

EXIT, VOICE, AND LOYALTY IN THE INDUSTRIAL DISTRICT: THE CASE OF PRATO

ESRC Centre for Business Research, University of Cambridge
Working Paper No. 175

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September 2000

This Working Paper relates to the CBR Research Programme on Small and
Medium-Sized Enterprises

Abstract

In this paper the “exit, voice and loyalty” approach by Albert O. Hirschman is applied to the case of the rise and evolution of the Prato industrial district, from post-war days until now. This is done, not so much to gain a better understanding of the specific events in Prato, but rather to shed light on the recuperation mechanisms that characterise the fundamental economic relations within the industrial district: i.e. labour relations, subcontracting relations, and relations between firms. The analysis shows how the higher competitiveness and adaptability of the district derives from the relative abundance of exit mechanisms, but also from the wealth of forms of voice, both individual and collective. These are continually being renewed within the district, thus bringing about an alternation and recombination of the mix of exit and voice, and also of the interaction models between them. The wealth of expressions of voice is a distinctive element of district relations which is linked to the multiplicity of loyalty relations (team attachment, professional category membership, local community sense of membership...) existing within the district.

JEL Codes: D49, D21, J5, L14

Keywords: exit and voice, industrial district

Acknowledgements

The author wishes to thank Giacomo Becattini, Marco Bellandi, Lorenzo Bianchi, Sebastiano Brusco, Marco Dardi, Pierangelo Mori, Gilberto Seravalli, Paolo Giovannini for their comments and observations on previous drafts of this paper. Special thanks go to Luca Meldolesi for having suggested to think about the industrial district in a Hirschmanian key. Of course, all responsibility for the contents is mine.

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1. Introduction

Thirty years have now passed since Albert O. Hirschman, with acumen and originality, formulated the theory of exit and of voice as ‘responses to decline in firms, organizations and states’ (Hirschman, 1970). This theory has had numerous applications since, in economics as well as in other fields of the social sciences¹, thus contributing to its progressive enrichment. It is not surprising, therefore, that such an approach, proposed by Hirschman to bridge the gap between the economic and socio-political spheres (Hirschman, 1987: 219), turns up to be useful also when accounting for labour and supplier relations, typical of that particular form of socio-economic organization known as the industrial district².

As we know, exit and voice are two different ways of reacting to a state of dissatisfaction, so as to start a recuperation mechanism. We have exit whenever a buyer, supplier, or more generally, one or more members of an organization who are dissatisfied, respectively, with their purchase, sale or relationship, decide to change product, client or organization. Exit is an indirect, usually private and individual, way of signalling that something is wrong. For example, a firm that sees its sales decline, or whose employees resign, will be induced to revise its productive organization to avoid decline (Hirschman, 1970: 21-29). On the other hand, we have voice when one or more dissatisfied buyers, suppliers, or members of an organization complain with their counterpart, or with the management of the organization, in order to achieve changes suitable to eliminate the causes of their dissatisfaction. Voice, contrary to exit, is a direct and informative way of signalling problems (Hirschman, 1970: 30-43). Compared with exit, which is the typical reaction in a competition-based market, voice is usually more costly, therefore it is generally used when exit is not feasible, or expensive in economic terms (e.g. when specific

investments have been made in a certain relationship, Hirschman, 1981: 222), or in emotional and social terms (e.g. leaving one's family or country). Furthermore, voice can be individual (a client protesting for delays in supplies), but often it requires collective action, as in the case of salary claims by workers belonging to unions (Freeman and Medhoff, 1984), and it needs some form of private or public institution in order to be expressed (Hirschman, 1987: 219; 1995: 12).

Often the comparative ease of exiting reduces the possibilities of practising forms of voice which would be more effective, as in the well known example of the Nigerian railways whose recuperation of efficiency was hindered precisely by road transport competition (Hirschman, 1970: 44-45). The interaction between exit and voice follows in this case a see-saw pattern (Hirschman, 1987: 222), the greater the exit, the lesser the voice, with negative consequences for the relationship or for the organization in crisis. In these cases Hirschman underlines the importance of loyalty as an element favouring voice on the side of the habitual clients, or members of an organization who feel bound by a sense of belonging. At other times we have situations in which exit and voice interact reinforcing each other with very favourable, or unfavourable, cumulative effects, as occurred with the fall of the German Democratic Republic in 1989 (Hirschman, 1995: 13-14). At any rate, even when an exit-voice combination comes into being which is favourable to the restoration of a satisfactory state of affairs, it will, by its very nature, tend to deteriorate. This because every recuperation mechanism, and in particular the institutions that are necessary to activate collective forms of voice, are subject to the forces of decay (Hirschman, 1970: 124).

In this paper, the model of 'exit, voice and loyalty' is applied to the case of the rise and successive evolution of the Prato industrial district, from post-war days until now. This is done, not so much to gain a better understanding of the specific events in Prato, already

studied elsewhere (Absalom *et al.*, 1997 and Becattini, 1997), but rather to shed light on the combinations of recuperation mechanisms that characterise the fundamental economic relations within the industrial district: labour relations, supplier and (sub)contracting relations in the local production-phase markets, the relations between firms within industrial district teams (of firms).

In this perspective it appears appropriate to refer to the applications, and in some respect also to the extensions, of the original exit-voice-loyalty model that have been introduced in the course of the years to analyse both labour relations (Freeman, 1976 and 1996; Freeman and Medoff, 1984; Meldolesi, Arbitrio and Del Monaco, 1996), and supplier relations (Helper, 1990; 1991; 1993; 1996). In particular, in this paper we apply the extended model proposed by Freeman with reference to the problems of labour (Freeman, 1996). According to this model, both parties in the labour relationship can choose from a whole spectrum of exit and voice actions. For example, the cessation of a work relation can be due either to the worker resigning or to his dismissal by the firm. Furthermore, the act of resigning by the worker has differing meanings and effects according to whether he then offers his services to other firms or starts his own business. Freeman maintains that a distinction must be made between these two cases. Obviously, the spectrum of forms that voice can take is wider than that of exit. Indeed the former can not only be individual or collective, but in either case, whether of the workers or the management of the firm, voice can take a whole variety of forms, of which individual protest and collective bargaining are only the two most common cases (Freeman, 1996: 30). In the extended Freeman model (1996), moreover, either part can, if dissatisfied with the results obtained by the action undertaken, resort to political mediation, applying to government authorities (Freeman, 1996: 6-7) in the hope of having their claims satisfied through legislation or through institutional changes.

Prato's main activities have historically been associated with the manufacture of woollen products. Roughly speaking, before the onset of industrialisation, these were organised in small artisans' workshops (the forebears of today's production-phase firms) that carried out the single phases of production (e.g. carding, spinning, weaving etc.). The work they did was usually commissioned by an 'impannatore' (the forebear of today's final firm) whose job was to plan, finance, and then market the finished goods. He did this by 'purchasing' the various phases of processing that were necessary, from the raw material onwards, before passing the partially processed good on for the next phase of production. Besides the small artisans' workshops, the turn of the century saw the introduction of vertically integrated wool-mills, in which all the various phases of manufacture were present, from the raw material to the finished goods. When this mode of production started to become inefficient, the wool-mills began to contract-out to the artisans, who by now had become industrial artisans, that is, proper phase firms, some of the phases and to close down the corresponding departments, thereby reducing their workforce and causing a phase firm population explosion. Once triggered, this process gathered momentum, the former vertically integrated wool-mills specialised increasingly in planning, design and marketing, delegating manufacture to the more efficient phase firms, while they themselves took on the job of the 'impannatori' of old, thus becoming final firms.

