Coventry University

PHD BY PUBLICATION

The role of mature sectors in promoting regional economic development in the West Midlands

Berkeley, N. P.

Award date:
2011

Awarding institution:
Coventry University

The Role of Mature Sectors in Promoting Regional Economic Development in the West Midlands

N.P. Berkeley

A thesis submitted in partial fulfilment of the University's requirements for the Degree of Doctor of Philosophy

2011

Coventry University

Contents

1. Introduction

1.1 This thesis brings together a coherent and inter-linked body of research published between 2000 and 2009 on clothing manufacturing; a sector that could be labelled 'mature' in its phase of economic development in Western economies. It investigates why in recent decades, despite notable early resilience the clothing industry within the West Midlands Region in the UK has declined markedly, placing this decline in the context of the picture nationally and internationally. It provides an in-depth analysis of the how the sector is placed to adapt, reverse decline and enhance its competitiveness, conceptualising firm behaviour in respect of attitudes to growth and change. Finally, it prescribes strategies and actions for the sustainability of such mature manufacturing sectors within modern growth-led economies. In doing so it recognises the crucial role played by government institutions at all scales in facilitating this process. The definition of 'mature' used here applies to a sector or industry that has limited growth prospects and is becoming less important to the economy. Mature sectors can be seen as long-established within countries traditionally evolving from a basis of mass production serving low-value added markets. In the UK sectors such as motor vehicles, food and drink and clothing and textiles, have in recent decades faced an uncertain future as the forces of globalisation mean that firms within them can no longer remain competitive in price driven markets. In this sense the clothing industry can be seen as mature in the way in which the majority of production has shifted to low-cost countries with value-added less labour intensive design and marketing functions carried out here in the UK. The decline in the clothing industry in terms of employment and output has been such that it could be labelled a 'sunset' industry despite notable small pockets of resilience attributed to the efforts of ethnic entrepreneurs and described in this thesis (Ram et al, 2003). However, it is not argued that the industry has witnessed product maturity. There is clearly still strong and growing demand for clothes. More it is the case that in western economies traditional forms of mass production which depend on high labour inputs have largely disappeared. At the same time, the sector can be seen to retain an important socio-economic role (in the case of clothing in providing employment opportunities for marginalised communities) and as such policy makers may continue to support it as a vehicle for promoting economic development, but only where there is clear potential for firms to modernise and diversify away from low value markets to niche markets driven by quality and high value.

1.2 Whilst much has been written on the UK clothing[1] industry from the perspective of different disciplines, for example, on the form and nature of economic decline (Taplin & Winterton, 1996; Taplin 2006; Dicken 2007; Jones 1996; Winterton and Barlow, 1996); entrepreneurship and firm behaviour (Ram et al, 2002, 2003); business support (Husband & Jerrard, 2001); and issues of culture and gender (Phizacklea, 1990 and Phizacklea and Wolkowitz, 1995), very little has been done which bridges these disciplines in a systematic way. This research attempts to overcome this gap by providing an *economic development perspective* to the debate drawing upon research material, methods, techniques and analysis from across the disciplines of geography, planning, social studies, business and regeneration to produce new insights into the role of mature sectors in promoting regional economic development. By extending the scale and the scope of the research in this way it has been possible to obtain a much broader perspective on the issues and challenges facing SMEs in the clothing sector in relation to spatially-specific issues such as: business culture; attitudes to business support; growth and diversification; and governance; alongside broader macro-economic issues such as globalisation. By applying this approach to a Region, and to Coventry in particular, the research has also gone further by providing well grounded, joined-up strategic direction for the survival, competitiveness and growth of the industry in a particular locality, whilst at the same time providing transferable knowledge for policy makers elsewhere. In this sense the research is important in its wider value and applicability. Indeed concepts have already been applied and extended from sector to cluster, and to different industries within Coventry and the wider Region.

1.3 Through a case study of the clothing industry in the West Midlands region, the overall aim of the thesis is to provide an analysis of the changing role of mature industrial sectors in the process of local regional and regional economic development; examining their potential to have a sustained future within a rapidly changing sectoral landscape.

[1] For the purposes of this thesis the clothing industry refers to the Standard Industrial Classification Division 17 – the manufacture of wearing apparel

1.4 Within this context the overall objectives of the research are to:

I. Analyse the historical economic development of West Midlands Region (WMR), in particular the processes of de-industrialisation and immigration that sowed the seeds for the emergence (and subsequent decline) of the clothing industry

II. Analyse and evaluate the reasons for the decline of the UK clothing industry, placing this within an international context and examining spatial variations

III. Examine the reasons for the decline of the clothing industry in the WMR following a period of growth and resilience

IV. Conceptualise the behaviour of clothing SMEs in respect of their attitude to diversification, growth and 'clustering' as a means of enhancing competitiveness

V. Formulate strategies for the sustainability of clothing manufacture

1.5 The journal articles, book chapters and applied research reports have been carefully chosen and situated in order to develop a consistent theme and a critical thread of argument. In so doing, the author has chosen not to include various published papers in order to maintain a body of publications with a coherent theme, rather than to produce a set of published, yet not necessarily connected, papers. A listing of other published work which has not been included in this submission is detailed in the Appendix along with the author's full Curriculum Vitae at the time of submission.

1.6 In bringing together a coherent body of research on the West Midlands clothing industry it is felt that the work:

- Provides evidence of training in a number of research methods appropriate to the discipline and area of study (both qualitative and quantitative)

- Provides evidence of knowledge in the general field of economic development policy, globalisation and structural change in local economies

- Demonstrates evidence of originality (as evidenced through publication in refereed journals and books; through the award of EU and institutional funding; and through the impact of the research on policy and practice)

- Demonstrates the ability for critical independent judgement in prescribing strategies and actions for the sustainability of mature "sunset" industries within modern knowledge-based economies

- Demonstrates a common theme with a link throughout the work.

