Clusters and Globalisation

The Development of Urban and Regional Economies

Edited by

Christos Pitelis

Judge Business School and CIBAM, University of Cambridge, UK

Roger Sugden

Birmingham Business School, University of Birmingham, UK and L'institute

James R. Wilson

Birmingham Business School, University of Birmingham, UK and L'institute

IN ASSOCIATION WITH L'INSTITUTE (INSTITUTE FOR INDUSTRIAL DEVELOPMENT POLICY), UNIVERSITIES OF BIRMINGHAM (UK), FERRARA (ITALY) AND WISCONSIN–MILWAUKEE (USA)

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

Published by
Edward Elgar Publishing Limited
Glensanda House
Montpellier Parade
Cheltenham
Glos GL50 1UA
UK

Edward Elgar Publishing, Inc.
136 West Street
Suite 202
Northampton
Massachusetts 01060
USA

A catalogue record for this book
is available from the British Library

Library of Congress Cataloguing in Publication Data
Clusters and globalisation : the development of urban and regional economies / edited by Christos Pitelis, Roger Sugden, James R. Wilson.
p. cm.
Edited papers from two workshops in Reus, Spain in 2003 and Toulouse, France in 2004. "[Published] in association with L'institute (Institute for Industrial Development Policy), Universities of Birmingham (UK), Ferrara (Italy), and Wisconsin-Milwaukee (USA)."
Includes bibliographical references.
1. Industrial location—Congresses. 2. Industrial districts—Congresses. 3. Regional economics—Congresses. 4. Globalization—Economic aspects—Congresses. 5. Economic development—Congresses. I. Pitelis, Christos. II. Sugden, Roger. III. Wilson, James R., 1976–

HC79.D5C58 2006
338.6'042—dc22

2005050162

ISBN-13: 978 1 84376 675 9
ISBN-10: 1 84376 675 2

Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall

Contents

Contributors

Mari Jose Aranguren, Faculty of Economics and Business Administration (ESTE), University of Deusto, Spain

Marco Bellandi, Faculty of Economics, University of Florence, Italy

J. Robert Branston, School of Management, University of Bath, UK

Lisa De Propris, Birmingham Business School, University of Birmingham, UK

Marco R. Di Tommaso, Faculty of Economics, University of Ferrara, Italy

Nigel Driffield, Aston Business School, University of Aston, Birmingham, UK

Claude Dupuy, Research Laboratory for the Study of Economics, Politics and Social Systems (LEREPS), University of Toulouse I, France

Jean-Pierre Gilly, Research Laboratory for the Study of Economics, Politics and Social Systems (LEREPS), University of Toulouse I, France

Nick Henry, Centre for Urban and Regional Development Studies, University of Newcastle, UK

Miren Larrea, Faculty of Economics and Business Administration (ESTE), University of Deusto, Spain

Itziar Navarro, Faculty of Economics and Business Administration (ESTE), University of Deusto, Spain

Daniele Paci, Faculty of Economics, University of Ferrara, Italy

Mario Davide Parrilli, Birmingham Business School, University of Birmingham, UK

Jacques Perrat, Association for the Development of Economic and Social Studies in the Rhône–Alpes Region (ADEES), France

Steven Pinch, Department of Geography, University of Southampton, UK

Christos Pitelis, Judge Business School and CIBAM, University of Cambridge, UK

Anastasia Pseiridis, Department of Economics, University of Patras, Greece

Valeria Pulignano, Catholic University of Leuven, Belgium and University of Warwick, UK

Miriam Quintana, Lloyds-TSB Bank Plc, UK, formerly of Warwick Business School, University Warwick, UK

Lauretta Rubini, Faculty of Economics, University of Ferrara, Italy

Silvia Sacchetti, Faculty of Economics, University of Ferrara, Italy

Stuart O. Schweitzer, Department of Health Services, School of Public Health, University of California, Los Angeles (UCLA), USA

Roger Sugden, Birmingham Business School, University of Birmingham, UK

Philip R. Tomlinson, School of Management, University of Bath, UK

André Torre, Institut National Agronomique Paris–Grignon, France

Ping Wei, Birmingham Business School, University of Birmingham, UK

James R. Wilson, Birmingham Business School, University of Birmingham, UK

Figures

11. Globalisation, governance and clusters: North Staffordshire ceramic and Prato textile industries*

Silvia Sacchetti and Philip R. Tomlinson

1. INTRODUCTION

In this chapter, we consider the experiences and challenges facing two European industrial clusters in the context of globalisation and increasing international competition. The cases chosen are both traditional, mature industries: the UK ceramics industry, which is concentrated in Stoke-on-Trent, North Staffordshire, and the Prato textile industry, based in Tuscany. Both regions have a long historical association with their respective industries and have been the focus of previous case studies, particularly in the literature on 'industrial districts'. While we recognise the usefulness of these previous studies, the scope of this chapter is not specifically to review this literature or to add more insights into the characteristics that define a typical 'industrial district'. Neither do we aim at assessing whether 'district experiences' may be transferred between different socio-economic environments.[1] Rather, given the mounting preoccupations of Western countries concerning the future of traditional industrial sectors in the global economy, we aim at assessing a possible future policy scenario for the North Staffordshire ceramics and Prato textile industries.

In each case, we specifically consider how each cluster is dealing with the challenges posed by globalisation and the effects that international competition is having upon each industry and the locality. A key theme in our analysis will be the question of governance within each cluster. This is an important issue since, as we shall argue, the nature of governance in a locality matters: it is interconnected with all of the challenges and issues that clusters and localities face in the global economy; see also the chapters by Sugden et al. (Chapter 3), De Propris and Driffield (Chapter 6), and Gilly and Perrat (Chapter 7). Moreover, governance issues are increasingly becoming the focus of public policy, particularly in Europe.[2]

In this respect, it seems relevant to adopt the strategic decision-making approach to industrial organisation (Zeitlin, 1974). Strategic decisions are those that govern the direction of firms, industries and essentially the long-term development of localities. If strategic decision making is more diffuse at the local and regional level, there is a greater likelihood that a locality may be able to achieve its collective interests.[3] However, if strategic decisions become concentrated among an elite subset of an industry's stakeholders, then there is a danger of a 'strategic failure' occurring: when strategic decisions taken by a corporate elite conflict with the wider public interest (see Cowling and Sugden, 1994, 1998). An understanding of governance structures and the nature of relationships between actors within an industry (and a locality) is therefore crucial in considering policy formulation to reduce the risks of 'strategic failure'.

In conducting our analysis, we follow the methodological framework for considering case studies set out in Branston et al. (2003) in the appendix to Chapter 3 of this volume, and as developed specifically for clusters by Sugden et al. in the main body of the chapter. We begin by briefly considering each cluster's social and economic background: specifically, its historical development, the composition of firms in the industry, the level and nature of employment, and the role of institutions and public agencies, before considering the questions of networking and governance. An analysis of the challenges posed by globalisation follows, leading to some discussion on possible future policy directions for each cluster. For clarity and consistency, each case is considered separately, although the reader will be able to draw similarities and comparisons throughout the discussion. Finally, Section 4 concludes.

2. CASE STUDY 1: THE NORTH STAFFORDSHIRE CERAMIC INDUSTRY

2.1 History, Institutions and Industrial Structure

Located between the Midlands and the North-West of England, the city of Stoke-on-Trent, in North Staffordshire, has a long tradition in the manufacture of ceramic products dating back to at least the late seventeenth century, the region's abundance of natural resources of clay, coal and river (and later canal) transport being favourable for the production of pottery.[4] Since then, it is estimated that over 1500 different pottery firms have operated in Stoke-on-Trent, with some firms (and famous brands) having a long history and association with the city, such as Aynsley (established 1775), Minton (1793), Wedgwood (1759) and Spode (1780) (see Keynote, 2003).