In this paper, therefore, we consider the mechanisms of exit and voice, as well as the role of loyalty during the formation of the district (section 2). We then go on to analyse the combinations of exit and voice which prevailed in the protracted period of development (section 3). Lastly we shall consider the loss of efficacy of some of the previously adopted combination, and the reactions to such loss during the crisis-restructuring of the past ten-fifteen years (section 4). A brief conclusion follows.

2. Exit and Voice as antagonists in the formation of the industrial district

2.1. In labour relations

The industrial district may be thought of as a microcosm in which economic and social relations are so tightly bound together that its study requires the systematic exploration of the many existing links between the productive apparatus and the local community in which it is embedded. Consequently, among the processes which characterise the industrial district, there are at least three that are so important that their concomitant activation may be considered to coincide with turning a given locality into an industrial district³.

These processes are:

- i. a progressive subdivision of the productive cycle of an industry (and of its correlated activities) among distinct but territorially neighbouring firms, giving rise to the forming of local production-phase markets;
- ii. the formation of institutions (both formal and informal) governing the relations that arise in the local employed and self-employed labour markets, as well as the reproduction and regeneration of the knowledge and of values that are congruous to the development of the district;
- iii. the spreading of local identity and loyalty, fundamental factors in maintaining the relative self-containment of division of labour among local firms, which is characteristic of the industrial district, and to facilitate the activation of voice within it.

Let us consider labour relations in the first decade following the war, the period in which Prato emerges as an industrial district. Thanks mainly to the high domestic and international demand for textile products, from 1944-1948 the industrial activities of Prato expanded greatly. Following rapid reconstruction, in a climate of full co-operation among the various economic and social forces of Prato,

both components of the local productive apparatus (vertically integrated wool-mills, together with small phase and marketing firms) experienced growth. Not only did the number of employees of the vertically integrated wool-mills rise from 7,000 to over 12,000 workers (out of a population of 78,000 inhabitants), but also the number of small and very small firms specialised in a single production phase or in the marketing of fabrics (*impannatori*) rose out of all proportion⁴.

In such a situation it is clear that if an employee were dissatisfied he could either offer his services to another local firm, or set up his own business. The latter choice was preferred by the best qualified and most ambitious workers, because of the income and status differential which, in the Prato environment, characterised the self-employed compared to the employed worker. The available data, though insufficient to account for the extent of the phenomenon, in part because some of the small enterprises were not registered, show the relative ease, in the immediate post-war years, of exit by labourers, in particular towards self-employment⁵.

After 1948, however, the labour market situation in Prato suddenly changed. Firstly, partially as an effect of the changed national political climate after the exclusion of the Left from the DeGasperi government, collaboration between workers and entrepreneurs which had characterised the previous period took a turn for the worse, especially in the larger factories, which also witnessed a change in demand conditions because of the closure of traditional export markets, and also because of the end of Government orders. Thus the profitability of the large Prato firms decreased drastically, reaching levels lower than those of the small specialised enterprises, whose number and diversity had increased considerably during the previous years.

It is therefore logical that the management of such firms, by now dissatisfied with labour relations and profits, chose to close down

entire departments, persuading many of their workers to leave their workplace in the factory and start their own business, with the offer of machinery for hire or discounted from work to be ordered, and the promise of orders. It is more difficult to explain the acceptance of this form of exit by thousands of workers dismissed by the large wool-mills, given the high degree of unionisation of these workers. A decisive role was played by the concrete experience of many who, ever since the immediate post-war period, had taken this road toward economic and social emancipation, achieving good and sometimes excellent results. This happened because such experiences contributed to the spread of the conviction that ‘those who are able, make their way and create their own future’ (PCI, 1954: 8)⁶. If to this one adds the fact that management encouraged this form of exit with the hiring out of machinery or by offering it against work to be ordered (sometimes with the possibility of these being used in the same wool-mill premises) and thus de facto advancing the capital to start the new business, one understands the essential failure of the attempts at voice advocated by the unions that called for strikes against dismissals. This failure served to accelerate, rather than stem, the exit from labour towards self-employment. Compared with 6,000 dismissals (Consiglio Provinciale di Firenze, 1953: 50), the admittedly partial statistics regarding self-employment register around 2,000 new license applications to operate textile machinery from 1949 to 1952 (Cioni, 1997: 242), while during the same period the registrations of new textile firms exceeded 1,300 (CCIA, 1949-1952).

Analysis of employed labour in Prato in the first post-war decade therefore allows one to state that, during this entire period the interaction between exit and voice followed a see-saw model. Indeed, finding a route towards economic and social mobility through exit towards self-employment on the one hand (even though more realistic during the immediate post-war boom than later), and, the decision to lay off taken by the management of major factories on the other, prevented the collective workers’ voice from being effective. All this however, accelerated the restructuring of the large factories and the

productive reorganisation in local industry, so as to regain, from the Fifties, competitiveness in the changed context of the national and international textile markets.

2.2. In the local production-phase markets

To analyse contracting-out and supply relations one needs to distinguish between the period of intense development immediately following the war, and the later years of economic crisis and restructuring, just as was done with labour relations. Initially, owing to a high demand for textiles and the concomitant proliferation of small textile phase and marketing firms, supplier relations did not present particular problems in Prato. In the isolated cases in which problems arose it was relatively easy for both parties to resort to exit, that is to change supplier or client. The big problems arose with the dismissals in the vertically integrated wool-mills. It is symptomatic that right at the beginning of 1950 a 'Tessitori per Terzi' (free-lance weavers) union was formed. Its aim was to organise all those weavers who either hired, held against work to be ordered, or owned their loom, so as to be able to react to the generalised lowering of rates for weaving (*Il Nuovo Corriere*, 5.1.1950). In fact, the first massive exit of workers from major firms, which took place towards the end of 1949 after the devaluation of the Pound Sterling, had greatly reduced the contractual power of the phase firms, rendering the recourse to exit practically impossible, that is, the substitution of clients who paid non remunerative prices, since these could easily find another phase firm willing to work for a very low price. Despite the timely formation of this particular trade union, a couple of years passed before the self-employed workers of Prato were in a position to activate their voice in order to restore satisfactory supplier relations.

Indeed, at the beginning of 1950, the industrial artisans who started their own business during the 'frenzy of the millions' years (*L'Impannatore*, 11.5.1947) and the new self-employed workers who had accepted forced exit from the wool-mills, still constituted two

distinct groups. The former had chosen self-employment to try their luck, and on the whole were therefore individualists, inclined to rely on themselves to solve problems, while the latter were unionised former workers from the major factories who had become self-employed more out of necessity than choice, and were therefore more accustomed to resorting to collective action. The bridging of ideological gaps among the different sections of the small phase firms, and particularly among the free-lance weavers, came about only in 1952 when, with the worsening of the crisis in the local industry at the end of the Korean war, a second major exit of workers and machinery from the Prato wool-mills took place (Consiglio Provinciale di Firenze, 1953: 51-52). The influx of new free-lance weavers in the local market during a period of stagnant demand created such intense competition among these weavers as to reduce their rates to less than half⁷. By this point, the dissatisfaction of the industrial artisans became so acute and generalised to induce the various components of this, by now vast, category to close ranks and organise a common protest which ended with a lock-out of thousands of small artisan workshops in and around Prato (*Il Nuovo Corriere*, 19 and 25 July 1952; *Toscana Nuova*, 7.9.1952)⁸.