1.7 The submission is subsequently organised into five main sections:

- An autobiographical context for the research

- An analysis of the portfolio of evidence

- A review of the research methodology, practice and theories that link the outputs together

- An analysis of impact of the research in terms of its contribution to knowledge, policy and practice and how others have appraised it
- A statement on the contribution of other authors to the outputs

- Conclusions and further research

2. Autobiographical context

2.1 Work by the author in this area of research dates back to 1990 since when a substantial body of experience and expertise has been developed. This initially included a range of client focused projects relating to the West Midlands regional economy. These not only helped to develop an understanding of economic development issues within the Region but also to significantly enhance research skills and project management. Examples, referenced in Appendix 1, include:

- an analysis of the benefits of foreign direct investment to the West Midlands Region
- a review of employment and skills trends in Coventry
- a regeneration strategy for a North Warwickshire market town
- an industrial vision and regeneration framework for the Black Country
- an assessment of the Walsall local economy
- a mid-term evaluation of Single Regeneration Budget projects in Coventry & Warwickshire
- an analysis of regional economic prospects and interpretation of forecasts
- an analysis of the impact of Coventry's proximity to Birmingham for local economic development
- an analysis of the history, emergence and identity of the West Midlands Region

2.2 Research on the clothing industry (including its wider High Value Added Consumer Products Cluster and latterly Creative Industry) dates from 1997 and has focused on providing market intelligence and strategic support to key stakeholders in the industry. A total of **29 outputs** in the form of published conference proceedings, chapters in books, journal articles, applied research reports and international conference presentations have been produced (see Appendix 1). Outcomes have been used to inform policy and practice aimed at helping the industry become more competitive through moving into higher value production taking advantage of new technologies and embracing innovative approaches to management. Table 1.1 describes the chronology of the research, worth some £350,000 in funding, along with Berkeley's contribution.

Table 1.1: Chronology of clothing industry and related research

Project	Funding	Contribution / Role
(a) Market Information Survey mapping the clothing sector in Coventry	ERDF, RETEX II £25,000 1996-1998	Analysis of interviews and support on the production of the final report
(b) An examination of the scale of decline in the clothing sector across the European Union	ESF, ADAPT £242,000 1998-2000	Principal Investigator, leading on the local Coventry project and a transnational work package; production of audit report for ESF for final claim of grant
(c) An Industrial Development Strategy for Coventry's clothing industry		
(d) A comparative analysis of firm behaviour in the clothing sector and automotive cluster in the West Midlands	EU Fifth Framework, RASTEI £2,500 2001	Management and delivery of 20 interviews with clothing firms (for University of Oxford)
(e) A comparative analysis of the clothing industries in the West Midlands Region and the Western Cape (South Africa).	Coventry University Small Research Grant Scheme £3,000 2004-2005	Principal Investigator, managing delivery of the research with RA support
(f) Foresighting future high level skill needs for the regions' High Value Added Consumer Products Cluster	ESF (AWM) £42,000 2004-2006	Project Director, liaising with the clients over the completion of the research to time and quality requirements, managing staffing resources, as well as undertaking fieldwork and analysis.
(g) Re-engaging ethnic minority-owned businesses with mainstream business support in the Coventry & Warwickshire sub-region	Coventry & Warwickshire Chamber of Commerce £15,000 2006	
(h) Mapping the scale and scope of creative industries (which incorporate designer-led fashion) in the Coventry & Warwickshire sub-region	Coventry City Council (LEGI) £20,000 2008	

2.3 Research outputs stemming from projects (b) to (e) form the basis of the portfolio of evidence analysed in Section 3 below, whilst the projects highlighted in (f) to (h) are used to illustrate the ongoing impact of the research in terms of contribution to knowledge, policy and practice (see Section 5).

3. Analysis of the portfolio of evidence

Introduction

3.1 The portfolio of evidence consists of seven outputs published between 2000 and 2006, including book chapters (1), journal articles (3), published conference proceedings (1) and applied research reports (2). Conceptually, these are presented in the form of a logic pathway which illustrates the key linkages that knit the outputs and objectives together, namely, a chronological process which (i) situates the decline of the clothing industry in its wider regional economic development context (ii) conceptualises that decline (iii) describes the industry's readiness to reverse decline and (iv) presents a strategy for moving the clothing industry forward (See Figure 3.1). The following analysis of the research portfolio is organised to reflect this logic pathway. It is presented in five parts:

Part A: Economic History of the West Midlands Region: sowing the seeds for the emergence of the clothing industry

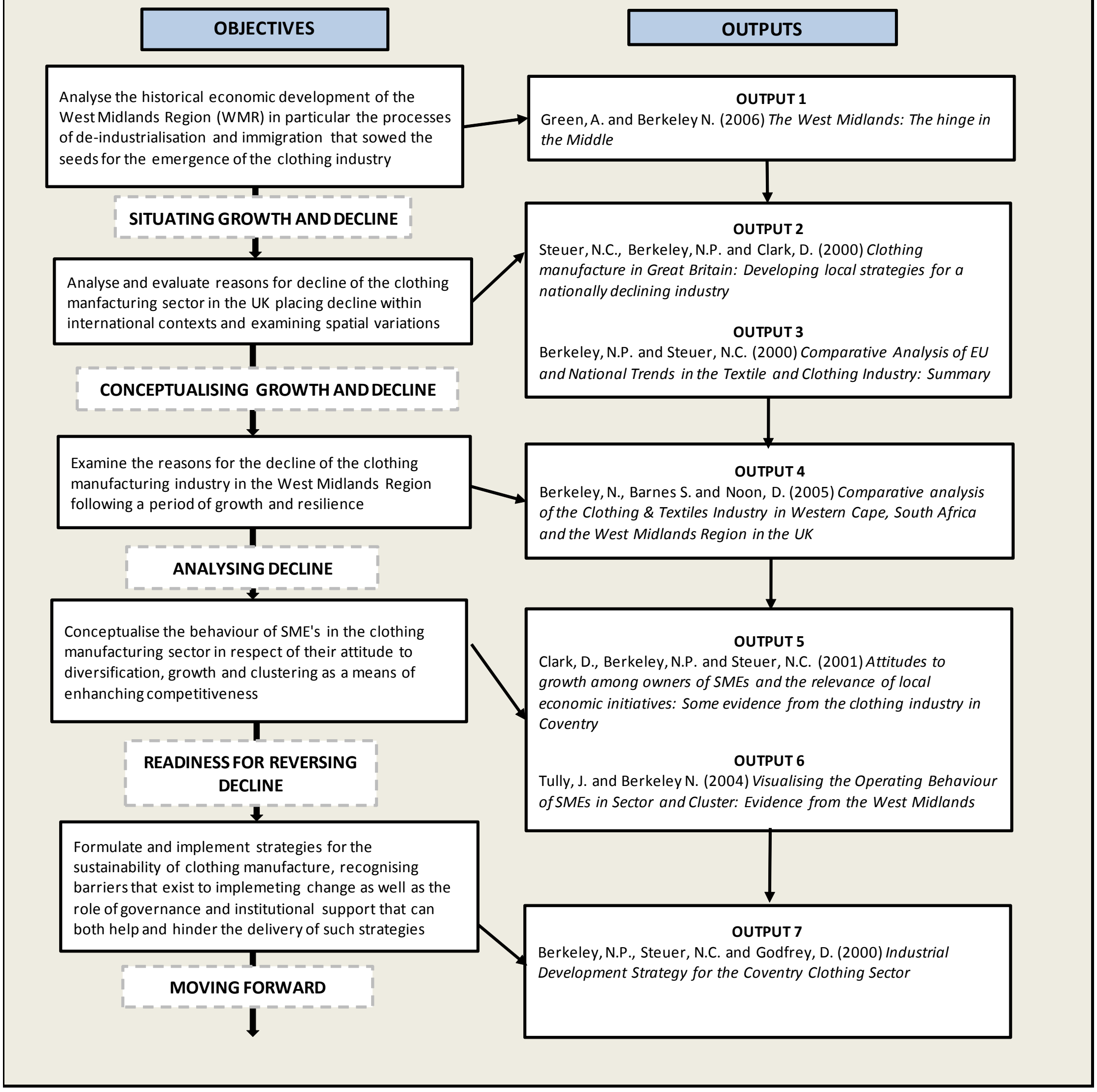
Part B: The decline of clothing manufacture in the latter half of the 20th century