Indeed, the evolution of the UK pottery industry and its concentration in the city of Stoke-on-Trent helped to shape the industrial heritage and landscape and the social fabric of the region, with the industry providing long-standing employment for generations of the local population (Whipp, 1990). The historical developments of both the city and the ceramic industry are intrinsically linked, with the latter providing Stoke-on-Trent with its own unique regional identity – the city often being referred to as 'The Potteries'.[5]

Although both the industry and cluster may be considered as being 'mature', ceramics remains an important part of the North Staffordshire economy, with the fortunes of the sector continuing to have a significant impact upon the economic prosperity of Stoke-on-Trent and the surrounding area. This is reflected in the fact that the industry is the region's largest industrial employer, directly accounting for 15 per cent of total employment and approximately half of all manufacturing jobs in the city.[6] In addition, ceramics has become a 'heritage' industry, which has provided Stoke-on-Trent with the opportunity to develop a growing tourist sector: the industry's 'famous brands' attract visitors from all over the world.[7] The cluster also remains the nucleus of the UK ceramics industry, with the headquarters of the main industry bodies – the British Ceramic Confederation (BCC) and the Ceramic and Allied Trade Union (CATU) – and various ceramic research centres being based in the city.[8] The region accounts for over 73 per cent of all UK ceramics employment and retains 'a diversity of [ceramic] company types, sizes and wealth of occupations which have given the industry its character and nature' (Ceramic Innovations, 2003, p. 3). This industrial agglomeration of ceramics in North Staffordshire extends across all of the industry's subsectors – table and giftware, tiles and flag manufacture, sanitary ware, industrial ceramics and refractory products.[9] The most important of these subsectors is table and giftware, which accounts for 35 per cent of total industry output and 62 per cent of all industry employment (Keynote, 2003), and 84 per cent of all pottery workers in the area travel to Stoke to work (ECOTEC, 1999).

According to Keynote (2003), there are approximately 800 ceramic firms in the UK, with 310 being directly involved in the production of table and giftware. Again the majority of these firms are based in North Staffordshire and employ fewer than 250 workers, with a significant number employing fewer than 25. This may suggest that small firms propagate both the cluster and the industry, a characteristic consistent with the notion of an 'industrial district'.[10] The reality is that the industry's structure is a hybrid: small and medium-sized firms coexist alongside a few large firms that dominate the industry. For instance, the Waterford Wedgwood and Royal Doulton groups account for a third of total industry output and well over half

of the table and giftware market. As one would expect, the fortunes of these two dominant groups have a critical effect upon the whole industry's performance, while their corporate strategies – on investment, employment and output – have a major impact upon the 'shape' and 'direction' of the industry and the level of ceramic activity within the cluster (see Padley and Pugh, 2000, pp. 16–17).

The present industry structure primarily emerged as a result of rationalisation and a series of mergers and acquisitions in the industry, during the late 1960s and early 1970s (see Gay and Smyth, 1974), with the larger ceramics firms subsequently obtaining public listings. In terms of corporate governance, these changes have had important consequences for the cluster: strategic decision making not only became more concentrated in the leading firms, but was also effectively transferred from hierarchies of local businessmen to more distant corporate hierarchies (usually based outside of the locality) predominantly consisting of city and institutional shareholders. According to Padley and Pugh (2000), these ownership changes resulted in changes in corporate objectives that have had (adverse) implications for the cluster's long-term development. We will return to this issue in Section 2.4.

2.2 Recent Trends: Globalisation and the UK Ceramics Industry

Since the early 1980s, the UK ceramics industry has had to face rising international competition, mainly from competitors in the low-wage economies of East Asia. This competition intensified during the 1990s as, in many cases, foreign competitors began to combine relatively low-cost labour with investments in new capital equipment, while taking advantage of a more liberal world trading environment. The competition is expected to intensify even further after 2005, when China joins the World Trade Organisation (WTO) and Chinese manufacturers are allowed greater access to world markets. So far, the main impact of international competition has generally been upon the high-volume, low-value-added part of the table and giftware market (Day et al., 2000, pp. 10–11). However, for UK manufacturers, greater foreign competition has threatened both their traditional export markets (which are mainly in North America and Japan) and crucially their share of the UK market. The situation has been exacerbated by consumer lifestyle changes, with consumers increasingly placing less utility upon using (and purchasing) relatively expensive domestic tableware, and instead preferring cheaper alternatives. This has allowed low-cost foreign operators to increase their market share at the expense of UK firms. Consequently, during the late 1990s, the UK's traditional trade surplus in the table and giftware market

entered into a period of continual decline, falling from £216.3 million in 1996 to £38.9 million in 2001 (Keynote, 2003).

The impact of globalisation and greater foreign competition has contributed to the closure of a number of factories and significant job losses in the North Staffordshire cluster, as the larger UK manufacturers have rationalised and restructured their operations. An indication of the decline in employment is given by the declining membership of CATU, which fell from approximately 23 000 in 1992 to 12 500 in 2002.[11] More recently, the UK's leading manufacturers – notably Wedgwood and Royal Doulton – have begun to pursue a strategy of global outsourcing, utilising production facilities in the Far East. This has become a particularly attractive option since ceramics is a relatively labour-intensive industry and overseas production offers UK companies significant labour-cost savings, enabling them to retain a global competitive advantage (Jackson, 2000, p. 10). Not surprisingly, these strategies have further exacerbated the decline in employment in the cluster, with firms directly substituting foreign for domestic labour. The more high-profile cases involve both Wedgwood and Royal Doulton. In June 2003, Wedgwood announced the closure of two of its Stoke-on-Trent factories, with a loss of over 1000 jobs, and the complete transfer of the production of its Johnson Brothers brand to China (*Staffordshire Evening Sentinel*, 4 June 2003). Royal Doulton has gone even further and in March 2004 announced the closure of its last factory in Stoke-on-Trent, with production being transferred to the company's facilities in Indonesia (*Staffordshire Evening Sentinel*, 26 March 2004).

In addition to these job losses, there have also been concerns about the impact of international competition and global outsourcing upon the cluster's skills base, since the skills of displaced workers are often lost to the industry. For instance, Ceramic Innovations (2003, p. 16) report that a significant proportion of displaced workers have become reluctant to return to the industry, which is increasingly regarded as having a 'poor image, soured by one of insecure and unpredictable employment and a sense of pessimism' (Keynote, 2003, p. 17). These trends have exacerbated the shortage of skilled workers in the cluster such as 'gilders, dish-makers, lithographers, spongers/fettlers and semi-automotive hollow operators' (Ceramic Innovations, ibid.). In response, some firms have adopted a policy that they will only outsource work within the locality to try to protect the skills base, although tightening (labour) cost pressures mean that firms are increasingly seeking to outsource on a global scale (see also Carroll et al., 2002). For smaller firms remaining in the cluster, the growing skills shortages are a serious concern. They raise the locality's long-run average costs (in particular training costs) while diminishing the potential for future productivity gains, thus reducing the cluster's overall competitiveness.

2.3 Strategic Decision Making and 'Strategic Failure' in the North Staffordshire Cluster

The effects of global outsourcing have not surprisingly raised concerns about the long-term prospects for the ceramics industry in the North Staffordshire cluster. Such concerns are epitomised in Carroll et al. (2002, p. 341), who argue that global outsourcing threatens not only employment levels, but also long-standing regional ties and the social fabric of the region. There is a general consensus too that the UK industry will not be able to operate as a large-scale industry (with adverse implications for employment levels) as it has done previously, and for stakeholders, such as CATU, the issue has essentially become one of 'managing the decline'. These concerns are very real, particularly as since the mid- to late 1990s the UK industry has experienced a real decline in all the key economic variables – output, employment levels, investment and its trade balance (see Keynote, 2003). The wider impact has also been felt in Stoke-on-Trent, which, in recent years, has also lost a significant proportion of industrial capacity in other manufacturing sectors – most notably through the closure of the region's coalmines and steelworks and also rationalisation in the tyre industry. In attempting to address the problems posed by globalisation upon the North Staffordshire cluster, we return to the issue of corporate governance and consider the role played by the leading firms in the industry. We do so by drawing upon some revealing insights from Padley and Pugh's (2000) comprehensive study of the industry.