After this brief chronicle of the emergence of the collective voice of the phase firm independent workers in the Prato industrial district, we shall now focus more precisely on how it was possible to pass from the prevalence of exit to the activation of voice. As we have seen, dismissals triggered wild competition among the phase firm independent workers, many of whom were also burdened by payments for machinery they hired or held in payment for work to be ordered. Besides making it impossible for them to resort to exit, in practice this also prevented individual voice from being effective. Therefore, the only thing left to stem the downward spiralling of rates, was to organise a collective protest in order to influence the behaviour of the purchasers. At the beginning of 1950, this was tried by the newly-formed Free-lance Weavers' Union, but it failed because of the ideological and organisational divisions existing

among the small phase firms in Prato⁹. Only after the further worsening of supplier conditions following the second wave of worker (and machinery) dismissals were the obstacles that had previously prevented the voice of the whole category from expressing itself overcome.

As highlighted by O'Donnel (1986), it was the horizontal voice that preceded the vertical one in Prato, i.e. the organization of a collective protest to obtain the desired changes. The public letter denouncing the conditions of serious hardship of the phase firms' independent workers that a group of free-lance weavers (some of whom were not affiliated with any artisans' association) sent to the Prato press in the summer of 1952 (*Il Nuovo Corriere*, 17.7.1952) indeed proves that the horizontal voice, that is the expression of unease of the category, was spreading¹⁰. This created an awareness of common identity, besides a common interest, which is a necessary condition for the exercise of vertical voice. Furthermore, in this case the passage from horizontal to vertical voice was facilitated by the local political context, pervaded as it was by a 'red subculture' (Trigilia, 1986). It was not by chance that the exhortation by the signatories to organise a unitary protest, was taken up by the artisans' association close to the Communist Party, which immediately called for a four hour lock-out of all phase firms (*Il Nuovo Corriere*, 19.7.1952)¹¹. Only after the success of this first protest did others follow, unifying the two artisans' associations, one of Communist inspiration and the other Catholic (*Toscana Nuova*, 7.9.1952), so that the Prato phase firms finally succeeded in obtaining acceptable rates (*Il Nuovo Corriere*, 18.1.1953).

Analysis of contracting-out relations in Prato during the period of the rise of the industrial district shows that, in the presence of a large number of dismissals, exit is no longer an effective mechanism for the budding local production-phase markets. Only with the organization of phase firms' collective voice is it possible to re-establish satisfactory supplier conditions. In this case too, the interaction

between exit and voice followed the see-saw model, but this time, contrary to what happened in labour relations, voice prevailed over exit.

2.3. Political action, local identity and loyalty

In the preceding sections we saw how in Prato during the first post-war decade exit and voice, contributed, on the one hand to the strong acceleration of the social division of labour, and on the other to the birth of institutions capable of sustaining the correct functioning of the local phase markets. These processes, however, would not have been sufficient to trigger a true district formation in Prato had they not been coupled with the concomitant spread and strengthening of a particular individual and collective identity. In this regard, it is opportune to consider again the events of Prato during the period of the dismissals, concentrating on the behaviour of the City Administration and the local political forces.

The failure of the Union to organise the voice of the workers was apparent from December 1949. At that time a trade-unionist who was also a Councillor of the Borough of Prato took the problem of the wool-mill crisis directly to the attention of the Borough Council (*Atti del Consiglio Comunale di Prato*, 30.12.1949). Not even resorting to political action (Freeman, 1996: 6-7) succeeded in stopping dismissals. On the contrary, this move seemed to produce the opposite effect, since it caused a break in the talks between the industrialists and the Trade Union¹². Despite this, resort to political mediation had important consequences for the emergence of the industrial district. Following the trade-unionist's intervention, the socialist-communist majority Borough Council passed a mandate to the Mayor to convoke the representatives of all the economic categories of the City and the parliamentarians of the Prato area to discuss the problem. The Mayor then appointed a Commission charged with studying the local economic situation and of working out a programme containing proposals for the recovery of local industry (*Atti del Consiglio*

Comunale di Prato, 30.12.1949 and 15.4.1950). Within a few months the Commission had completed its task, and the proposed programme obtained the assent of the economic parties which unanimously approved it before taking it to the Government in Rome (*Atti del Consiglio Comunale di Prato*, 15.4.1950; *Il Nuovo Corriere*, 4.4.1950). Despite the fact that the Central Government reaction proved disappointing, the experience of the Commission contributed toward solving the industry's problems and to the birth of the Prato district. This was not so much due to the economic interventions proposed and carried out (for example, a programme of public expenditure for the construction of roads, sewers, schools etc.), but mainly because the experience of the Commission promoted and spread cohesion among the various parties, through the common objective of the defence of 'our industry' (PCI, 1954: 44).

During the months in which the Commission worked out its proposals for overcoming the textile crisis, the main local institutions, and particularly the Communist Party which had the responsibility of the City Government, repeatedly and publicly invited all the parties to commit themselves as individuals and as groups to co-operate for the recovery of local industry. And this was of double help to the process of Prato's district formation. First, the climate of collaboration which now prevailed after the Borough Administration had taken on the burdens of the problems of the local industry, favoured the acceptance of self-employed work by laid off workers and therefore accelerated the economic and social transformation of the district.

The second contribution was of a cultural type, consisting in the reinforcement of local identity, stimulated by political action in defence of 'our industry'¹³. In conclusion, during this period a sense of local membership spread, which became prominent compared to others identities, for example that of class belonging. In this sense, the politicising of the wool-mills crisis contributed to the formation of a district consciousness in the main categories of Prato, inducing a sort of loyalty towards local industry. Besides being a fundamental

element of the industrial district, since it defines and maintains the relative territorial self-containment of the social division of labour, loyalty also plays an important role in the activation of the various forms of voice (Hirschman, 1970: 77-81) within the district itself.

3. Exit and Voice as allies in the protracted development of the district

3.1. In labour relations

With the social and cultural metamorphosis we referred to above and which marks the birth of the Prato district, local industry recovered competitiveness. It was then able to take advantage both of textile demand growth in industrialised countries during the Fifties and Sixties, and of its gradual fragmentation and variability in the Seventies. All this triggered a process of intense and essentially uninterrupted development that lasted around thirty years. In the context of this paper we shall not dwell on the main quantitative or qualitative aspects of such a development¹⁴. We are more interested in understanding the particular combinations of exit and voice that allowed the Prato district to maintain itself efficiently for so long, despite the tendency for any organization to deteriorate (Hirschman, 1970: 14-15).

A distinctive feature of the labour market within a district is its loose separation from local phase markets. This is because in the district context it is relatively easy to pass from employed to self-employed work¹⁵, once having acquired a certain amount of professional knowledge and of personal relations that are necessary to set up one's own business. As a matter of fact, after the transformations of the early Fifties, an ever growing number of people in Prato started their own business¹⁶. For a long period therefore, individual exit from the labour market constituted a widely practised way to economic and social mobility in the district. This practice fostered (and was fostered by) a sort of American ideology of the self-made man (Hirschman,

1970: 108-109), and also contributed to attracting a substantial and protracted influx of immigrants. Initially these came from the Tuscan countryside, and later, increasingly, from the non-industrialised areas of central, but mainly southern, Italy (see Becattini, 1997). In general, therefore, during the decades of growth of the district, anyone (worker or entrepreneur) dissatisfied with their work relationship, could reasonably easily resort to exit, changing firms or even starting on their own, or in the case of the entrepreneur, substituting workers thanks to the continual flux of immigrants.

Even though exit remained the prevalent reaction mechanism in case of dissatisfaction of either part of the labour relation, it was the very intensity and duration of development that soon caused the district labour market to become tense. The conditions therefore arose for the strengthening of trade-unions and the resurgence of workers' collective voice. Already towards the end of the Fifties, but even more during the Sixties and Seventies, the voice of Prato's unions made itself heard again, through the collective negotiation of labour relations. Thanks to local agreements on top of the national textile workers' contract, Prato's workers did indeed manage to obtain salaries higher than the national wages¹⁷.