Part C: Clothing manufacture in the West Midlands Region 1960-2000: Growth, resilience and decline

Part D: Reversing Decline?: the readiness of the clothing industry to adapt to change

Part E: Strategies for sustainability and growth of clothing manufacture

Figure 3.1: Portfolio of Evidence- Logic Pathway



Part A: Economic History of the West Midlands Region: sowing the seeds for the emergence of the clothing industry

3.2 In presenting the portfolio of research on the clothing industry it is important to place the sector in the broader context of economic development and restructuring in West Midlands Region that has resulted in a legacy of mature industrial sectors. In the form of a book chapter, **Output 1, '*The West Midlands: The hinge in the Middle'*** (Green and Berkeley, 2006) examines firstly the history, emergence and identity of the Region drawing upon research, for example, by Wood (1976), Dury (1978) and Upton (1999). It describes how the Region has unique characteristics, being the only landlocked English region and being dominated in its urban core by one city: Birmingham. The geographical definition of the region is highlighted as contentious, and the way in which boundaries have been artificially imposed is argued not to have helped in engendering regional identity.

3.3 The chapter illustrates how the heart of region, lying in the watershed of two major river systems: the Trent and the Severn-Avon, became the centre of the *industrial revolution* in the 18th century. The Black Country, with mineral deposits; and Coventry and Birmingham, with an abundance of skilled labour to produce finished goods (from historical involvement with metals and textiles trades), emerged as the focal point of country's metal industry. This is subsequently reflected in the region's industrial identity, found in the growth, character and distinctive products that put its cities on the map. Birmingham became famous for guns, buttons, 'toys', trinkets, jewellery and the motor industry; the Black Country from coal mining and heavy industry to bicycles, cars, armaments, machine tools and aero engines; Coventry, developing from its 'medieval greatness' in textiles, to produce watches, sewing machines, cycles, motor-cycles, aero engines, tractors, machine tools and cars; and the Potteries in North Staffordshire emerged as the centre of the ceramics industry.

3.4 The second part of the chapter analyses economic and demographic trends in the Region, highlighting key implications. During the post-war boom from 1945 to the early-mid 1970s the West Midlands emerged as one of the more prosperous regions in England, seeing rapid population and employment growth. However, the dependence upon manufacturing and especially the traditional mass producing engineering industries left the region highly vulnerable and the forces of globalisation and deindustrialisation ultimately hit the Region especially hard (see Section 4 for discussion of theories). In 1965 nearly two-thirds of the labour force in the West Midlands was employed in manufacturing. By 1982 this proportion had fallen to a third, and by 2002 less than one-fifth.

3.5 In demographic terms the West Midlands Region is described in the Chapter as second only to London terms of its ethnic and cultural diversity. This is especially true of the urban core of the Region around Coventry, Birmingham and the Black Country. For example, 30 per cent of Birmingham's population is from non-White ethnic groups. This process of immigration, most markedly from former British colonies in South East Asia, has been a key feature of the regional economy since the 1960s.

3.6 It is this combination of circumstances: the decline of traditional mass manufacturing industries which left a surfeit of 'cheap' industrial premises and skilled redundant workers; coupled with large scale immigration of south-east Asian communities that created the conditions for the emergence of industries such as clothing in the Region. This process can be seen as illustrative of the role of 'ethnic entrepreneurs' and of ethnic community-based economic networks in West Midlands cities (most notably in the conurbation), which in itself is indicative of a process of what Henry et al. (2002) term 'globalisation from below', drawing on the distinctive histories and transnational links of residents. As well as sowing the seeds for the emergence and growth of the clothing industry it is this same set of circumstances that underpinned the subsequent decline of the industry that is described below.

Part B: The decline of clothing manufacture in the latter half of the 20th century

Introduction

3.7 The aim of Part B is to analyse and evaluate reasons for the decline of the clothing manufacturing sector in the UK, examining spatial variations and placing decline within an international context. In doing so it draws on two outputs: *Clothing Manufacture in Great Britain: Developing Local Strategies for a Nationally Declining Industry* (Output 2) and *A Comparative Analysis of EU and National Trends in the Textile and Clothing Industry* (Output 3).

Clothing manufacture in the UK: a nationally declining industry

3.8 **Output 2, 'Clothing Manufacture in Great Britain: Developing Local Strategies for a Nationally Declining Industry'** is a published international conference paper drawing upon research conducted as part of the ADAPT project (see Table 1.1). This paper adds to the literature by analysing the spatial variations evident in the pattern of decline of the clothing industry in Great Britain during the latter half of the 21st century (Steuer et al, 2000, 1999). It highlights how these spatial variations can be linked to the pronounced differences apparent in the structure of the industry between and within regions. In the first section the paper presents an analysis of decline in clothing manufacture in Great Britain, drawing upon key literature and theory.

3.9 Clothing manufacture provided a major source of employment in Great Britain from the 19th century. At its peak in 1911, employment reached 800,000 (Godley, 1996). Since this date however, the industry's importance to the economy has declined, both in absolute and relative terms. Most apparent since the 1970s, this decline has been linked both to the processes of **deindustrialisation and globalisation**; witnessed in the decline of mass manufacturing in developed economies and its almost wholesale relocation to lower-cost producers in developing and emerging economies; and the **retail revolution** in which the modern demands of retailers for flexible production (involving much shorter production runs of quick turnaround multi-seasonal fashion garments) were met with a limited response from British manufacturers (Dicken, 2007; Gibbs, 1998; Winterton and Barlow, 1996; Crewe and Davenport, 1992; see Section 4 for a fuller discussion of these theories). In high wage developed economies the clothing industry can be described as a "sunset industry" in which jobs will continue to disappear due to the intense nature of competition from low wage economies. This will remain the case as long as the industry is labour intensive, low on technological innovation and is characterised by low barriers to entry (Taplin and Winterton, 2004).