According to Padley and Pugh (2000), one of the UK industry's core problems has been that firms have been too eager to divest during an economic downturn. This problem has been exacerbated by the short-term objectives set by the UK stock market, which now primarily governs the industry (see Section 2.1). For instance, during downturns, there has been an increasing tendency for the larger publicly quoted companies to rationalise their operations and cut back upon capacity (possibly in the more innovative areas of the company) in order to improve their (short-run) return on capital. Yet, as Padley and Pugh (2000) go on to point out, such short-term (strategic) decisions often fail to account for the cyclical nature of the industry and can hasten decline since, in subsequent upturns, the industry has insufficient (domestic) capacity to meet rising demand, thus creating a void that has often been filled by foreign imports and/or by UK firms using global outsourcing. The authors contrast this situation with an earlier period 'when the majority of the industry was independent and family owned, they [firms] understood the short-term nature of the cycle and acted accordingly' (ibid., p. 15). By 'acting accordingly', Padley and Pugh (2000) suggest that family-owned firms took a longer-term view (as

opposed to City institutions) and were more likely to invest at the 'bottom of the cycle'. These firms were then able to take advantage of subsequent upturns while, in the aggregate, the cluster was in a stronger position to compete with foreign competition (ibid., pp. 15–17).

In their overall assessment of the industry, Padley and Pugh (2000) are quite clear that the structural changes of the 1960s and 1970s have not been beneficial for the long-term development of the North Staffordshire cluster. Indeed, their study concludes with the rather sober assessment that

> we cannot find one merger in the industry where the whole is greater than the sum of the parts before the companies were merged, whether measured in terms of increased profit, employment, output or the value of the firm. Thus all mergers have led to rationalisation but without the intended benefits. (ibid., p. 28)

From a theoretical perspective, Padley and Pugh's (2000) account is entirely consistent with the predictions of the strategic decision-making approach to industrial organisation: an increasing concentration of economic power among a remote, corporate elite is likely to lead to 'strategic failure' (Cowling and Sugden, 1994, 1998). In this case, the strategic interests of the larger ceramics firms and their associated corporate hierarchies appear to have taken precedence over the long-term development of the North Staffordshire cluster. While reversing this process will not be easy, it is worthwhile to consider some possible ways forward.

2.4 Future Possibilities for the North Staffordshire 'Potteries'

At first glance, the challenges posed by globalisation and the current competitive difficulties faced by UK ceramics firms paint a bleak future for the North Staffordshire cluster. However, we would not wish to paint an overly pessimistic picture: pessimism itself can become a self-fulfilling prophecy that can precipitate and extend industrial decline (Padley and Pugh, 2000). Indeed, there can be grounds for optimism. At this point, we should note that on the positive side, the UK industry remains a major player in the global ceramics market with, according to the BCC, a 'critical mass' of firms in all segments of the industry. There are also a number of success stories, most notably in the supply of hotel-ware and in the luxury goods end of the table and giftware market.[12] The cluster itself has inherent strengths, which can be further harnessed to its long-term competitive advantage, the cluster's long-standing tradition in ceramics, its ceramic research centres and expertise, combined with a reputation for quality and design being particularly significant. The 'Made in Stoke-on-Trent/England' back-stamp remains a valuable marketing tool, particularly

in traditional markets.[13] Nevertheless, if the cluster is to have a sustainable long-term future in the global economy, further structural changes and policy initiatives are necessary.

In this respect, advocates of the strategic decision-making approach favour a greater emphasis upon fostering small-firm development and encouraging greater networking between firms within and across localities. The attraction of this approach lies not only in the possibility of emulating the success of various clusters of small firms elsewhere (for instance, the Italian 'industrial districts'), but also in the fact that it may facilitate moves towards a less hierarchical industrial structure and a greater involvement of stakeholders at the local level (and thus reducing the risks of 'strategic failure' (see Cowling and Sugden, 1999)). To some extent, the North Staffordshire cluster is beginning to think along similar lines and has adopted appropriate measures. For instance, at the regional policy level, the issue of governance has become a key area of discussion and changes in attitudes in the cluster are now being openly encouraged: for example, firms are actively being encouraged to engage in far greater co-operation to foster innovation within the industry (ECOTEC, 1999; North Staffordshire Taskforce, 2003). It is also widely acknowledged that the future of the UK industry lies in encouraging smaller-scale production units and that competing on the low-cost, mass-produced wares of the past is no longer a viable option, since foreign operators will always hold an absolute cost advantage. Padley and Pugh (2000, p. 28) argue that in ceramics 'small is beautiful' and – echoing Piore and Sabel's (1984) general thesis – in the new global economy, smaller (ceramics) firms are likely to be more flexible and successful in reacting to changing market conditions.[14]

We would generally concur with such a vision. Indeed, in many respects, the revitalisation of the industry could well be along the lines of going 'back to the future', with an industrial structure resembling something from its earlier industrial heritage. Yet, while we support a stronger small-firm network, we should be quite clear that we do not advocate a cluster where competitiveness is based upon 'sweatshop' or 'Victorian' labour standards. We recognise that, in a relatively labour-intensive industry, labour costs are a conscious concern for all businesses operating in a global market, yet a 'race to the bottom' is not the basis for a successful cluster: indeed, such a strategy is likely to worsen the industry's 'poor image' (particularly for employment opportunities) and exacerbate industrial decline. Rather the focus should be upon engineering a constant sense of dynamism among small firms towards higher-value-added activities, with an emphasis upon aspiring to and setting world-class benchmarks in ceramics: in turn this should result in higher levels of productivity, greater financial rewards and higher wages.[15]

The achievement of a truly evolving, dynamic, innovative cluster of small ceramics firms in North Staffordshire has some way to go before it can become a reality. At the moment, small firms may propagate the cluster, but many are what Rowley (1998) has described as 'survivalists', employing strategies that merely enable them to 'keep their heads above water'. In rising to the challenges of international competition, these firms will have to be more proactive in their competitive strategy, perhaps becoming more design-conscious and giving greater attention to seeking and attaining new markets. For small firms, this transition might be aided through publicly funded initiatives such as the 'Hothouse' project, which was established in 1995 with European Union and local government funding. The 'Hothouse' is primarily a ceramic shape and pattern design centre, equipped with the latest technology which enables users to bring new designs to the market more quickly. It is a centre of excellence and is intended to serve the whole cluster, with all firms being able to take advantage of the centre's facilities (for a set fee) and expertise, without having to incur the high sunk costs associated with investing in specific technologies. The 'Hothouse' project is a welcome initiative, which can facilitate mutual learning, knowledge and technological transfers that are a key facet of any modern successful cluster (Morosini, 2003; see also the chapters by Henry and Pinch and Di Tommaso et al. in this volume – Chapters 5 and 13 respectively).[16] On the subject of collective initiatives, we are somewhat disappointed that, so far, there have been no developments with regard to the suggestion raised by the ECOTEC Report (1999) that a cooperative forecasting, marketing and distribution service be established for the cluster. Small firms often lack the expertise or resources to market and sell products on an international level. Yet, collectively there are significant scale economies that can be obtained from such activities, which could benefit the whole network (Brusco, 1982).

In nurturing a dynamic cluster of small firms, it is also important to foster a spirit of entrepreneurialism and encourage new entrants/investors into the sector, preferably with each entering on a small scale. One possibility here is that new potential entrants may come from the industry's pool of redundant workers from the larger manufacturers (ECOTEC, 1999). Of course, 'entrepreneurs' are not born overnight and, in addition to any financial support available, there is a role here for the region's universities, in collaboration with other public agencies, to develop and support appropriate enterprise and educational programmes for willing entrepreneurs.[17] In addition, an improvement in the industry's (and region's) 'image' is also required to attract and retain new young talent into the sector.[18]

While our focus has been upon fostering a more diffuse system of governance at the industry level, we would also argue that there should be changes at the firm level, with firms moving towards a less hierarchical

system of management than has typically been employed in the past. In particular, firms should seek to encourage their workforce to actively participate in the firm's development and should be rewarded appropriately: good employee relations and a 'feeling of involvement' among motivated employees are increasingly important tenets for success in the modern economy; see also the chapter in this volume by Quintana and Pulignano (Chapter 9). An example of such a ceramics firm that has adopted a 'flat' management structure is Moorcroft PLC, a small/medium-sized company, which specialises in producing and designing high-quality table and giftware. Although it is a publicly listed company, the majority of Moorcroft's shares are retained locally by the Edwards family (Keynote, 2003), and the firm operates (and encourages) an employee share ownership scheme. The philosophy at Moorcroft is that 'status' itself is not important: there are no company cars, for instance, and management itself is seen as an overhead, with employees being regarded as the firm's wealth creators.[19] An open dialogue between managers and employees exists, with conscious efforts made to involve the latter group in all aspects of decision making (Edwards, 2000). The company also encourages employees to develop new skills and pursue new ideas. In terms of financial rewards, the company embraces profit sharing, while wages and piecework rates are all above the industry norm.