At any rate, union voice in the Prato district was distinctive in several regards. The first one concerns the prevalence of the territorial level of bargaining, as opposed to the company level, typical of other industrial contexts. This is easy to account for, by keeping in mind that territory is a fundamental element in the district as a socio-economic organization. A second peculiarity concerns the prevalence, in local negotiation, of the monetary aspect rather than other work conditions (Trigilia, 1989: 309). This is surprising, if one considers that in the Prato district at that time working conditions were very hard: generally long hours, makeshift premises, and machinery often dangerous for the health of workers¹⁸. This can be explained, at least partially, through the social mobility that, within the district context, could be accomplished by exit from employed work. The possibility,

or at least the belief in the possibility, of setting up one's own firm, justifies the relative disinterest on the part of workers in the regulation of quantitative (especially overtime) and qualitative aspects of their services. This is because employed work was often considered a transitory, even if decisive, experience necessary to acquire a) basic professional know-how, b) a good personal reputation and c) a small amount of capital, all of which were indispensable in attempting the change to self-employment. From this perspective, detailed regulation of labour organization was not only disadvantageous to the entrepreneurs, but it was also opposed by many workers. This is because it would have been an obstacle towards the accumulation of monetary capital, but above all, an obstacle towards gaining the know-how and reputation necessary for vertical mobility through self-employment. Conversely, union negotiation which concentrated on salary aspects accelerated such accumulation by allowing the workers to obtain straight away part of the results of the increased productivity resulting from their efforts, thanks to which they could also build a good reputation and increase their professional knowledge more rapidly.

During the thirty years of development then, exit was still the prevalent mode of reaction in employed labour relations. However, in contrast to what happened during the period of district formation, it was no longer an obstacle to, but rather an ally of, voice through the union, so much so that even the issues taken up in collective negotiations facilitated exit as a way to economic and social mobility.

3.2. In the local production-phase markets

During the period of protracted growth of Prato, firms specialising in the various productive phases and those specialising in the marketing of textile products increased considerably, also as an effect of the widening of division of labour (Stigler, 1951). As a consequence, the existing local production-phase markets expanded and others, related to new activities joined them¹⁹. In this situation, anyone who was

unsatisfied with a particular contracting-out relation, could easily remedy this through exit, i.e. by substituting supplier (or purchaser) with another one among those competing in their respective local market.

In a preceding section we saw how, during the formation of the district, Prato's phase firms were able to organise their collective voice to obtain remunerative rates (section 2.2). This experience, together with the strengthening of Artisans' Associations - linked to the expansion of phase markets during the years of growth - caused the collective voice to become institutionalised, in a way similar to that of employed labour. Indeed, at the end of the Fifties, a true collective negotiation of prices and of main conditions of supply relations (terms of payment, higher and lower rates for particular orders, complaint procedures etc.) developed between the Artisans' Associations (representing the small phase firms) and the Industrial Union of Prato (representing the purchasers) with regard to the different weaving operations, the central phase of the productive process of the local industry²⁰.

Now, since in district phase markets exit is usually available, we seek to discover what the advantages of voice are, in the specific form of collective price bargaining. In the first place, collective agreements on rates discourage cut-throat price competition among local firms, competition which would induce a worsening of local products, followed by a reduction of investment, both on the part of phase firms and the commissioning ones²¹. Secondly, collectively negotiated price agreements reduce the uncertainties of the variability of costs and profits, respectively, of the commissioning and phase firms. As a consequence, not only does it lower transaction costs, but it also favours the establishment of normal co-operative relations between purchasers and phase firms, with productivity and quality advantages.

Thus during the thirty years of growth of the district, as in employed work, in contracting-out relations exit and voice interacted in a

complementary way. In local phase markets, competition (and therefore exit) requires for its correct functioning the fixing of rules and even of prices (therefore the expression of voice), through institutions able to ensure their implementation. This is because contracting-out and supply relations, together with labour relations, are fundamental for the district, for they jointly contribute to economic efficiency and social consent within it.

3.3. Teams of firms in the district

If the development-induced widening of the district phase markets facilitates resorting to exit, it also increases the costs of searching for particularly reliable phase firms or commissioning ones, with whom to conclude transactions that are more profitable than usual, but also riskier, since they require investments and are subject to the possibility of opportunistic appropriation of the related quasi rents (Klein, Crawford and Alchian, 1978). However, as pointed out elsewhere (Dei Ottati, 1994a; Absalom *et al.*, 1997), the typical economic and social environment of the district favours investments in building up a reputation for reliability. Since such investments are partially specific to relations among a restricted number of subjects, they tend to promote preferential economic relations among these. This also influences the supply and contracting-out relations in the local phase markets. Thus, for example, when a purchaser (or phase firm) knows the reliability reputation of a phase firm (or purchaser), through first hand experience, he will be inclined to prefer it to others in assigning (or accepting) orders. A consequence is the formation, within circles of operators that know each other, of tighter and more stable patterns of relations, that lead to the development of reciprocal trust and loyalty.

Here we must consider not only the local markets of the different production phases, but also that of final firms that increasingly specialise in the planning and marketing of products, whose manufacture is then entrusted to the various phase firms²². The

increased number of final firms is important, because it makes exit available also to the small phase firms. However, as products of the same district are relatively easily interchanged, competition among final firms is not limited to the district phase markets, but is also particularly keen in outlet markets. It is not surprising, then, that during a period of protracted growth, some final firms attempt to increase their profits by differentiating their products from those of local competitors. Sometimes this is done by offering higher quality, and sometimes through products that are somehow different (in the materials or techniques employed, or the market sectors to which they are destined) from the typical district ones. Usually however, to achieve such differentiation there is a need for machinery and professional knowledge which is, at least partially, new to the district. Therefore some form of specific investment is required (Williamson, 1985: 95-96), both in physical and human capital. This implies that, in order to implement a differentiation strategy, taking into account the productive structure of the district (a high degree of division of labour among firms), the final firms have to conclude riskier transactions with some phase firms. Hence the search for phase firms whose reputation is known, usually for having already had business relations with them, relations that have built up reciprocal loyalty²³. There remains but a small step from this to the formation of 'teams' of firms that specialise in complementary activities, and that, usually under the leadership of a final firm, co-operate in the planning, manufacture and marketing of products. These teams constitute proper micro-organizations, in the sense that there are no occasional exchange relations among firms that are part of the team, but instead relatively stable supply relations that, in time, generate social and economic ties, both in terms of loyalty and of reciprocal specific investments²⁴.

This organisational evolution also makes the relations among team firms different from those in the phase markets. In teams, in fact, loyalty and specific investments discourage, resorting to exit as a first reaction to difficulties (Hirschman, 1970: 77-78 and 1981: 222). The high subjective and objective cost of exit from the teams encourages

voice, mostly individual, as a priority recuperation mechanism, promoting among the firms in each team a system of reciprocal assurances which favours a continuing dialogue among them²⁵. These teams of firms usually grow out of an evolution, partly spontaneous and partly conscious, of supply relations in the district markets in which these organizations are embedded. Indeed, district teams are open, that is, each of the firms that are part of them also have exchange relations, even if not continuous ones, with other local firms. And this is important, because it assures them that resorting to exit remains a possibility, though at a higher cost, should voice prove to be ineffective²⁶.