3.10 The paper highlights the scale of the sector's decline, showing that during the period 1971-1991 over half of UK clothing industry jobs were lost, with employment falling from 330,000 to 146,000 (Jones, 1996). Despite some resilience in the early-mid 1990s, the industry faced renewed difficulties at the turn of the century. Weak retail sales in the UK forced many retailers to seek lower-cost suppliers overseas in an attempt to improve their margins. At the same time manufacturers faced mounting pressures: significant import penetration resulting from trade liberalisation; growing competition from new and emerging markets; increased concentration amongst buyers leading to a demand for smaller quantities of more varied goods at lower cost; and machinery and technology becoming rapidly obsolete in coping with this demand. In response, many firms sought to move low-value production tasks offshore (Taplin, 2006). The emergence of clothing producers in the 'transition' economies of central and eastern Europe, with their relatively short shipping times to UK markets, abundant supply of skilled low-cost labour, weaker employment legislation and favourable trade agreements suited this situation perfectly (Taplin, 2006; Taplin and Winterton, 2000). At the same time, as Taplin (2006) suggests, those firms in western Europe seeking to retain domestic production have been forced to concentrate on product quality, design and ultimately high value added activities.

3.11 Employment in UK clothing manufacture subsequently fell by a further 48 per cent in ten years to stand at 77,000 in 2001 (Office for National Statistics, 2001). Analysis of other economic indicators reinforces the picture of a sector in decline. Between 1995 and 2002, output declined by 44 per cent, whilst the number of clothing sector firms fell by 35 per cent (Jones and Hayes, 2004). Interestingly, since the mid-1990's output and employment have declined in parallel. This sits in contrast to previous years where productivity gains saw output remain fairly constant despite rapidly falling employment (Figure 3.2). Moreover, the rapid growth in imports (104% rise between 1993 and 2001) is reflected in a substantial trade deficit; standing at some 4.8 billion Euros in 1997 (Textile Outlook International 1998; Taplin 2006).

Figure 3.2: Trends in output in employment in UK clothing industry

This item has been removed due to third party copyright. The unabridged version of the thesis can be viewed at the Lanchester Library, Coventry University.

OUTPUT EMPLOYMENT

Source: Jones and Hayes, 2004, page 264

3.12 The second section of Output 2 contends that whilst global shifts in production and changes in consumption patterns may underpin the decline of clothing manufacture nationally they do not explain wide geographical variations in performance. Analysis of Annual Employment Survey data (now Annual Business Inquiry) revealed that alongside a 56% decline in clothing sector employment nationally between 1971 and 1991, the South East lost 76% of jobs and the North West, 65%. At the same time, the West Midlands lost just 14% and the East Midlands even recorded an increase in employment, albeit of 1% (Table 3.1).

3.13 Moreover, it was highlighted that although such regional analysis is useful in providing an indication of broad changes in sectoral employment, it masks important local trends. Within the context of net contraction, some local areas of Britain were shown to have fared particularly badly, experiencing job losses at a rate much higher than the national average. For example, the counties of Greater London, Greater Manchester, and West Yorkshire each lost more than half of their clothing employees in the period 1981 to 1996, at a time when clothing employment in Britain decreased by a just over a third. Of particular interest to analysts and policy-makers however, is the fact that over the same period other localities experienced resilience, even growth. This is especially apparent in Leicestershire (+

5,000 jobs) and in the West Midlands conurbation (+ 1,900). Growth has been attributed to the emergence of new centres of clothing manufacture, accounted for by two principal factors: first, to the diversification of the hosiery and knitwear industries to incorporate clothing production in East Midland localities such as Leicester, and secondly to the establishment of Asian-owned enterprises in areas such as Coventry, Birmingham and the Black Country in the West Midlands conurbation (Healey and Ilbery, 1990).

Table 3.1: Employment in clothing manufacture in Great Britain and its regions, 1971-1991

Source: Steuer et al, 1999

3.14 The third section of the conference paper sought to provide explanations for spatial patterns of decline, linking performance (in employment terms) to industrial structure and to the size of firms in particular. For example, all but one of the counties which typically have a high proportion of large firms lost over 1,000 clothing employees over the period 1981-96, whilst Leicestershire and the West Midlands conurbation, dominated by SMEs, experienced the largest level of employment gain out of all Britain's counties (Annual Employment Survey, 1998). By way of explanation, larger firms were shown to have been most severely affected by the failure to respond to increased demands for flexibility in production. Such firms, traditionally mass producing standardised goods, suffered from outmoded technology without access to the necessary resources to invest in new capital and equipment. If resources were available it required entrepreneurs to be aware of and be able to exploit opportunities provided by new technologies. In essence many large firms had economies of scale but not of scope. They lost their competitive advantage and were forced to shed labour and/or diversify to reduce costs. Smaller enterprises, although generally having less capital to invest, are considered to have fared better due to being more entrepreneurial and adaptable in their production techniques, often moving to systems of manufacture based on smaller batch size, shorter lead times and more rapid turnaround of orders. At the same time, newly emerging small firms found it much easier to take advantage of new technologies and processes than their long established larger counterparts. They were also able to exploit opportunities provided by a political climate that heavily promoted an enterprise culture (Baker, 1996), and in the case of south-east Asian entrepreneurs access financial capital through their family and community connections.

The decline of clothing manufacture in Western Europe: the international context

3.15 **Output 3, *A Comparative Analysis of EU and National Trends in the Textile and Clothing Industry*** is a research report stemming from an ESF funded ADAPT project (see Table 1.1 above) which builds on Output 2 by examining the scale of decline in clothing manufacture in the European Union, as well as an original comparative analysis of trends taking place at the national level in six case study countries (Berkeley and Steuer, 2000a, 2000b). The report revealed global discrepancies in labour costs, and the failure to both keep pace with new technologies and to respond to changing market conditions as key factors underpinning decline in the sector across the continent. At a national level it also highlighted how these factors also largely explain differential performance between nations (Berkeley et al, 1999).

3.16 Output 3 highlighted that employment decline in the EU clothing industry mirrored that of the UK described previously. For example, between 1980 and 1993 across the then twelve member states 450,000 jobs were lost. Employment decline continued throughout the 1990s with a further 150,000 jobs disappearing (Berkeley et al, 1999). Taplin confirms this trend, highlighting that between 1980 and 1995 employment in clothing manufacture (EU15) declined by 40 per cent, and between 1999 and 2002 declined by a further 18 per cent (Taplin, 2006). All member states have been affected, although Germany, Greece, Belgium, Austria, Denmark and Ireland fared comparatively worse.

3.17 The Report also highlighted the relative concentration of EU clothing employment and the important role played by the UK, despite the scale of decline observed above. In 1996, over 90% of clothing manufacturing employment was accounted for by six member states with the UK and Italy both accounting for one-fifth, whilst Portugal (14%), France (13%), Germany (12%) and Spain (12%) had similar shares. Data published by Taplin for 2003 showed that the same six countries still accounted for 90% of total EU employment. However, by this time continued employment decline saw the UK's relative share fall to just 10% (Taplin, 2006).

