. The first date corresponds to the year of establishment, the following dates to the period for which records are available. When dates of establishment or change of public status specify the month, it means that the relevant record (i.e. deed of incorporation or the official document recording the change in the company's legal status) was available in the company's folder. When the month it is not specified it means that the relevant record was not available, but the year was mentioned in one of the reports available.

RECORDS AT THE CHAMBER OF COMMERCE IN BARI

Folder No.	Company	Legal Status	Established	Records Available		Product
				From	To	
826	San	Pb/Ltd (1988)	1936	1951	1991	Food processing
1,786	Sma	Pb	1959	1959	1976	Clothing
2,140	Svr	Ltd	1967	1967	1991	Food processing
2,191	Sin	Ltd	1967	1968	1989	Food processing
2,169	Ser	Ltd	1/1967	1969	1985	Wood processing
2,442	Sfi	Ltd	1/1971	1971	1991	Textiles
2,564	Sbc	Ltd	1/1972	1972	1991	Textiles
3,603	Stu	Pv/Ltd (12/1977)	3/1972	1978	1991	Wood processing
2,635	Svc	Ltd	11/1972	1973	1991	Food processing
2,614	Sfs	Ltd	11/1972	1973	1985	Textiles
2,674	Sab	Ltd/Pv (1986)	2/1973	1973	1986	Footwear
2,690	San	Ltd	3/1973	1973	1983	Clothing
2,645	Sbia	Pb	1973	1973	1991	Clothing
2,632	Sal	Ltd	1973	1973	1979	Clothing
2,586	Sar	Ltd	1973	1973	1988	Footwear
2,749	Sri	Pb	10/1973	1974	1991	Footwear
2,769	Sst	Pb	11/1973	1974	1990	Plastic
2,788	Spl	Pv/Ltd (4/1984)	12/1973	1984	1991	Footwear
2,840	Sca	Ltd	3/1974	1974	1987	Footwear
2,888	Sil	Ltd	6/1974	1975	1989	Wood processing
3,094	Smo	Ltd	11/1975	1976	1981	Clothing
3,400	Sga	Ltd	3/1977	1979	1991	Footwear
3,479	Sto	Ltd	10/1977	1978	1991	Footwear
3,546	Sbim	Ltd	11/1977	1978	1991	Clothing
3,593	Ste	Ltd	12/1977	1978	1991	Footwear
4,165	Sec	Ltd	1/1980	1980	1991	Footwear
4,427	Sja	Ltd	9/1980	1980	1991	Clothing
4,790	Sli	Ltd	6/1981	1981	1991	Footwear
4,110	Spo	Pv/Ltd (1983)	1979	1983	1988	Footwear
5,491	Sro	Ltd	1983	1983	1991	Footwear
5,475	Ssa	Ltd	2/1983	1983	1991	Footwear
4,600	Sco	Pv/Ltd (6/1984)	3/1981	1984	1991	Footwear

Notes: Pv = Private partnership; Ltd = Limited liabilities; Pb = Public share.

RECORDS AT THE CHAMBER OF COMMERCE IN FORLÌ

Folder No.	Company	Legal Status	Established	Records Available		Product
				From	To	
2,996	Nla	Ltd/Pv (1966–71)	1955	1956	1991*	Footwear
3,751	Nde	Pb	1962	1963	1967	Footwear
4,442	Nci	Pv/Ltd (10/1974)	7/1968	1974	1991	Metal chairs
5,676	Neu	Ltd	3/1974	1974	1991	Footwear equipment
5,212	Nrs	Pv/Pb (12/1975)	4/1967	1976	1991	Footwear
5,581	Nwi	Ltd	12/1973	1974	1979	Footwear
7,280	Nma	Ltd	2/1978	1978	1987	Footwear
8,146	Nal	Pb	9/1979	1979	1991	Clothing
8,367	Nca	Pv/Pb (2/1980)	9/1966	1981	1991	Footwear
4,935	Npo	Pv/Pb (12/1980)	2/1972	1981	1991	Footwear
3,484	Nfa	Pv/Pb (4/1981)	1/1961	1981	1991	Footwear
4,662	Nfr	Pv/Pb (6/1982)	2/1970	1982	1991	Clothing
10,471	Nri	Ltd	6/1982	1982	1991	Footwear
10,417	Nrf	Ltd	5/1982	1982	1991	Leather items
4,351	Nvi	Pv/Ltd (11/1982)	8/1967	1983	1985	Footwear
6,934	Nrm	Pv/Ltd (2/1983)	6/1969	1983	1987	Clothing
11,850	Npn	Ltd	4/1984	1984	1991	Footwear
5,325	Nrt	Pv/Ltd (9/1985)	4/1973	1985	1991	Paper/card boxes
12,904	Nti	Ltd	4/1985	1985	1991	Footwear
11,263	Nip	Pv/Ltd (5/1989)	9/1983	1989	1991	Packaging
13,580	Npl	Pv/Ltd (7/1989)	12/1985	1989	1991	Leather items

Notes: Keys as above; * excluding 1966–71 and 1973.