The formula appears to work: Moorcroft is a very successful ceramics company, manufacturing much-sought-after wares that are world renowned for both quality and originality in shape and pattern design (Keynote, 2003). These products are designed and manufactured solely in Moorcroft's Burslem factories: global outsourcing is not considered a strategic option for the firm – it might 'devalue' the product's quality in the eyes of the consumer. Consequently, while other ceramics firms have been reducing their domestic employment levels, Moorcroft's labour force has risen from 17 in 1986 to just over 200 in 2001 (Keynote, 2003). Furthermore, the company's labour productivity levels are approximately twice the industry norm (Edwards, 2000). Moorcroft's approach might, therefore, be an example to other small firms in the industry: indeed the company's relatively successful performance suggests that it is possible for smaller firms to thrive in the North Staffordshire cluster.[20]

In summary, the North Staffordshire cluster faces some important challenges, particularly in the face of increasing international competition. Further structural changes are likely and the growth in global outsourcing by the larger manufacturers will have a significant (negative) impact upon employment levels within the industry. Indeed, given that the majority of employment is within the sector's larger firms, then current employment levels are particularly vulnerable. This will have implications for morale within the

industry and could adversely affect the cluster's skills base. Yet the pottery industry has traditionally been the 'focal point' of Stoke-on-Trent and it can play an important part in the region's future economic development. In order to do so, however, it is important that the cluster, collectively, takes positive action to respond to the challenges posed by globalisation. We have suggested some possible ways forward, with a greater emphasis upon less hierarchical production modes, greater cooperation between all industry stakeholders, and small-firm networking. If the city can retain and enhance its reputation as a centre for ceramic activity – based upon art, creativity and innovation – then this will not only improve the industry's image, but will also attract other firms and industries in related fields into the region, while also having benefits for the growing tourist sector.

3. CASE STUDY 2: THE PRATO TEXTILE INDUSTRIAL DISTRICT

3.1 History, Institutions and Industrial Structure

The textile and clothing industries[21] were one of the earliest manufacturing activities undertaken by European countries, the sector's growth primarily being driven by evolving fashion tastes, lower input prices and technological change. The transformation of raw cotton, wool, silk and flax provided a fundamental contribution to the development of craftsmanship in medieval cities, which remains within today's industrial districts. In Italy, in particular, the production and transformation of silk and the manufacture of cotton or woollen products supported the rise of the first industrial family-owned firms. During the twentieth century, and particularly following the Second World War, the number of firms undertaking complementary activities rose and began to cluster around earlier industrial establishments, such as the textile region of Prato in Tuscany. In the north and centre of Italy, this industrial awakening occurred in parallel with the mechanisation of agriculture which released a pool of skilled and experienced labour for the textile industry.[22]

Not far from Florence, Prato is the most important textile and clothing district in Italy, with 7400 firms[23] and 43 000 workers.[24] Historically, the manufacturing of textiles can be traced back to the twelfth century, when the production of clothes was regulated by the 'Corporazione dell'Arte e della Lana', the Guild of Art and Wool. The transition from artisan workshops to the factory occurred during the second half of the nineteenth century, largely due to the introduction of a number of innovations which promoted the mechanisation of textile factories. Later, the local industry received a

stimulus by military commissions, tariffs and the economic autarchy that was in place during the 1930s. The industry's economic 'boom' occurred later, after the Second World War. Between 1950 and 1981 the number of employees in Prato's textile industry rose from 22 000 to 60 000, while in other European regions the sector underwent stagnation and rationalisation. Prato was acknowledged as being a successful example of an industrial district, where firms are mainly family-owned and of very small size.[25,26] The longstanding tradition of production of woollen tissues, concentrated within an area of 700 km^2, created the conditions for the emergence of a social and economic system based upon a network of relationships that promoted and facilitated information flows, knowledge transfers, cooperation among firms and, through agglomeration economies, reduced firms' average costs.

Ironically – and contrary to traditional views that 'conflict' is absent in industrial districts – Dei Ottati (2003) has argued that the collective spirit that embodies the Prato district arose mainly out of tensions among the region's economic actors (mainly between the large mill owners and workers) during the 1940s. This occurred during the demand crises of 1948 which resulted in the lay-off of thousands of workers.[27] However, these lay-offs were accompanied by positive proposals (with accompanying financial support) to encourage the district's most skilled workers to become self-employed. According to Dei Ottati (2003, p. 504) 'within a short period of time, the structure of the Prato industry changed radically. With the vertical deintegration of the larger mills, the system based on the division of labour among specialised firms became the dominant one'. The massive exit of labour towards self-employment populated the local system with thousands of 'phase firms', firms specialised in one or two phases of the production process that gave rise to a complex system of 'interconnected local phase markets' mostly undertaking subcontracting activities (Dei Ottati, 2002, p. 451). As a consequence, prices for weaving and other operations dropped substantially, which led to Prato's self-employed workers organising their 'collective voice' through local artisans' associations.

This story of the behaviour of economic actors (namely final firms, 'phase' firms, workers, intermediate associations and local government) in response to demand fluctuations and subsequent periods of crisis denies the quite diffused 'harmonic' view of the industrial district, where actors reciprocally cooperate with each other while also competing. Moments of economic crises have recursively emphasised that actors retaining strategic decision-making power would individually pursue their own interests and objectives even if these were not in the wider public interest. However, as Dei Ottati (2003) emphasises, when 'individual voice' was not effective, it was the organisation and exercise of a 'collective voice' which contributed to the search for alternative solutions and mediation of the region's collective

interests. This represents an important lesson in the evolution of Prato's governance structure, an issue we will return to below.

3.2 Recent Trends: Prato's Industrial Crisis and International Competition

After 30 years of expansion (from 1950 to 1980), the Prato industrial district has, in line with other European textile industries, undergone a long period of economic rationalisation. While Prato's industrial restructuring has been relatively less severe than that of its European neighbours,[28] the region has, nevertheless, experienced a significant decline in both textile employment and the number of firms operating within the district (see Table 11.1). A number of factors have contributed to these trends. First, there has been a change in consumer demand patterns: household heating and the diffusion of different lifestyles have shifted consumers' preferences towards lighter materials such as flax, silk and cotton, and away from carded woollen textiles, in which Prato held a comparative advantage. Second, the larger textile firms introduced new technologies which increased the flexibility of their large-scale production processes. This allowed them to compete more directly with district firms, who found themselves at a distinct disadvantage. Finally, there has been increased competition from the so-called newly industrialised countries, where textiles and clothing products can be produced at lower labour costs (see below).

Table 11.1 The textile and clothing industry in the Prato district: number of firms and employees, 1980–2002

	1980	1996	2000	2002
Firms	16000	9600	9000	8600
Employees	60000	50000	45000	43000

Source: ISTAT and Unione Industriale Pratese, UIP.[29]

As a response to the industrial 'fallout', Prato's regional government began, in 1987, to activate a number of social policies, such as improving job mobility and introducing retraining schemes to mitigate the effects of declining textile employment for the region's labour force. The cooperation of both firms and unions in this phase of industrial restructuring was crucial, particularly in managing the labour market situation. As Dei Ottati (2003, p. 513) points out, 'positive results were obtained thanks to deliberate concerted action aimed at governing the massive exit of workers, whose aggregate effects would have been harmful to social cohesion, the latter

being an indispensable element for district survival'. Furthermore, and in retrospect, the carded wool crises enriched the product specialisation of firms, which became more market-oriented. Today, the product mix comprises knitted wool, cotton, viscose, flax and silk.[30] This change was also reflected in the reorganisation of production inside the district. The number of small artisan shops has significantly decreased, while final firms, in particular, have started to establish subcontracting agreements with phase firms outside the Prato district. Purchasing strategies have changed as well, with most of the fibres and yarn now being procured from external suppliers located in countries with lower labour costs. It is not by chance that Prato hosts one of the largest Chinese communities in Italy, which is engaged in the clothing industry. Chinese firms take on production phases that require 'very fast work', such as machine sewing and ironing of clothes. As a recent study emphasises,[31] this has contributed to a replacement of 'activities' that were decentralised in the south of Italy or abroad, and has brought them back inside the district.[32]

The presence of Chinese subcontractors is, in some respects, controversial. On the one hand, they may be regarded as being indispensable for the survival of the Italian textile industry and the 'Made in Italy' brand label, since they provide an opportunity to lower the costs of production and shorten the lead-time for orders that traditional Italian firms are not able to or do not wish to meet. At the same time, the 'ability' of the Chinese subcontractors to meet these 'standards' imposes social costs, since it invariably involves the exploitation of labour (mainly family members) under working conditions that sometimes cross the borderlines of legality (Ceccagno, 2003). Indeed, at this level, Chinese subcontractors often fiercely compete against each other, with many firms failing to survive: the annual firm volatility rate amounts to 35 per cent. This might suggest that the 'activities' brought back into the district by these firms are of the 'sweatshop kind' and do not enrich the opportunities of the district to re-launch its production with, for instance, new diversified and higher-value-added products. However, there are signs that the second generation of Chinese immigrants are developing their activities with an eye on selling a final product to the market, as opposed to being low-cost subcontractors.