3.18 Analysis of non-employment indicators in the Report again paints a picture similar to that of the UK: rapid decline in the number of clothing manufacturing enterprises; declining output; and a growing balance-of-trade deficit, the latter increasing by 41 per cent between 1990 and 1997 alone. The role of delocalisation of production in explaining declining EU clothing production was highlighted. This has involved the establishment of new production facilities offshore or outward processing trade (OPT). The latter process, where firms temporarily export to a low cost country for finishing/making-up and then re-import goods into the country of origin, has become increasingly prevalent. Here, whilst labour costs are crucial, transport costs and speed of delivery have become increasingly important as demands for quick production turnaround in the industry have intensified. Countries initially benefiting most from OPT were in North Africa and the former Yugoslavia. However, the collapse of communism in Eastern Europe saw Poland, Hungary, Romania and the Czech Republic emerge as key markets. Data reveals that EU clothing imports under OPT from East European countries increased from 65,000 tonnes to 185,000 tonnes between 1990 and 1995 alone (Taplin, 2006). Such countries have the comparative advantage of proximity, being able to deliver rush/quick replenishment orders in 2-3 days compared to 45 from Asian countries. Tokatli and Kizilgun (2010) suggest that proximity advantages are increasingly outweighing cost advantages, particularly in respect of replenishment considerations.

3.19 An additional key feature of the Report was an in-depth comparative analysis of trends taking place at the national level in six EU case study countries, seeking to observe and explain differential performance. The six countries: UK, France, Italy, Portugal, Greece and Belgium were chosen to reflect the membership of the ADAPT project. The analysis revealed:

- Within a general context of decline, Italy among the larger, more established players fared better than the UK, Belgium or France. In Portugal decline was observed as a recent phenomena. Whereas in the UK the worst of the decline occurred during the 1980s, in Belgium, France and Italy it was a more consistent trend.

- In the majority of countries and especially Belgium, France and Greece, production declined during the 1990s. Only Italy recorded an increase.

- Major differences between the countries were apparent in terms of balance of trade with non-member states; ranging from deficits of 0.2 billion Euro in Greece to 6 billion Euro in the UK. At the same time Italy and Portugal recorded surpluses.

3.20 The following factors were presented in explaining differential performance:

- The cost of labour, crucial to the competitiveness of the industry (especially in lower-value markets), varied significantly between countries: from $3 per hour in Portugal to $21 per hour in Belgium.

- Those higher-cost countries that have achieved relative success in the industry in recent years (e.g. Italy) have done so through competing in terms of product quality and differentiation rather than price and standardisation.

- The implementation of delocalisation strategies also varied. With the increasing importance of cost reduction and speed of delivery those in closest proximity to low-cost producers appeared to have taken most advantage.

- The greatest gains in the clothing industry were made in areas such as design, thus benefiting those manufacturers serving higher-value markets.

- The level of institutional support for the industry was also highly variable. Political influence was seen to be important in determining the scale and nature of intervention.

Part C: Clothing manufacture in the West Midlands Region 1960-2000: Growth, resilience and decline

3.21 The aim of Part C is to describe the emergence of clothing manufacturing in the West Midlands Region, analysing and evaluating reasons for its decline following periods of growth and resilience. Part B revealed how the West Midlands region initially bucked national trends of decline. This theme will be developed here, drawing upon a significant body of research, described in 2.2 above, and captured in the form of two outputs: an international conference paper: *A stitch in time? Institutional support for the clothing industry in the West Midlands Region of the UK* (Berkeley, 2003); and a research report that forms **Output 4, *Comparative Analysis of the Clothing and Textiles Industry in Western Cape, South Africa and the West Midlands Region in the UK*** (Berkeley et al, 2005). A synopsis of the research presented in Output 4 is detailed below:

3.22 As outlined previously, the West Midlands Region is renowned for manufacturing, most notably engineering and more especially the motor vehicle industry. It is less well known for clothing manufacturing. Yet this industry plays a vital socio-economic role, not least in providing employment opportunities for traditionally marginalised workers. Geographically clustered in the region's urban core, generating some 10,000 jobs in 700 firms and with an annual turnover of £500 million, clothing is an important feature of the regional economic landscape. Until the mid-1990s the sector enjoyed periods of sustained growth and resilience. However, since then it has been in decline as competitive pressures have increased markedly.

3.23 Clothing manufacture is a relatively new feature of the West Midlands economy. Indeed a report in the mid-1960s described it to be "of very minor importance" (Wood, 1976, p181). The stimulus for growth was provided by the 1970s recession which led to reduced job opportunities in metal and engineering industries (see paragraph 3.6). At the same time, the emerging popularity of casual wear and increasing changes in fashion raised the demand for flexible, short-run production of clothes. Such changes initially favoured local rather than overseas producers because delivery times from supplier to market are much shorter (AEKTA, 1988). Thus dynamic south-east Asian entrepreneurs, despite little business management experience, saw a market opportunity in clothing manufacture to establish businesses and provide work for family members and a small workforce. More importantly it was a "means of earning a decent living" when compared to life in a factory (Ram et al., 2002, p75). Start-up costs were relatively low with co-ethnic and familial links providing alternative access to finance at a time when access from mainstream sources was difficult for SMEs. Additionally, premises were both cheap and readily available (Lloyd, 1989). The industry prospered, growing rapidly to provide 15,000 jobs by the early 1970s. As previously highlighted during the following two decades, the industry regionally significantly outperformed that nationally, with the loss of 14% of its 1971 employment compared to 56% nationally (Jones, 1996). Only the East Midlands clothing industry enjoyed better fortunes during this period (Table 3.1, page 16).

3.24 Resilience has been explained by two factors. First, firms were able to compete on price terms by keeping wages low. Co-ethnic and familial links, and the dependency relationships which resulted from a lack of alternative employment, underpinned and sustained this position (Mitter, 1986; Healey et al., 1987; Dicken, 2007). Secondly, firms displayed considerable flexibility, although this was largely achieved through the casualisation of labour, rather than the production process (Piore and Sabel, 1984; Phizacklea, 1990; Phizacklea and Wolkowitz, 1995). The emergence of a largely ethnic minority-run sector helped considerably to stimulate economic development in inner-city areas, providing employment opportunities for marginalized workers and occupying what would otherwise be redundant premises. Moreover, it has been argued that 'ethnic entrepreneurs' and labour played a pivotal role in maintaining the viability of clothing production in Britain (Phizacklea, 1990). However, this in itself is in no small part due to the "distinctly unglamorous efforts of ethnic-minority operators in areas like the East and West Midlands" (Ram et al., 2003, p74) where the exploitation of female workers was commonplace (AEKTA, 1988). The lack of alternative employment opportunities in the wider labour market, partly influenced by cultural and language barriers (especially amongst early generation immigrants), effectively trapped many Asian women in the industry, and has been illustrated to demonstrate why "for many [south-east Asian women], the only option seemed to be work at Asian-owned clothing companies" (Ram et al., 2002, p76). For the firms themselves, the vast majority owned/managed by south-east Asian men, the women provided a ready supply of cheap labour which they were all too ready to exploit (Ram et al., 2002).