So, the building up of loyalty among the firms of each team favours voice in the case of problems in their relationship. Voice, however, is usually effective, because of the risk that otherwise the firms in the team run of losing the reputation they previously acquired, and because it is always possible to turn to another local firm with a similar specialisation, and therefore exit remains a credible threat (Hirschman, 1970: 83). Therefore, during the protracted growth of the district, in the case of teams of firms as well, exit and voice interacted, reinforcing each other so as to maintain efficient team relations.

4. Exit and Voice as allies and antagonists during the crisis and subsequent transformation of the district

4.1. In labour relations

Despite the fact that the collaboration between exit and voice in the main production relations of the district facilitated the maintenance of efficiency and social consent for a long time (section 3), during the course of the Eighties Prato's industry went through manifest difficulties that triggered an intense process of change, both in labour relations and in the relations among firms within the district. The events of the Eighties' crisis and of the transformations that followed

are well known²⁷. In this paper, therefore, they are only briefly outlined, to help understand how they led to the deterioration of previously efficient combinations of exit and voice, and also, how new combinations were formed, that freed the way for a process of adjustment first, and then of recovery.

During the decades of protracted growth, the district of Prato reached and maintained a position of world leadership in carded wool products. Together with the superior adaptation capability of the district organization to the changing characteristics of intrinsically fragmented and variable demand, the know-how and designing creativity that were accumulated locally, were such that they allowed the district to gain a solid competitive advantage²⁸. In the course of time, however, this advantage was progressively eroded, mainly through the combined effect of techniques and market evolution. Slower technical progress in carded wool (particularly in spinning) reduced the efficiency of this process compared to other types of textile production. Also, market globalisation in finished products as well as in components, and the emergence of new manufacturers in countries with a much lower cost of labour, sharpened international competition. If to all this one adds the fact that consumers' tastes had changed, together with their lifestyle, increasingly leading them to prefer lighter fabrics with different characteristics from those of traditional heavy carded wool, the extent of the crisis of Prato in the Eighties is not surprising. Overcoming the crisis therefore, required more than marginal adjustments that operated during the years of growth, when the flux of incremental innovations had been continuous, and taken as a whole, relevant, but mainly limited to just one type of product or process²⁹. Now, the adjustment necessary to regain competitiveness required more substantial quantitative and qualitative changes, regarding materials, techniques and markets, with inevitable repercussions on the productive organization and necessary professional know-how.

Since the difficulties concerned mainly those firms that manufactured the most typical products of the local industry (carded wool fabrics), many final and phase firms were no longer capable of selling a quantity of product corresponding with the usually-employed production capacity. In this situation many workers were redundant and were therefore either placed in unemployment compensation schemes, dismissed, or given early retirement (Bellandi and Romagnoli, 1998). During the carded wool crisis, the dominant reaction mechanism in labour relations was once again exit. This time though, the decision was taken by the firms that were experiencing difficulties, rather than by workers wanting to improve their position. As a consequence it took on a completely different meaning - estrangement from the production process' - instead of that of economic and social emancipation, as had been the case previously. Furthermore, during the crisis, exit involved whole categories of workers instead of just individuals. So in a couple of years the number of textile employees in Prato was reduced by several thousand³⁰.

With such a massive exit, one could expect that, as had already happened during the formation of the district, the workers' capacity for expressing their voice would be severely curtailed. Instead, probably because of the essentially collaborative relations between industrialists' and workers' representatives that by now had existed in Prato for a long time³¹, the voice of union organizations didn't weaken, even if, naturally, confronted with the unemployment emergency, the objectives of negotiations with the industrialists changed. Central to these now became work organization. Indeed, on the one hand the union agreed to firms dismissing the workers that were redundant to their plans for restructuring to increase productivity, but on the other it demanded that they reduce the practice, which had previously been prevalent in Prato, of resorting to overtime rather than new hirings, in the event of increased demand. More importantly, the collective negotiation between workers' unions and industrialists of Prato became aimed at 'favouring the

restructuring of firms, the processes of change and the reduction of the district's productive capacity to restore efficiency and promote local development' ('Accordo territoriale UIP-O.S.' of 21.7.1987:3). To this end, the various representatives agreed a) to request Government recognition of the state of crisis, so as to benefit from the mechanisms of income support that existing legislation made available for dismissed workers, and b) to adopt measures (of work training courses, special salaries for two years) to facilitate the hiring back of workers that had lost their jobs through the crisis of local industry (Prato Industrial Association-Workers' Union, 21.7.1987; Trigilia, 1989: 330-333).

Thus in labour relations within the district exit remained the dominant adjustment mechanism, but while in the period of sustained growth the workers' union's voice had been aimed at reinforcing individual exit as a way towards economic mobility, during the carded wool crisis it became an instrument for accelerating the process of firm restructuring and of reorganising the district as a whole. In this case, therefore, the mechanisms of exit and voice also co-operated to restore efficient working relations.

4.2. In the local production-phase markets

Given the loose separation between employed and self employed work typical of the district, the consequences of the Eighties crisis were in part similar to those for employed workers. Many final firms, specialised in carded products, were in difficulty. Hence, not only did they try to reduce their work-force, but they also reduced the work they ordered to the local phase firms. Competition among the latter, therefore, especially in some phase markets (such as the early phases of the carded wool process), soon became unsustainable. Exit now became precipitous and had very different effects from those experienced during the previous decades of growth. In earlier times exit had been individual and regular, and it applied to both sides (purchasers and phase firms), thereby allowing each to search for the

supply relations that best suited their production or income needs. Now, however, exit became collective, concentrated in time, and concerned mainly in firms that specialised in some phases of the textile cycle, many of which were forced to withdraw from their respective markets.

All this greatly upset the relations among the firms in some production-phase markets, and entailed redefining and re-sizing the whole set of such markets³². Indeed, if the carded wool crisis, and the consequent need to change products and markets, caused an abrupt contraction of demand for some activities and hence a shrinking of the respective phase markets, the demand for other specialised activities increased, for example the finishing of fabrics³³. This, in turn, caused the opposite problem from the one we have just considered, by making it difficult for purchasers (commissioning firms) to resort to exit in the case of unsatisfactory services on the part of the finishing phase firms, who had suddenly become in short supply in the local market. Furthermore, restructuring and product diversification also led to the birth of new markets for specialised services, for example that of producer services³⁴.

Overcoming the Eighties crisis required innovations in products and processes that were far from marginal. Within the tight time limits imposed by the market, it was difficult to carry out such a process of adaptation relying solely on the resources internal to the district, since. Because of the very specialisation acquired in time, there was no immediate availability of the new material (plants) and above all human (productive, commercial and organisational) resources needed to carry out the changes that were necessary to regain competitiveness. It is therefore easy to understand why, during the carded wool crisis, besides an acceleration of exit within the various local phase markets, we also witness exit from these markets, some of the components made in the district were substituted with components produced outside it, often abroad. This new form of exit spread right from the start of the crisis, and some of its initial effects were

positive, since it reduced the time needed for adaptation by the local firms (Dei Ottati, 1996a: 123-126). For example, purchasing yarn made of fibres other than wool from outside the district allowed Prato's firms, which were traditional wool cloth manufacturers, to produce and sell silk, linen and viscous cloths, with relatively little difficulty. Thanks to market globalisation, furthermore, even those which remained faithful to traditional woollen products could attempt to regain competitiveness by purchasing components from countries with lower labour costs. Clearly, exit from and within local phase markets combined, and together they produced the general re-proportioning we mentioned earlier.