More recently, the sector has again been affected by a marked reduction in consumer demand and declining export markets. Between 2000 and 2002, employment fell by 4.4 per cent, while the total production of yarn, textiles and clothing decreased by 7.5 per cent (see Table 11.1 and also Table 11.2). In 2002, exports were €3 billion (60 per cent of total output), although this was 6 per cent less than in 2000. The reduction of consumer demand for clothing has had an impact upon the district's activities and the organisation of production within. There are increasing demands upon

firms for shorter lead-times with respect to new orders and the district has experienced alternating phases of under- and over-utilisation of plants (UIP, 2003). Moreover, international competition has become particularly fierce: in 2002, world exports in textiles and clothing amounted to €350 billion (6 per cent of all world trade flows), with 50 per cent of these being serviced from developing countries (70 per cent for clothing).[33] In this respect, the ongoing liberalisation of trade which has ended in 2005 with the exhaustion of the MFA (Multifibre Arrangement) has exposed so-called developed market economies to competition from a large number of transition and developing countries, especially from Asia. Between 1990 and 1999 the degree of import penetration in the EU has increased from 12 per cent to 23 per cent in textiles and from 30 per cent to 46 per cent in clothing (Stengg, 2001, p. 3). The clothing industry is relatively more labour intensive than textiles and it is here, particularly, where low-cost operators from countries such as China (and to some extent India) have been able to take advantage of significantly lower costs to undercut their Western rivals.[34] The growth in international competition poses a real challenge for the Prato district, and it is to this issue that we now turn.

Table 11.2 Recent production trends in the Prato district (textiles and clothing: turnover, €millions)

	2000	2002	Var. (%)
Fibres and spinning	880	750	–14.77
Fabric manufacture	3240	3150	–2.78
Knitwear and clothing	1340	1150	–14.18
Total T&C	5460	5050	–7.51

Source: Authors' elaborations on UIP data.

3.3 The 'Global' Textile and Clothing Industry: a Scenario for International Networking?

One response to the challenges of globalisation has been a move towards greater consolidation within the Prato district through the creation of groups of firms linked by ever closer financial ties. According to Dei Ottati (2003, p. 517), these new arrangements have allowed firms to coordinate their activities and introduce new process and product innovations more effectively, since ownership – as a coordination mechanism – is a much quicker means by which firms can react to changes in market conditions, as opposed to relying upon traditional relationships (between many firms)

which were based upon nurturing trust. Nevertheless, these ownership changes have had an effect upon the nature of production activities within the district. In particular, it has been argued that this rising concentration will lead to a reduction in the number of final firms (as opposed to phase firms),[35] which specialise in the design and marketing of products, while production is, in turn, contracted out to other smaller firms.

The direction that has been taken for the textile and clothing sector points to the evolution of a structure where a few large client firms lead production decisions and compete on the international market. The production of fibres, yarn preparation and fabric manufacture, undertaken by phase firms, would therefore be orchestrated to serve the competitiveness of a few well-known clothing firms that, using their internationally renowned brand names, organisational capacity and experience, could successfully compete in the global marketplace and thus guarantee the district with a substantial demand flow:[36] this may provide the district with an opportunity to reinvigorate itself. This scenario, which has in part already been implemented, could be the viaticum through which the industry finds systemic coordination and a common strategy that creates the conditions for a substantial reorganisation of the industry. We suggest that this perspective is essentially about networking and, in particular, it envisages the restructuring of the industry by means of 'networks of direction', that is, networks of firms where coordination is achieved by replicating a hierarchical organisational structure among firms (Sacchetti and Sugden, 2003). Economic planning would be retained by a few large client firms, which would organise production and thus rely upon a qualified substratum of subcontracting firms, which follow their instructions. At the moment, this kind of networking appears to be the only strategic approach to counter the process of deindustrialisation that is currently afflicting Prato. Small and medium-sized firms have been losing out to international competition, so the new arrangements potentially offer a guaranteed demand flow, while the larger firms will be able to procure high-quality products (with high design standards), which are consistent with their own brand image.

The main risk in Prato's industrial restructuring process is that it will lead to a concentration of strategic decision making among an elite subset of firms within the district. As has occurred in other regions, the wider social interests of Prato may become peripheral to the strategic objectives of the new elite, raising the possibility of 'strategic failure'. For instance, with increasing globalisation, there is no guarantee that Prato's smaller firms will benefit from large-firm procurement. Indeed, the larger firms might increasingly seek to outsource production to overseas subcontractors, where factor prices are lower, as occurred during the late 1980s and early 1990s, in response to growing international competition. This outsourcing

was predominantly in Eastern Europe and North Africa, as opposed to Asia, mainly because of the region's geographical proximity and the higher-quality standards in production (Stengg, 2001, p. 4). Yet, as technological advances in Asia continue to improve (and with falling transport costs), the opportunities for global outsourcing are increasing, which in turn may threaten the future vitality of Prato.

The challenge for both Prato's business community and policy makers is to reverse the decline in firm numbers and employment opportunities, while also preventing the industry from becoming dominated by a few large client firms. This might be achieved if a margin of strategic decision-making power can be retained by local firms and institutional actors. One possibility is the active promotion of networks where relationships are based upon reciprocity and where dependence is mutual (see Sacchetti and Sugden, 2003). The idea is to organise and coordinate production processes within and outside the district through networks whose strategy is jointly decided by those actors affected by the outcomes of decision making. We might, therefore, envisage the creation of points of coordination inside the district which are identified not only with the large client firms, but with other affected parties. In this respect, Prato may be able to rely upon its past experience, since historically, social cohesion has played an important role in the region's development. This has involved trade unions, the association for large manufacturers, intermediate associations for the representation of self-employed workers and local governmental agencies depending on the type of problem to be solved.[37] The Prato experience, in particular, has shown that the mediation of local interests, the notion of 'fairness' and the discouragement of destructive forms of competition (such as 'cut-throat' competition to drive down the prices paid to subcontractors) were not spontaneous outcomes deriving from inter-firm cooperation (Dei Ottati, 2002). Rather, rules of behaviour were continuously redefined through local bargaining.[38] In the future, these experiences might be useful in guiding Prato's industrial strategy and safeguarding its productive specialisations that are crucial to its international competitiveness. Furthermore, to avoid the risk of strategic failure, it is vital for intermediary institutions and the local government to continue being active partners in industrial development.[39]

More generally, networking also implies that any industrial restructuring proceeds in accordance with some main priorities (see European Commission, 1997). First, it is important to create a flexible labour force, able to cope with 'old' and 'new' tasks required by the new organisation of production: this might, for instance, imply a wider and more diffuse use of information and communcation technologies (ITC) with other firms inside or outside the district area. Second, networking is consistent with the objective of developing and disseminating new products, methods and equipment,

including distribution, as it promotes the exchange of knowledge among producers through the whole production process (from yarn production to the design, preparation and production of garments). Third, networks can be at the forefront of high-quality standards in production and set the rules under which firms have to comply, thus 'ensuring a high level of protection for consumers and the environment' (ibid., p. 4). Fourth, networks represent a modality of production organisation that goes beyond clustering, as it is not confined to a geographical area but it promotes linkages within and across regions and nations – within the single European market but also outside it. By definition, this type of 'openness' implies that the organisation of production could involve firms located in developing countries. In order to avoid problems associated with firms exploiting low-cost labour, these types of open networks may have to be policed by an insistence on 'strict compliance with the rules and disciplines which have been freely accepted under international agreements' (ibid., p. 4).