3.25 Since the mid-1990s the resilience of the region's clothing industry has been seriously challenged. Research highlighted that it shrank by one-quarter, in terms of turnover, between 1998 and 2000 (Advantage West Midlands 2001a). This has been characterised by significant job losses and company closures. Official statistics show that employment almost halved in just four years between 1998 and 2001, with the loss of 5,600 jobs (Table 3.2). At the same time some 200 firms disappeared, one-quarter of the 1998 total. The impact on the region's urban conurbation has been especially severe with estimates suggesting that employment shrank by 20% between 2000 and 2002 (Figure 3.3).

Table 3.2: Employment in clothing manufacture in Great Britain and its regions, 1998-2001

Source: Berkeley et al (2005); Annual Business Inquiry 1998-2001

Figure 3.3: Estimates of Employment in West Midlands Clothing Industry (2000-2002)

This item has been removed due to third party copyright. The unabridged version of the thesis can be viewed at the Lanchester Library, Coventry University.

Source: Advantage West Midlands (2001a)

3.26 As a consequence total employment in clothing manufacture in the West Midlands stood at just 7,000 in 2001 (Office for National Statistics, 2001). However, intelligence suggests that, given the prevalence of home-working and informal working practices, actual employment levels can be as much as 40 per cent higher. Indeed, industry sources put the figure at 'approximately 10,000' (Apparel Group West Midlands, 2003). Whilst this still appears relatively small, representing only 1.5% of regional manufacturing employment, it is significant in that the majority of workers are south-east Asians and predominantly women where opportunities in the wider mainstream labour market were, certainly at this time, fairly limited. Interestingly, one of the consequences of the relocation of garment assembly overseas has been a shifting in the ratio of male to female workers in the industry to almost 50:50, where it was historically 10:90 (Taplin, 2006; Jones and Hayes, 2004). This has emerged as sewing jobs, traditionally female roles, have largely been lost and replaced by higher-value roles such as product development, design, fabric testing, advertising, buying and sourcing. Such jobs tend to be better paid and male dominated (Taplin and Winterton, 2004). Such trends have important implications for policy makers seeking to ensure the long-term sustainability of the sector.

Factors contributing to decline

3.27 Research presented in Berkeley et al (2005) highlights several inter-related factors that have contributed to this reversal of fortunes. International competition in the clothing industry is particularly severe, an issue exacerbated by the phasing out of the Multi-Fibre Agreement (Winterton and Barlow, 1996; Ram et al., 2003). Trade liberalisation, manifest in a sharp rise in imports from low-cost regions, is seen by many stakeholders to be the key driver of employment decline (Taplin, 2006). In addition, the majority of the region's clothing manufacturers continue to mass produce low-value goods, often on a cut-make and trim basis, for domestic markets. It is here where firms compete largely on price and not quality, where competition with producers in the developing world and newly emerging markets is most fierce (Taplin et al, 2003).

3.28 Since the late 1990s, in order to reduce costs, UK-based clothing firms have increasingly sought suppliers, or shifted production, 'offshore'. At the lower end of the value chain West Midlands firms found their customers sourcing the majority of their production work overseas (Ram et al., 2002). As highlighted above, manufacturers in central and eastern Europe have particularly benefited from this process. Effectively, this leaves the West Midlands firm to pick up 'bottleneck production' or unsatisfactorily completed orders, for which their flexibility is ideally suited. However, this can lead to fierce price competition between local firms, with quality the inevitable victim. Moreover, the dependency relationship, where firms get orders through intermediaries, means that they have little control over their own destiny. Prices are dictated to them. In a difficult competitive environment they are susceptible to external factors beyond their control. Whilst the introduction of minimum wage legislation in the UK inevitably forced up a firm's costs, prices paid for their garments fell to below 1995 levels (Advantage West Midlands, 2001a).

3.29 The constant pressure to further reduce costs in order to compete has implications for manufacturing quality and ultimately for working conditions and practices. This creates a vicious circle where firms become entrenched in a low productivity, low margin environment, limiting their ability to supply to higher-value markets and ultimately to invest in design-led production or new technologies. This in turn creates a poor image which deters new recruits. The slackening of entrepreneurial dynamism, evidenced by the reluctance of children of business owners to enter the industry is a major concern, as is the lack of available skilled labour and recruitment in general, due to the availability of alternative employment opportunities. The clothing industry is not known for high rates of pay. Its workforce is also ageing, averaging in the mid-to-late 40's, with the consequence that as workers retire key skills are vanishing (Advantage West Midlands, 2001a).

3.30 It is within this context that the thesis proceeds to provide an in-depth analysis of the how the industry within the region is positioned to adapt to change, reverse decline and enhance its competitiveness; conceptualising firm behaviour in respect of attitudes to growth and change.

Part D: Reversing Decline?: the readiness of the clothing industry in the West Midlands Region to adapt to change

3.31 The aim of this section is to assess the extent to which the clothing industry within the West Midlands Region is placed to adapt to change, stem the tide of decline described above and ultimately enhance its competitiveness. It presents an analysis of barriers to change and conceptualises firm behaviour in respect of attitudes to growth and change. In doing so it draws on three outputs: *A Comparative Analysis of the Clothing and Textiles Industry in Western Cape, South Africa and the West Midlands Region in the UK* (Output 4), *Visualising the Operating Behaviour of SME's in Sector and Cluster* (Output 5) and *Attitudes to growth among owners of SMEs and the implications for business advice: Evidence from the Clothing Industry in Coventry* (Output 6). In addition to desk research, each output draws extensively on face-to-face interviews conducted with clothing manufacturers and industry stakeholders as part of the programme of research outlined in Section 2 above.

Adapting to change: an analysis of barriers

3.32 A key feature of **Output 4** (Berkeley et al, 2005) was an analysis of barriers that hamper the Region's manufacturers adapting to change. It was recognised that in order to increase competitiveness and prevent further decline, diversification away from mass market dependency is required. This may involve: improving the quality of manufactured products, implementing sales and marketing strategies, establishing offshore links, diversifying into niche markets, and ultimately shifting into higher-value, design-led production. However, Output 4 identifies that the shift away from mass market production will not happen overnight. Issues including: workplace conditions and standards, manufactured quality, access to finance, management mind-set, technical skills and expertise, and the market intelligence needed to be tackled as a matter of urgency.