At this point one might ask what happened to collective voice in the district phase markets (section 3.2). In the years of protracted development, technical and organisational differentiation among the firms specialising in different production phases, and even in the same phase, had steadily increased. Locally negotiated rates (and more generally the system of prices relative to the various specialised activities which was directly or indirectly related to them) were therefore already in part insufficient to regulate the large variety of supply relations existing within the district³⁵. It is not surprising therefore that during the carded wool crisis, at a time when final firms resorted extensively to exit within and without the local phase markets, the existing collective voice was no longer listened to. It is significant that, in 1985, the industrialists' association of Prato, representing the purchasing firms, decided to cancel a price settlement it had recently agreed with the local Artisans' Associations, and that for about two years it proved impossible to agree to a new one.

The diversification and quality efforts made by many final firms, together with the efforts for technological renewal and learning made by the surviving phase firms, bore fruit and within a few years local industry showed signs of recovery (Balestri, 1994: 22-23). It was at this point that, especially among the most influential final firms, there was a change in the way exit was perceived, particularly exit out of

the district markets. There came the awareness that in some specialisations (e.g. weaving and twisting) the productive capacity of the district after the closure of many phase firms had become insufficient to satisfy the needs of the local purchasers. This created bottle-necks in the production cycle and delays in delivery that risked negating all the efforts made to recover competitiveness. Furthermore, after the unemployment and exclusion experienced by many textile-dependent and self-employed workers, the generation of new entrepreneurs, and the renewal of some industrial skills, slowed down too³⁶. These negative middle and long term consequences of the massive exit from local markets that took place during the crisis became evident with the onset of recovery. Hence the attitude of the more observant industrialists changed. They now started to perceive exit from district markets as a threat, rather than a safety valve (Hirschman, 1981: 258-65). The situation was ripe for a resurgence of collective voice in the local phase markets.

After all that had happened, it became clear that the collective negotiation of rates according to the structure that had established itself during the previous decades was now inadequate to regulate the multiplicity of types of contracting-out relations that characterised the new district. In weaving itself, once one of the most homogeneous phases of the Prato industry, technological and organisational differences between smaller and larger (industrial and artisan) firms were such that uniform rates were clearly inapplicable. To overcome the 'rigidity' of the existing structure of collective price negotiation, in renewals of agreements special clauses were introduced. The first, introduced in 1987, was a so called 'rate-elasticity' clause which allowed for the possibility of discount agreements of up to 18% for large orders on collectively negotiated rates. Then, in 1991, came a 'negotiation autonomy clause' that allowed purchasers and phase firms to stipulate contracts derogating from collectively agreed rates (Unione Industriale Pratese-Associazioni Artigiane di Prato, 'Accordo sulle tariffe di tessitura' of 1.5.1897 and of 1.3.1991). Yet, such innovations were not sufficient to restore effectiveness to this form of

voice. Collectively agreed rates continued to be ignored. The variety of contracting-out transactions and of phase firm organisations had increased so much that collectively negotiated rates were no longer useful to regulate supplier relations, even as a point of reference.

In order for competition (and hence exit) in local phase markets not to take destructive forms, not only as far as prices were concerned, but also quality standards and other contractual terms, it became necessary to pass from price negotiations to the collective negotiation of rules of behaviour that the different types of final and phase firms had to comply with³⁷. For this reason, in 1997, representatives of the industrialists and of the artisans of Prato reached a turning point in the collective negotiations of supply relations by signing an agreement, called the 'Gentlemen's Agreement', in which the rules of reference for all supply relations in the area were fixed. The price of processing is now freely agreed by the parties, but the contract must be laid down in writing and, in consideration of the ever increasing importance of quality as a competitive factor, it must contain also the technical and quality specifications of the work ordered. This agreement also provides for sanctions for transgressors and the institution of a collective body of arbitration which any firm that has been damaged by incorrect behaviour on the part of another can refer the matter to. The Gentlemen's Agreement, therefore, marks the revival of collective voice in the phase markets. The rules contained in it, allow the local contracting-out relations to improve. This, in turn, indirectly discourages resorting to suppliers from outside the new district.

So, during the crisis and subsequent transformation of the district, interaction between exit and voice in the local phase markets changed. Initially the see-saw model prevailed once again, with exit (within, and out of, local markets) hindering voice, but also accelerating the adaptation of supply relations during the first years of the crisis. Conversely, the first signs of recovery saw the reorganisation of collective voice, which facilitated the rebuilding of satisfactory local supply relations, thereby stemming exit (especially

out of the district) when this began to become a threat to the district's firms.

4.3. In teams of firms

As we have already pointed out (section 3.3), team-like organisations had arisen within the district, that had allowed several final firms to introduce innovations which put them in a position to be able to differentiate their products from typical district ones. As a consequence, firms belonging to such teams were less influenced by the carded wool crisis and, generally, performed better than the others. This happened also thanks to the wider resources (information, professional and financial) at their disposal for investments in innovation and learning, which allowed them to remain competitive. Such resources derived in good measure from the relations of loyalty typical of the teams, loyalty that the crisis reinforced, by making the threat of exit more credible, and the voice within the teams more effective.

The better performance of the firms that were organised as teams did not pass unnoticed in the district, where cultural and physical distances among subjects are generally small. Several local firms, looking for a way out of the crisis, started planning products (and getting phase firms to acquire machinery) similar to the ones that were already being produced successfully by other district firms. These innovations however, were not of an incremental kind. They involved considerable investments in physical and human capital, and above all, a different relationship among the subjects. Without an intense exchange of information and knowledge among the different specialised firms involved in the realisation of the new products or in the use of new materials, it is indeed not possible to produce goods that are competitive in quality, price and delivery times. Together with product conversion and company restructuring, therefore, we also see the start of a process of reorganisation of supply relations which led to the proliferation of teams of firms³⁸.

The teams that already existed before the crisis started, however, were formed over longer periods of time, through repeated exchange relations and investments in reciprocal knowledge and reputation. The higher degree of commitment and tighter co-ordination among the firms in these teams was therefore the result of past investments. It was not possible to replicate such an organisation without similar investments being made. The passage from a type of supply relations in which exit is prevalent, albeit integrated by collective voice in the local phase markets, to one in which individual voice has an important role, is all but simple. The difficulty lies not only in the fact that each of the two systems requires different investments, but also in the fact that each entails different incentives, expectations and competence (Helper, 1991: 819-820). If such a passage cannot be improvised, it is nonetheless possible to try speeding it up by building, for example, teams in which the final firm participates, through a share of the capital, or loans, in the new investments by the phase firms. Financial ties per se do not insure that the intensity of communication and the degree of co-ordination among the firms of the new teams will match those of the existing ones, which are based on investments in reputation. Nevertheless they constitute a credible commitment (Williamson, 1985: 163-189) that contracting-out relations will be continued, at least until the new investments have been recovered. They therefore favour the organisational transition necessary to hasten recovery. Indeed, in the years that followed the crisis there was an increase in financial ties among district firms, but this was essentially due to the proliferation of teams, rather than a return to classical vertical integration, however disguised³⁹. Furthermore, the opportunity of setting up some form of financial tie with phase firms increased the need to signal the seriousness of one's intentions. This was because, during the crisis, attempts at creating pseudo-teams had been made. Some phase firms had been induced to make investments in the anticipation of a lasting relationship that never materialised, a fact that caused them serious problems⁴⁰.

The existence of team relations in the district, and their proliferation with the coming of the crisis, also entailed a certain spread of loyal behaviour (Hirschman, 1970: 77-92) in local supply relations. This is important because it favoured the adjustment to the changed external context of many local firms and, at the same time, contributed to stem the exit from the district markets. Despite this, at the first signs of recovery it became clear that some local phase markets had become too restricted (section 4.2). Indirectly, this had repercussions on the efficiency of the teams, because by diminishing the credibility of the threat of exit in case of unsatisfactory performance by some members of a team, it also reduced the efficacy of voice inside it. As Hirschman underlines, although loyalty favours the use of voice, generally, if exit is not possible, it makes no sense to speak of loyalty, just as it would be impossible to be good in a world without evil (Hirschman, 1970: 82).