At the local level, policy intervention has been trying to achieve some positive results through promoting the innovative capacity of firms. In this respect, funding has been made available through the EU Objective 2 Fund. It has primarily been oriented towards the improvement of infrastructure that supports textile manufacture, for instance into the development of new technologies for the treatment of the water used by textile firms. This project is supported by a network of actors coordinated by 'Tecnotessile', a service company for technological development in the Prato region. Firms, local universities, local business associations and public agencies within the network are all involved in the project. Other policy initiatives have also been supported through the same system. In essence, the local network has implemented projects for industrial research aimed at improving SMEs, technological innovation and for the development of ICTs (for further details, see Regione Toscana, 2003).

The turning point for the future of the Prato district will be in 2005, with the end of import quotas that were introduced in 1974, under WTO supervision. In a sense, the actors who will affect the future of Prato are not only local producers but also those of other countries. Policy action is therefore likely to be required both at the national and EU level, for setting clear and reciprocal rules to avoid the unwanted phenomenon of social and environmental 'dumping'. This would allow Italian (and also European) textile and clothing firms to compete on the quality of products, without compromising safety and environmental standards. In the face of the troublesome implications for Western countries (Europe, the USA and Canada), those who see the abolition of the Multifibre Arrangement as positive forecast increases in the scale of industry and estimate gains of around $2 billion per year in India from increasing productivity by 67

per cent in the clothing sector, which will bring it roughly into line with China (Kathuria et al., 2001, p. 21), and impressive lowering of consumer costs (François et al., 2000). In summary, the scenario for the textile sector in Prato, and elsewhere, is a difficult one. The restructuring of activities will probably cause the closure of more firms and there will be a further reduction in employment (mainly female employment).[40] However, if a new entrepreneurial spirit emerges, it could inject new energies into the locality, by bringing new abilities and an attitude to cooperation that exceeds local geographical spaces.

4. CONCLUDING COMMENTS: LESSONS LEARNED

The North Staffordshire ceramics cluster and the Prato textile district are two of Europe's oldest industrial clusters, with a long history in the design and manufacture of high-quality ceramics and clothing garments respectively. However, the future for these traditional clusters has become increasingly uncertain, as globalisation and global outsourcing, combined with the growth in international competition (particularly from low-cost operators in Asia), threaten the long-term viability of these relatively labour-intensive industries in each region. In response to these challenges, each cluster has had to readjust and has begun to undergo significant structural change. This has sometimes been painful, with the ensuing reduction in the number of firms and the level of employment. Furthermore, structural change alters the nature of governance in each cluster. As we have argued and as is clearly highlighted in each case study, the issue of governance matters in that those who control an industry's strategic decisions effectively determine a cluster's and/or locality's long-term direction and economic development.

In considering the wider implications of globalisation and structural change, each of these localities can possibly learn from each other's recent experiences. For instance, in North Staffordshire, it is becoming increasingly recognised (particularly among policy advisers), that the 'old' modes of industrial hierarchy are unlikely to be successful, and that the future vitality of the cluster depends upon greater cooperation and networking between actors within (and perhaps outside) the locality. These changing perceptions are partially in recognition of the successful nurturing of the traditional Italian 'industrial districts' where the issue of governance has long been addressed in favour of less hierarchical modes of production. If, as Padley and Pugh (2000) suggest, the future of North Staffordshire ceramics lies in encouraging an entrepreneurial cluster of small-firm production, then perhaps there are lessons to be learnt from the earlier development of Prato's small-firm sector. In Prato, the locality's 'collective voice' led to a positive

policy response that laid the foundations for a new set of entrepreneurs to emerge following the cluster's industrial crisis of the 1940s (see Section 3.1). While the present industrial 'shake-out' affecting North Staffordshire's larger firms is disconcerting for both workers and the wider community, it may provide a greater imperative for a similar re-focus in industrial policy making, perhaps towards nurturing the cluster's fragile small-firm base.

Similarly, Prato can learn from the experience of North Staffordshire. The recent moves in the Prato district towards a greater consolidation of production and a reduction in the number of 'final firms' possibly echoes the 1960s merger wave in the North Staffordshire cluster. This merger wave not only significantly reduced the local economy's (ceramic) small-firm base, but it also altered the nature of governance in the cluster which, in turn, has exacerbated the present industrial crisis (see Sections 2.2 and 2.3). As we have argued in this chapter, if Prato is to avoid a similar mistake and the spectre of 'strategic failure', then the challenge for its local policy makers, in the face of continual structural change, is to seek ways in which a significant degree of strategic decision making can be retained within the locality.

Finally, we would argue that the future for both clusters is in seeking to establish and maintain world-class standards/benchmarks in the manufacture of ceramics and textiles respectively. In the global economy, there is little to be gained from manufacturing mass-produced wares or garments, where low-cost operators from the Far East have secured a comparative (labour) cost advantage. Rather, the future prosperity of each region depends upon a combination of successful marketing and continual innovation in art, design and technology to produce high-value-added products for the world market. To achieve such a favourable scenario, we envisage a positive role for networks, institutions and public research units. Here, Prato has an inherent advantage, since such bodies have long underpinned the region's economic development. In North Staffordshire, attitudes are becoming more favourable towards such institutions: the 'Hothouse' project has been a welcome step forward, although, as we have noted, similar initiatives are required to improve and sustain the cluster's long-term competitiveness.

In conclusion, the case studies in this chapter highlight, more generally, some of the challenges currently facing traditional industrial clusters in Western economies. While such clusters can survive and indeed prosper in the global economy of the twenty-first century, it is apparent that this can only be achieved by first considering the nature of the governance structures that impact upon the respective localities. It is our view that such an appraisal is a prerequisite in the formulation of appropriate policy initiatives, which aim to mitigate the negative effects of increasing globalisation upon a locality's development. Furthermore, a review of governance structures, combined

with positive moves towards a diffusion of strategic decision making within a locality is more likely to serve the wider public interest.

NOTES

* We would like to thank Geoff Bagnall, General Secretary of the Ceramic and Allied Trades Union (CATU) and Kevin Farrell, Chief Executive of the British Ceramic Confederation (BCC) for providing time for interviews in connection with this research.