3.33 Poor working conditions have characterised the industry for decades. For firms entrenched in low-value volume production such conditions have been an inevitable consequence of the need to drive down costs. However, if firms are to attract new recruits and be in a position to satisfy the increasingly stringent criteria set by high-street fashion retailers then the issue of workplace conditions and standards must be addressed. This will require a change in the mind-set of firms who have very rarely sought third party quality assessment. Similarly, if firms are to diversify they must readily embrace new management and production processes, including offshore production, as well as new technologies which will enable them to improve the quality of their manufactured products.

3.34 Diversification into higher value markets requires significant resources both technical and financial. Neither exists in abundance in firms serving domestic markets. There is a distinct paucity of training within clothing firms. Where it occurs, in-house, on-the-job training predominates. Skills gaps and shortages are common especially at operative level and in respect of basic skills (Skillfast-UK, 2004a). The majority of the region's clothing firms do not make effective use of ICT, and have little experience of design, sales and marketing activity, being accustomed to receiving orders through intermediaries. Furthermore, many owner/managers lack the business organisation skills, awareness, vision and confidence necessary to change this position. Even if they possessed the know-how, the majority of firms lack the financial capital, and would be unprepared to take the risk (see 3.36 below) involved in moving into 'make through' production (Jerrard and Husband, 1999; Ram et al., 2002). Many manufacturers interviewed as part of the ADAPT project (see 2.6) indicated that they were unaware of changes and trends taking place in the fashion arena. This makes large-scale investments risky and targeted production difficult.

3.35 On the supply side an ageing workforce needs to be replenished with the skills and dynamism to respond to the challenges the industry faces. However, as seen, it is deemed 'unfashionable' among young people and careers advisors and suffers from a lack of visibility (both geographically and strategically) in the region. At the higher skill level it is vital that design talent created through the region's Universities is not lost to the region.

Adapting to change: Aversion to growth

3.36 Moving into higher-value markets can also hindered by a growth aversion culture. This is captured in research reported in **Output 5, *Attitudes to growth among owners of SMEs and the implications for business advice: Evidence from the Clothing Industry in Coventry*** (Clark et al, 2001). Drawing upon interviews conducted with firms as part of the ADAPT project this journal article conceptualised attitudes to growth among SMEs in the Coventry clothing industry, noting that most business owners in the sector could be assigned to one of three broad categories of 'stagnant satisficers', 'thwarted expanders' or 'capricious manufacturers' according to their attitudes to growth.

3.37 'Stagnant satisficers' were found to comprise the largest group, accounting for around 60 per cent of owners. It comprises those who have built their businesses to a level that they regard as suiting their familial, economic and social needs. Their priority is to maintain the status quo rather than pursue further growth. Most however, were shown to preside over firms in decline. The research uncovered satisficing behaviour to be linked to 'diversified entrepreneurship'. Many owners combine owner-managing a clothing firm with other business ventures, such as: renting and trading in property, retailing and importing. For some, clothing manufacture is merely a fringe activity. When interviewed, several reported that they were concentrating on their property portfolios at the expense of clothing, taking advantage of the booming property market at the time and thus minimising risk. The paper also highlights how the age of owner-managers also influences satisficing behaviour. For many, stagnation is linked to problems of generational succession, having no family member to take over the business, or the lack of willingness to take a risk with family inheritance.

3.38 A further 30 per cent of owners were 'thwarted expanders' in that they face barriers to growth. Given that price competition in low-value markets keeps margins and wages low, labour shortages are a key issue. The traditional supply of extended family workers into the industry is failing as the workforce ages and new entrants are deterred by the 'sweatshop' image alongside prospects of 'better' jobs in other sectors. Switching to high-value design-led production was not seen as a realistic strategy for some firms. Owners often reported an unwillingness to take the risk in diversifying given the costs involved, the difficulty of meeting necessary quality standards, the shortage of skilled labour and the fickle nature of demand for products. The final 10 per cent of firms were described as 'capricious manufacturers', a group who move regularly in and out of clothing production so as to maximise short-term gain and avoid long-term liability.

3.39 The paper concludes by suggesting that these differences have important policy implications. For example, 'thwarted expanders' might best be helped by traditional business support mechanisms, although such approaches might be inappropriate where there is an underlying aversion to growth. However, at the same time recent research undertaken by the author explored the issue that ethnic minority owned businesses (EMBs) do not fully engage with mainstream business support services (Berkeley and Jarvis, 2005, 2006). Interviews with clothing manufacturers in Coventry identified the most appropriate mechanisms by which business support providers could better engage with EMBs and reverse the existing situation of their minimal engagement, interaction and utilization of available support services. This provided a robust evidence base to inform the development of a strategic action plan subsequently adopted by the Chamber of Commerce. Since the inception of the action plan significant success has been achieved in re-engaging BME businesses (some 300 in the first year with 125 completing business reviews and/or strategic planning assessments).

Adapting to change: networking and clustering behaviour

3.40 The theme of firm behaviour is further developed in **Output 6, *Visualising the Operating Behaviour of SME's in Sector and Cluster*** (Tully and Berkeley, 2004). This journal article was developed from two conference papers (Tully and Berkeley, 2002a; 2002b) and questions the logic of UK Regional Development Agency cluster policy at the time, demonstrating how firms both within defined clusters [automotive components] and outside [clothing sector] display remarkably similar inter-firm behavioural characteristics. The paper argues whether a more sophisticated and locally sympathetic approach to visualising clusters and business behaviour, rather than an emphasis on using employment concentration as a basis for identifying 'clusters' would have a greater impact for policy. In terms of the clothing industry it highlighted that a significant proportion of firms within the sector in Coventry demonstrated 'clustering' type behaviour making them more competitive, forward thinking and willing to change and adapt; thus well placed to survive and prosper.

3.41 Evidence in the paper is drawn from structured interviews undertaken with 20 automotive components firms (Tully) and 20 clothing firms (Berkeley), exploring: linkages with suppliers and distributors, cooperation with other firms, R&D,

adoption of new technology, awareness and utilisation of institutional support mechanisms and awareness of the corporate environment. The research revealed:

- Automotive components manufacturers are longer established and likely to be larger than clothing manufacturers
- Firms in both industries depend most on local and national networks of suppliers and customers
- A higher proportion of clothing manufacturers felt competitive pressures with firms outside the European Union
- Behavioural responses to competitive pressures were fairly consistent, e.g. changing productive capacity, markets and products; and investing in IT and new product development
- Automotive components manufacturers are more likely to have invested in process and design technology in moving toward customised production

3.42 The paper further reveals that the majority of firms in both industries could be placed into three behavioural types, resembling the conceptualisation of firm behaviour identified by Gordon & McCann (2000). That firms fall into 'pure agglomeration', 'industrial complex' and 'social network' cluster types reflects the behavioural response of owners/mangers to the competitive pressures they have similarly faced: should they downsize and manage decline, try to compete on price and quality, or diversify into design-led, niche market production? The research revealed that individual firms have responded in similar ways and that this has occurred not only *within* but also *between* the two separate industries.