During the recent period of crisis and subsequent transformation of the district, then, the link between exit and voice within teams of firms remained complementary, but it tended to change during the course of time. While in the beginning the greater ease of resorting to exit bolstered voice within the teams, later the increased cost of exit also diminished the efficacy of voice within them. In order to be competitive then, district teams must remain open. This means that substituting some firms in a team must not be so costly, as to preclude all possibilities of exit, and hence also relinquish part of the force that voice can exert on the other members (see Helper, 1996). Therefore the performance of the district teams is not independent of the functioning of the phase markets. When competition (exit) within these is reduced too greatly, for example because of insufficient renewal of firms, or a process of concentration, the performance of the leading local firms, such as are those in well established teams, is also at risk. It is not surprising therefore that, in Prato, it was precisely the representatives of such firms who were the first to perceive the importance of restoring these markets to their correct functioning, through the so-called Gentlemen's Agreement (section 4.2).

5. The two-fold nature of the exit-voice approach and industrial district competitiveness

In this paper the exit-voice model has been applied to a new field of research, the industrial district. This model, enriched from its original form to take account of later applications and extensions by Hirschman himself, and other authors, has been used to consider the post-war evolution of a well known Italian industrial district: Prato's textile district.

In this case too, the exit-voice model has proved to be surprisingly fruitful. An analysis of the reaction mechanisms that have prevailed in the principal economic and social relations (employed labour, supply and team relations) within the district of Prato since the war, helps towards a better understanding of the competitiveness and adaptability of that district, and perhaps of the district formula itself.

Indeed, the strong performance of the district of Prato seems to be largely accountable for by two features of the reaction modes within it. The first important feature concerns the wide availability of both (exit and voice) options, thanks to the widespread presence within the district of market relations superimposed onto, and interlinked with, social ties. This in itself already starts to explain the comparative advantage of Prato, because, as Hirschman points out, the contexts in which exit and voice both play an important role are those that yield the best results, even if, unfortunately, they are relatively rare (Hirschman, 1970: 54 and 120). A second feature (mentioned also in the work of Meldolesi, Arbitrio and Del Monaco, 1996) concerns the superposition and alternating predominance of the two basic models of interaction between exit and voice, in the main relationships within the district. These are the see-saw model, in which there is a substitution relation between exit and voice, and the reinforcement model, in which there is a complementary relation between the two options. In particular, the analysis of the case of Prato has highlighted

the fact that the reinforcement model tends to dominate district relations during the periods of regular growth, while the see-saw model tends to prevail during phases of discontinuity, when the adaptation required is most rapid and substantial.

Indeed, the combined action of the two different types of logic of exit and voice, characteristic of the reinforcement model, stimulates initiative and creativity on the one hand, and involvement and co-operation on the other. In this way, the combined effects of the two types of logic induces a continual effort towards improvement which, in periods of gradual change, favours the regeneration of district competitiveness and the maintaining of its efficiency.

On the contrary, in the case of discontinuous changes (for example in market conditions or of the techniques of local industry), the see-saw model tends to predominate in one or more of the economic relations within the district, generally with a double oscillation, so as to accelerate first adaptation and then recovery. An initial growth of exit which chokes the old, and by now obsolete, forms of voice, is followed by a resurgence of new ones that stem exit, to return, if that be the case, to the reinforcement model once recovery has consolidated.

In conclusion, the higher competitiveness and adaptability of the industrial district derives from the relative abundance of exit (the economic structure of the district is made up of a system of interconnected markets), but above all from the wealth of forms of voice, both individual and collective. These are continually renewed within the district, thus bringing about an alternation and recombination of the mix of exit and voice, and also of the interaction models between them. Such a wealth of expressions of voice is a distinctive element of district relations, which is in turn linked to the multiplicity of loyalty relations (team attachment and professional category membership, or local community) existing within the district. All this makes the industrial district the ideal application field

for the exit-voice analysis of the economic versus the political operating mode.

Notes

1. The principal applications of the theory of exit and voice regard trade unions, industrial organisation, public services, peoples' migrations, political parties, marriage and even child development, (Hirschman, 1987). More recently the model of exit and voice has been applied by Hirschman himself to analyse the fall of the German Democratic Republic, (Hirschman, 1995: 9-44). For an original application of the exit-voice approach to business association, see Becattini, 1979. On the genesis and the developments of the exit-voice approach, see the searching and well documented discussion contained in Meldolesi, 1995.
2. On the industrial district as a socio-economic organisation, there exists such a vast body of theoretical and empirical literature that we cannot even cite some of the most important contributions. We shall only mention some collections of essays, in Italian: Becattini, 1987; Bagnasco, 1988; Brusco, 1989; Bellandi and Russo, 1994; and in English: Goodman and Bamford, 1989; Pyke, Becattini and Sengenberger, 1990; Pyke and Sengenberger, 1992; Cossentino, Pyke and Sengenberger, 1996. We also mention a recent essay, containing the first study of the importance of industrial districts in Italian development since the war (Brusco and Paba, 1997).
3. On the fundamental processes typical of the industrial district, see Becattini, 1998.
4. For an accurate analysis of the birth and evolution of the various populations of specialised firms in the industrial district of Prato from 1946 to 1993, see Lazzeretti and Storai, 1999.
5. The local press of the time goes as far as reporting that in almost every home there was a small textile entrepreneur

(*L'Impannatore*, 4.5.1947). The available statistics, that are incomplete because of the presence of unregistered activities, indicate that the licences for the operation of textile machinery granted by the Borough of Prato from late 1945 to late 1948 were in excess of 1,000 (Cioni, 1997: 242), and that the registrations of new textile firms from late 1946 to 1948 amounted to almost 800 (CCIAA, 1946-1948).

6. An anonymous document of the Prato PCI (Italian Communist Party) secretariat, dated 4.4.1954, reads: 'Many workers do not exclude, exactly because they are vitiated by the environment (sic), the possibility of bettering themselves economically through a stroke of luck, which is thought possible for anyone who will not waste the opportunity. It is because of this mentality that, although the crisis and the consequent industrial closures have brought about vast reductions among industrial personnel there are no totally unemployed in Prato, but rather, partially unemployed people who do not queue up at the unemployment office, but try to make both ends meet by relying on their natural capacity for adaptation, their dynamism, their will to do' (PCI, 1954: 9-10).
7. The dramatic fall in weaving rates is widely witnessed by the local press of the time. A letter by some free-lance weavers published in *Il Nuovo Corriere* on the 17.7.1952 for example reads 'the work that... should be paid 80 lire every thousand strokes (of the loom), is paid 40 and sometimes 35 lire'.
8. A letter published in *Il Nuovo Corriere* calling on all free-lance weavers to 'protest by shutting their workshops' in order to gain observance of the agreed rates was signed by twenty-nine weavers, some belonging to the Communist Artisans' Association, some to the Catholic Artisans' Association and others still not belonging to any Association (*Il Nuovo Corriere*, 17.7.1952).