1. On this issue, the debate has divided between scholars who believe that it is possible through policy action to replicate the organisation of production and labour that has been observed within certain districts and others who, on the contrary, are convinced that districts represent locally embedded experiences that, given the influence of cultural and historical processes for the evolution of behavioural rules, cannot be replicated everywhere (see, for example, Amin, 1989).
2. Indeed, and particularly pertinent to our study, it is interesting to note the following comments from a recent report of the North Staffordshire Taskforce (2003, Section 2.9): 'whilst funding constraints will always arise, a key issue to address is that of governance, both within the private and public sectors, and within civil society. This issue is pivotal to an understanding of both the problems and opportunities of North Staffordshire'. Furthermore, it is apparent that governance issues have begun to underpin recent European Union directives: see, for instance, the European Commission's (1997) directive on networking in relation to the textile industry (see Section 3.3).
3. On the notion of the public interest, see Long (1990). In particular, according to Long (1990, p. 171), the 'public interest' is defined as an evolving consensus among a set of people (a public) regarding private actions. Private actions are then assessed according to the standard agreed upon by the public. It is argued that the 'consequences of private parties' actions create a public interest as that public discovers its shared concern with the effects of private actions and the necessity for their control.
4. For a historical account of the development of the North Staffordshire potteries, see Thomas (1971).
5. Stoke-on-Trent was granted city status in 1910 and comprises six pottery towns – Longton, Fenton, Stoke, Hanley, Burslem and Tunstall. These towns provided the setting for many of the widely acclaimed novels of the (locally born) author Arnold Bennett, including *Clayhanger* and *Anna of the Five Towns*.
6. Data obtained from Stoke-on-Trent City Council (http://www.stoke.gov.uk). It is worth noting that the proportion of the local population directly employed in the ceramics industry has been in continual decline. In 1938, over half of the city's workforce were employed in the industry. By 1974 this figure had fallen to just over a third (Gay and Smyth, 1974, pp. 13–14).
7. The city attracts approximately 2.6 million annual visitors – 60 per cent primarily attracted by the 'pottery shopping' experience (ECOTEC, 1999).
8. The other main industry bodies whose headquarters are in the city are the Association for Ceramic Training and Development, the British Ceramic Plant and Machinery Manufacturers' Association, CERAM Research Ltd and the Ceramic Industry Forum.
9. This statement can be supported by reference to employment data in the industry: in the production of ceramic tiles, flags and sanitary ware, the North Staffordshire cluster accounts for 40 per cent of total UK employment; this figure rises to 60 per cent in both industrial ceramics and refractory products and then to approximately 80 per cent in the table and giftware sector (data provided by the Department of Trade and Industry (DTI) (http://www.dti.gov.uk/clusters/map/graphics/westmid.pdf)).
10. For a discussion on the literature on industrial districts and the North Staffordshire cluster see Day et al. (2000). More general discussion of the industrial districts literature can be found in other chapters in this volume, for example those by Pitelis and Pseiridis (Chapter 2), Bellandi (Chapter 4) and Parrilli (Chaper 10).
11. These data are provided by CATU. They are a useful indicator of the decline in employment since union density is approximately 100 per cent (Carroll et al., 2002).
12. For instance, in hotel-ware, Stoke-based companies such as Steelite and Dudson have been successful in developing close long-term (and profitable) relationships with their clientele.
13. Concerns have been raised about the issue of 'back-stamping', where firms produce their wares overseas, and then place a 'Made in Stoke-on-Trent/England' transfer on the finished product at their Stoke factory. The legalities of this issue are often complicated and controversial (Carroll et al., 2002). At a macro level, the region's local MEP, Michael Cashman (2003), has been campaigning for greater international regulation and policing on the 'back-stamp' issue. He suggests that 'back-stamps' be applied where the product was originally fired. It is argued that such a move would provide consumers with greater information and might ensure a 'fairer' international competition (and reduce counterfeits) in ceramics.
14. See also the discussion in Pitelis and Pseiridis in this volume (Chapter 2).
15. It is interesting to view the argument that benefits might be generated from returning to an earlier industrial structure in the light of Parrilli's observations in Chapter 10 with regard to there being a series of 'stages' that clusters pass through. While Parrilli uses this to justify optimism on the part of so-called 'survival clusters' in less developed countries, these arguments may provide an extension to such an approach in the sense of there being a 'stage too far'; see also the later analysis of the Prato cluster.
16. As always there is the public goods issue of 'access' to such facilities, and there is always a danger that larger corporations might 'crowd out' smaller firms, as in the case of the Japanese Public Testing and Research Centres (see Cowling and Tomlinson, 2003, p. 40). Our wish is that such facilities are particularly made accessible to smaller firms within the cluster. Bellandi, in Chapter 4, discusses public goods in the context of clusters in some detail.
17. For an in-depth discussion of ways to nurture an entrepreneurial society, see Gavron et al. (1998).
18. Admittedly this is a long-term problem, and is a consequence of the current pessimism relating to the industry's present situation, but there is no reason why the industry's image may not be improved if appropriate initiatives are taken.
19. A simple example of this principle in practice is that Moorcroft only allows its designers and employees to appear in publicity shots of Moorcroft pottery: management and directors are not allowed to do so (Edwards, 2000).
20. It is worth noting that during the early 1980s, Moorcroft had twice been close to bankruptcy before being purchased by the Edwards family in 1986. The subsequent organisational changes – initiated by the new owners – towards a 'flat' management structure and the generation of a 'family-orientated atmosphere' within the company are in sharp contrast to structures evident in the larger ceramics firms (and, indeed, British industry more generally).
21. The textiles and clothing sector comprises firms involved in production in a number of markets and sub-markets. These are primarily (a) the extraction and preparation of raw materials (wool, raw cotton, artificial and synthetic fibres, etc.); (b) manufacturing processes (spinning, weaving, knitting, finishing); (c) the production of final products for the clothing industry (standard garments, fashion and luxury garments); (d) other final markets such as the household industry (furnishing, carpets) and industrial goods (such as belting, high tech materials for sailing). For further information see Dicken (2003, pp. 317–19).
22. A significant number of this new labour force were women from rural areas, who had domestic experience of textile processes, such as preparing the yarn, weaving, and making the family clothes.
23. Source: Infocamere-Movimprese (2004).
24. Source: Unione Industriale Pratese (UIP, 2004).

25. In Prato, only 1 per cent of firms have over 50 employees; 14 per cent are classed as small firms (10–49 employees), and 85 per cent are micro firms (1–9 employees). (Source: ISTAT, 1996.)
26. In 1996, the average number of employees in Prato firms was 7 (source: authors' elaborations on ISTAT). By comparison, in 1999, the average textile firm in the EU had 12 employees (source: authors' elaborations on Eurostat, 2004).
27. Between 1945 and 1948 the number of employees rose from approximately 10 000 to 22 000 workers. However, in 1948 the vertically integrated mills lost their export markets in South Africa, India and the Middle East, due to the introduction of protectionist policies in these countries and also to changes in the patterns of international trade after the war (see Dei Ottati, 2003).
28. Since the early 1980s, other European textile and clothing regions, such as Nord Pas de Calais in France, Tilburg in the Netherlands, the North West of England and Baden-Württemberg in the south-west of Germany have also undergone significant industrial restructuring with resulting falls in employment levels. Indeed, throughout the EU, between 1980 and 1995, the decline in employment was 47 per cent in textiles and 40 per cent in clothing (Stengg, 2001, p. 3). Over the same period, Prato has experienced a more moderate 17 per cent fall in employment.
29. ISTAT (1996). These are the latest national figures available from the national census office. More recent data are derived from the Unione Industriale Pratese (UIP) (2003).
30. It should be noted, however, that while Prato's entrepreneurs have diversified their products by looking to manufacture 'lighter tissues' of wool or by addressing new market segments such as the production of technical fabrics and garments, the core business in Prato remains the manufacture of woollen fabrics (indeed, the production of raw fibres and yarn preparation amounts to merely 15 per cent of total turnover, while the clothing industry accounts for 23 per cent – woollen fabrics account for the remainder).
31. See Ceccagno (2003).
32. With a presence of 10 000 people, the Chinese constitute 5 per cent of the inhabitants of Prato (population 190 000). The Chinese own 1500 firms, mainly undertaking subcontracting activities in the clothing sector. Prime contractors usually do not exceed three or four firms.
33. Data from the European Commission (2003).
34. For instance, in 1998, there were wide hourly wage differentials in the clothing industry. In Germany, for instance, hourly wage rates were US$18.00 but this dramatically fell to US$2.77 in Poland, US$1.36 in Morocco, and US$1.04 in Romania. In China, India, Indonesia, Pakistan and Vietnam labour costs are under US$0.45 per hour (source: ILO, 2000, p. 41). The average hourly wage in Italy for workers in textile and clothing was approximately US$17.00.
35. See Dei Ottati (2002) for the distinction between 'phase' and 'final' firms.
36. This might be compared also with the structure of the car industry cluster in the south of Italy set out in the chapter by Quintana and Puligano (Chapter 9), for example.
37. See Dei Ottati (2003) for an application of exit and voice strategies within the Prato district.
38. For example, the agreement on procedures and initiatives to improve relations between commissioning firms and subcontractors in the Prato textile district, signed in 1997.
39. See, for example, the strategic policy objectives declared by local institutions for the promotion of textiles and the development of the district (Caloffi, 2002). See also the chapter by Aranguren et al. in this volume (Chapter 12), where similar arguments are made regarding local development agencies in the Basque Country region of Spain.
40. The percentage of women in textile employment is between 40 and 60 per cent in Italy, the UK, Spain, Austria and Greece. Central and Eastern European countries (plus Portugal) have between 60 and 80 per cent of female workers in their staff. The role of women is even more important in clothing, 'with women taking up 74 per cent of the jobs in clothing worldwide' (1995 figures; source: ILO, 2000, p. 25). However, between 1985 and 1995 the share of women employed in the European clothing industry dropped from 81 to 76 per cent, and in Italy this reduction included an actual employment loss of 80 000 female employees (ibid., p. 25).