9. The widening of the ideological gap between the two groups of phase firms in Prato following the first wave of closures of the weaving sections of the vertically integrated wool-mills is highlighted also by the break-up of the organisation representing the local artisans. In March 1950 the artisans that did not recognise themselves in the political culture of the left broke away from the Artigianato Pratese, an association that up to that time had represented the whole category, and founded a new Catholic artisan organisation.
10. The organisation of the free-lance weavers' collective voice in Prato at this point might also have been helped by the so-called 'rebound effect', since the great disappointment of those who, right after the war, had chosen the strategy of individual mobilisation, now made them ready for collective action (see Hirschman, 1982: Ch. 5).
11. The success of the first lock-out was also due to the grass-root level information and organisation work done by the Artigianato Pratese activists who went to see all the artisans one by one, even those scattered in the country-side around Prato (*Il Nuovo Corriere*, 25.7.1952), and also to the solidarity of the dependent workers and of general local public opinion (*Il Nuovo Corriere*, 19.7.1952).
12. The industrialists' representative was withdrawn from the City Commission for the study of the problems of local industry, motivated by conflict with the union representatives in the same Commission (*Atti del Consiglio Comunale di Prato*, 15.4.1950 and *Il Nuovo Corriere*, 24.2.1950).
13. The Communist Party document, for example, reads 'the textile industry belongs to the whole City, it is everybody's patrimony and must be saved in the interest of all' (PCI, 1954: 44).

14. On the extraordinary development of Prato from the mid-Fifties to the early Eighties, see the wide ranging essay by Becattini, 1997. Among the many writings on the post-war development of Prato, we mention Cori and Cortesi, 1977; Lorenzoni, 1980; Nigro, 1986; Balestri, 1990; Bellandi and Romagnoli, 1998.
15. See Becattini, 1989a, and Dei Ottati, 1994a. On the importance of social mobility through self-employment in Emilia-Romagna, region with many industrial districts, see Solinas, 1996.
16. To get a rough idea of the number of new firms in the Prato district, consider that, in the firms register at the Chamber of Commerce, between 1953 and 1962 there were 3,000 new entries regarding firms for weaving alone. See also Lazzeretti and Storai, 1999: fig. 4.12.
17. On industrial relations in Prato from the end of the war to the mid-Eighties, and in particular on the high degree of unionisation (almost double the national average at the beginning of the Sixties), see Trigilia, 1989: 283-333.
18. On the high number of work accidents in Prato, see Nigro, 1986: 843-844, and Becattini, 1997. As regards the long hours worked, an investigation carried out by CENSIS found that over 30% of the artisans of Prato and their helpers, at the end of the Seventies, still worked over ten hours a day, as did 24% of the foremen, see CENSIS, 1980: 32.
19. The number of textile firms in the district of Prato grew extraordinarily from 1951 to 1981: according to data of the census of industry they rose from around 800 in 1951 to almost 15,000 in 1981, while textile employment during the same period rose from 21,000 to 61,000 workers (ISTAT, 1951 and 1981).

20. On the collective negotiation of artisan processing rates in Prato, see Trigilia, 1989; Dei Ottati, 1994b: 473; Becattini, 1997.
21. The aim of discouraging unfair forms of competition among local operators was clearly felt by the signatories (Unione Industriale Pratese and Associazioni Artigiane di Prato) of the first collective weaving price agreement of 1959. Indeed, the introduction of the agreement reads ‘the stipulating parts have noticed the existence... among weavers of a phenomenon of accentuated competition... and that such phenomenon is thought detrimental both to the artisans concerned and to the purchasers, with grave perturbation of the productive market’ (‘Accordo sui prezzi della tessitura laniera’, Prato, 12 June 1959).
22. On the important distinction between ‘final’ firms and ‘production-phase’ firms (or simply phase firms) in the industrial district see Brusco, 1990. In this respect see also Becattini, 1989a who defines a ‘pure entrepreneur’ as a final firm in which the marketing specialisation is taken to the extreme.
23. On the co-ordination of transactions with high quasi-rents in the industrial district, see Dei Ottati, 1994b.
24. On teams of firms in industrial districts, see Becattini, 1997. An example of teams of firms of the type considered is aggregations called ‘informal groups’: see Dei Ottati, 1996b. In such teams specific investments, for example in technology, are a consequence (rather than a cause, as normally claimed in the literature on transactions costs) of previously established long standing relations. On the differences between the transaction costs and exit-voice approaches, see Helper, 1993: 152-154.

25. The system of mutual assurances usually includes, on the side of the purchasing firm, preference in making the orders, relative stability of rates, technical assistance, financial support, willingness to accept limited delays in technical progress; while, on the side of the phase firm, it includes, besides preference in the execution of orders and rate stability, respect of delivery times and requested quality, willingness to jointly solve the problems that may arise in the production stage and in the realisation of samples. On the typical features of the supply relations based mainly on voice mechanisms, see Helper, 1996.
26. On the advantages of organising supply relations so as to have more than one habitual supplier (and purchaser), see Seravalli, 1995.
27. See Bellandi and Trigilia, 1991; Balestri and Toccafondi, 1994; Dei Ottati, 1995: 149-183; Giovannini and Innocenti, 1996; Becattini, 1997.
28. Taking Prato's exports as an indicator of the district's competitiveness, we note that in current prices they amounted to 108 billion lire in 1963, rising to 226 billion in 1972 and topping 15,000 billion in 1981, with a four-fold increase in real terms.
29. On the capacity for innovations typical of the district organisation, see Becattini, 1989b, and Bellandi, 1992.
30. According to Chamber of Commerce data, the number of people employed by the textile industry of Prato shrank by 6,000 between 1987 and 1989.
31. A clear sign of the co-operative climate in Prato's industrial relations is the agreement reached in 1974 by the union and local industrialists for the establishment of a fund for social

interventions (destined to finance creches, public transport, a health service in the workplace), financed by the employers by an amount equal to 1% of the salaries paid to the workers.

32. To get a rough idea of the re-sizing of Prato's textile industry during the crisis, between 1981 with 1991 establishments fell by 4,900 (mainly artisans), while the number of operators was reduced by about 17,000 (ISTAT, 1981 and 1991). For an analysis of the trend of the various populations of specialised firms, see Lazzeretti and Storai, 1999.
33. Between 1981 and 1991, the number of textile finishing firms of Prato increased by around 90 units, with an increase of over 1,300 operators. On the other hand, the number of firms specialising in spinning and its preliminary phases was reduced by around 500 units, with a loss of 5,000 operators (ISTAT, 1981 and 1991).
34. On the growth of tertiary activities, and especially producer services, in Tuscan industrial districts during the Eighties, see Sforzi, 1994.
35. Excluded from the collective price negotiation of weaving in 1981 were, for example, linen, silk and hemp fabrics, while the so-called atypical fabrics (obtained with material or machinery not common in Prato) were excluded in 1984. See Unione Industriale Pratese-Artisans' Associations of Prato, Accordi per le tariffe di tessitura (agreements on weaving rates) 19.11.1981 and 1.2.1984.
36. During the carded wool crisis, the number of new firms in the district of Prato registered each year at the Chamber of Commerce was less than that of firm closures.

37. On the decisive role of the ‘contractual environment’, meaning the set of implicit or explicit rules that regulate the relations among firms, favouring (or discouraging) production relations based on trust and co-operation, which is an increasingly crucial factor for competitiveness in an ever more demanding market as regards quality and variety, see Wilkinson, 1998.
38. On voice in supplier relations as a strategy favouring innovation, see Helper, 1993: 145-149. On the proliferation of teams in the district of Prato, see Dei Ottati, 1996c: 46-48; Ciappei and Mazzetti, 1996.
39. On the distinction between financial integration and organisational integration, see Robertson and Langlois, 1995: 547-548.
40. Susan Helper calls such a behaviour cheating, with reference to supplier relations in the U.S. automobile industry. See Helper, 1991: 800.

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