REFERENCES

Amin, Ash (1989), 'A model of the small firm in Italy', in E. Goodman, J. Bamford and P. Saynor (eds), *Small Firms and Industrial Districts in Italy*, London and New York: Routledge.

Branston, J.R., Rubini, L., Sacchetti, S., Sugden, R., Wei, P. and Wilson, J.R. (2003), 'The development of local economies and the possible impact of public policy: a framework for case studies', L'institute Discussion Paper No. 20.

Brusco, S. (1982), 'The Emilian model: productive decentralisation and social integration', *Cambridge Journal of Economics*, **6** (2), 167–84.

Caloffi, A. (2002), 'Iniziativa locale per il rilancio del settore tessile e dello sviluppo distrettuale' *Newsletter*, Club dei Distretti Industriali (4/1/04), http://www.clubdistretti.it.

Carroll, M., Cooke, F.L., Hassard, J. and Marchington, M. (2002), 'The strategic management of outsourcing in the UK ceramic tableware industry', *Competition and Change*, **6** (4), 327–43

Cashman, M. (2003), 'Ceramics backstamping' (An article for the CBI) http://www.michaelcashmanmep.org.uk/campaigns.asp.

Ceccagno, A. (ed.) (2003), *Migranti a Prato. Il distretto tessile multietnico*, Milan: Franco Angeli.

Ceramic Innovations (2003), *Sector Workforce Development Plan*, http://www.actd.co.uk/CINN/workfporce.htm.

Cowling, K. and Sugden, R. (1994), *Beyond Capitalism, Towards a New World Economic Order*, London: Pinter.

Cowling, K. and Sugden, R. (1998), 'The essence of the modern corporation: markets, strategic decision-making and the theory of the firm', *The Manchester School*, **66** (1), 59–86.

Cowling, K. and Sugden, R. (1999), 'The wealth of localities, regions and nations: developing multinational economies', *New Political Economy*, **4** (3), 361–78.

Cowling, K. and Tomlinson, P.R. (2003), 'The problem of regional hollowing out in Japan: lessons for industrial policy', in R. Sugden, R.H. Cheng and G.R. Meadows, *Urban and Regional Prosperity in a Globalised New Economy*, Cheltenham: Edward Elgar, pp. 33–58.

Day, M., Burnett, J., Forrester, P.L. and Hassard, J. (2000), 'Britain's last industrial district? A case study of ceramics production', *International Journal of Production Economics*, **65**, 5–15.

Dei Ottati, Gabi (2002), 'Social concentration and local development: the case of industrial districts', *European Planning Studies*, **10** (4), 449–66.

Dei Ottati, Gabi (2003), 'Exit, voice and the evolution of industrial districts: the case of the post-World War II economic development of Prato', *Cambridge Journal of Economics*, **27** (4), 501–22.

Dicken, P. (2003), *Global Shift: Reshaping the Global Economic Map in the 21st Century*, London: Sage.

ECOTEC (1999), *A Strategic Analysis of the Ceramics Industry in Staffordshire*, Birmingham: ECOTEC Research and Consulting Limited.

Edwards, H. (2000). 'How do I turn on my workforce?', in I. Jackson, S. Leech, M. O'Keefe and L.Trustrum (eds), *Ceramic ambitions and Strategic Directions: Perspectives on the UK Ceramics Industry*, Stoke-on-Trent: Staffordshire University Business School, pp. 62–4.

European Commission (1997), 'Plan of action to increase the competitiveness of the European textile and clothing industry', *Communication from the Commission*, COM(97) 454 final.
European Commission (2003), DG Commerce, Conference on 'The future of the T&C industry after 2005', Brussels, 5–6 May.
Eurostat (2004), *Textile and Clothing. Statistics*. Last update: 10 May 2005, accessed 5 July 2004, http://europa.eu.int/comm/enterprise/textile/statistics.htm.
François, J.F., Glismann, H.H. and Spinanger, D. (2000) *The Cost of EU Trade Protection in Textiles and Clothing*, Working Paper No. 997, Kiel Institute of World Economics.
Gavron, R., Cowling, M., Holtham, G. and Westall, A. (1998), *The Entrepreneurial Society*, London: Institute for Public Policy Research.
Gay, P.W. and Smyth, R.L. (1974), *The British Pottery Industry*, London: Butterworths.
ILO (International Labour Organization) (2000), *Labour Practices in the Footwear, Leather, Textiles and Clothing Industries*. Report for discussion at the Tripartite Meeting on Labour Practices in the Footwear, Leather, Textiles and Clothing Industries. Geneva: International Labour Office.
Infocamere-Movimprese, Statistics on Italian enterprises. Accessed January 2004, http://www.infocamere.it/movi_search.htm.
ISTAT, Census of Industry and Commerce, 1980, 1996, Rome.
Jackson, I. (2000). 'Profile of the UK ceramics industry', in I. Jackson, S. Leech, M. O'Keefe and L.Trustrum, *Ceramic Ambitions and Strategic Directions: Perspectives on the UK Ceramics Industry*, Stoke-on-Trent: Staffordshire University Business School, pp. 8–13.
Kathuria, S., Martin, W. and Bhardwaj, A. (2001), *Implications for South Asian Countries of Abolishing the Multifibre Arrangement*, Washington, DC: World Bank.
Keynote (2003), *China and Earthenware Market Report*, London: Keynote Market Reports.
Long, N.E. (1990), 'Conceptual notes on the public interest for public administration and policy analysts', *Administration and Society*, **22** (2), 170–81.
Morosini, P. (2003), 'Industrial clusters, knowledge integration and performance', *World Development*, **32** (2), 305–26.
North Staffordshire Taskforce (2003), *Report of the North Staffordshire Taskforce* http://www.advantagewm.co.uk/task-force-report.doc (Advantage West Midlands: Birmingham).
Padley, H. and Pugh, G. (2000), 'The pottery industry: exploding the myths and charting the way', in I. Jackson, S. Leech, M. O'Keefe and L. Trustrum (eds), *Ceramic Ambitions and Strategic Directions: Perspectives on the UK Ceramics Industry*, Stoke-on-Trent: Staffordshire University Business School, pp. 14–33.
Piore, M. and Sabel, C. (1984), *The Second Industrial Divide: Possibilities for Prosperity*, New York: Basic Books.
Regione Toscana (2003), 'Tessile, prove tecniche per riciclare le acque di lavorazione', *Prima Pagina*, Newsletter of Regione Toscana, 29 November. Accessed 4 January 2004, www.regione.toscana.it/primapagina.
Rowley, C. (1998), 'Manufacturing mobility? Internationalisation, change and continuity', *Journal of General Management*, **23** (3), 21–34.
Sacchetti, S. and Sugden, R. (2003), 'The governance of networks and economic power: the nature and impact of subcontracting relationships', *Journal of Economic Surveys*, **17** (5), 669–91.

Stengg, Werner (2001), 'The textile and clothing industry in the EU. A survey', European Community Enterprise Papers, No. 2, Brussels, European Community.
Staffordshire Evening Sentinel (4 June 2003), 'Massacre at Wedgwood', Etruria, Stoke-on-Trent: Staffordshire Newspapers Ltd.
Staffordshire Evening Sentinel (26 March 2004), 'The end: Royal Doulton closes its last factory in city', Etruria, Stoke-on-Trent: Staffordshire Newspapers Ltd.
Thomas, J. (1971), *The Rise of the Staffordshire Potteries*, Bath: Adams and Dart.
Unione Industriale Pratese (UIP) (2003), *La congiuntura nel distretto tessile di Prato*, 23 September, Ufficio Studi, published research report, Prato.
Unione Industriale Pratese (UIP), accessed January 2004. http://www.ui.prato.it/unionedigitale/info/distrettopratese.
Whipp, R. (1990), *Patterns of Labour. Work and Social Change in the Pottery Industry*, London and New York: Routledge.
Zeitlin, M. (1974), 'Corporate ownership and control: the large corporations and the capitalist class', *American Journal of Sociology*, **79** (5), 1073–119.