3.43 An examination of firm behaviour in both the clothing *sector* and the automotive *cluster* highlighted a similar subtle correlation between the sophistication of the relationship with suppliers, customers and competitors and the 'success' of the business. The more sophisticated this relationship: the more positive the outlook for future growth; the more aware of the market and the business environment; the more likely to have partnerships with local universities; the more likely to have an external view of the region; the more diversified the firm; the more likely to have invested in new technologies; and the more likely to have outsourced lower order functions. The level of sophistication of firm behaviour is likely to reflect the decision of owner-managers to undertake the risk to diversify into customised production in design-led niche markets. This behavioural mind-set was observed in *both* industries.

3.44 From the relationships observed in the research, three model types, A, B and C, were constructed reflecting the levels of sophistication in the operating behaviour of firms *within* the sector and cluster, but also reflecting the similarities in behaviour of firms *between* the sector and cluster.

- (A) where firms have no interactions with competitors or customers, relates closely to 'pure agglomeration' model (Gordon & McCann, 2000)
- (B) where firms engage with customers and suppliers but not competitors, relates to the 'industrial complex' model, and
- (C) where firms collaborate with competitors and interact with other agencies within the region, relates to the 'social network' model

3.45 Those firms who are more cooperative with other firms tend to be higher up the value-chain than those that are less collaborative. Most notably, firms that operate within this typology not only coexist in the same region but also the same industrial sector, supporting the notion that no cluster exists in pure form, but often is a collection or hybrid of many different ideals in one space (Markusen, 1996; Gordon & McCann, 2000). The distribution of clothing and automotive components firms is similar across the model types. In each industry, the vast majority of firms operated outside the 'social network' model. Only one-quarter of the firms within the automotive cluster were operating within the social network model, a figure not too dissimilar to those in the clothing sector (20%). Such exemplar firms in clothing had diversified into niche markets such as protective workwear, taking advantage of advancements and opportunities in technical textiles.

3.46 The research suggested that economic development policy that channels resources into key priority clusters can marginalise industries that fall outside this remit; especially when clusters are defined on fairly limited (employment concentration) criteria. A large concentration of employment does not necessarily mean that every firm will behave as if it operating within a cluster. More importantly, while the research revealed examples of non-clustering behaviour in a defined cluster, it also revealed clustering behaviour in the clothing sector (not defined as a cluster in its own right because of a perceived lack of growth potential, alongside under-representation in employment). Yet research reveals that employment in the West Midlands clothing industry could be underestimated by national statistics, by as much as 40 per cent (see paragraph 3.26). This begged the question as to whether the sector was being overlooked because of its lack of visibility and lack of representation within the Regional Development Agency. The extent of lobbying by industry stakeholders in the mid-2000s was testament to this point. Yet it was not until November 2009 with the publication of an Action Plan for the sector that this situation was reversed.

3.47 The research presented in Outputs 5&6 is important in two key respects. Firstly, it has highlighted that despite considerable difficulties and barriers to growth, exemplar firms do exist within the industry. It is argued that it is on these 'winners' where support agencies should focus their attention. That there are 'winners' also provides a model of good practice and firm behaviour that has potential to be cascaded further within the industry. Secondly, the research revealed that there are many clothing manufacturing firms that are risk averse, for a variety of reasons, and therefore in effect beyond the reach of policy makers. This evidence, alongside the extensive research presented in Parts A, B & C provides the backbone of the Strategy subsequently formulated (and implemented) for the industry, and presented in Part E below.

Adapting to change: an analysis of strengths, weaknesses opportunities and threats

3.48 As part of **Output 4**, a SWOT analysis was undertaken for the West Midlands clothing sector (Berkeley et al, 2005). It provides a summary of the preceding analysis as well as context for policy makers in pursuing strategies to enhance the industry's competitiveness.

Strengths

- Strong stakeholder support based on collaboration and partnership working
- A dedicated Sector Skills Council - Skillfast (since subsumed into Skillset see 5.7)
- Geographical clustering in inner-city areas of the urban conurbation

- Workplace conditions have improved in many firms creating a platform to diversify into higher value added markets
- An increasing number of exemplar firms that have made the switch into niche market production and are competing well

Weaknesses

- Factories have less productive capacity and unit cost of labour is relatively high making it difficult to compete in price driven low value added markets
- The relative strength of the sterling (at the time of analysis) makes it hard for firms to compete internationally.
- A lack of investment in capital, coupled with outdated premises limits the ability of firms to embrace new technologies. This inhibits attempts to improve quality of manufactured products.
- Risk aversion amongst owner-managers inhibits growth.
- Management mindset needs to change. Firms need to examine how they can improve their competitiveness through ways other than price.
- Skills gaps and shortages are prevalent at all levels.
- Lack of design, sales and marketing expertise
- An image characterised by poor working conditions, lack of prospects, an ageing workforce and poor rates of pay.
- Dependency relationships, with firms having little control over their own destiny

Opportunities

- Diversification into higher value added niche markets such as technical textiles. Consumers in developed countries demand variety and quality.
- The West Midlands is well placed to serve domestic markets providing it can meet international standards of competition.
- Firms have been given the opportunity to improve workplace conditions and standards through funded initiatives such as the Clothing Manufacturers Charter (see Section E).
- Local firms are well placed to pick up ‘bottleneck’ or unsatisfactorily completed orders for which their flexibility is ideally suited.

Threats

- Inability of firms to compete in low value added markets suggests that without action, to facilitate diversification, the sector will continue to decline.
- Funding, required to maintain partnership support initiatives, is increasingly difficult to source. This situation is only likely to worsen in a period of public sector austerity (as at the time of writing) which has also witnessed the demise of Regional Development Agencies, following the election of the Conservative-Liberal Democrat Coalition government (May 2010).

Part E: Strategies for sustainability and growth of clothing manufacture

3.49 The aim of Part E is to draw upon the research intelligence outlined in Parts A to D above, to present strategic advice for enhancing the sustainability, competitiveness and growth of the clothing industry. In doing so it draws extensively on **Output 7: *Industrial Development Strategy for the Coventry Clothing Sector*** (Berkeley et al, 2000b) as well as an earlier conference paper (Berkeley et al, 2000a). The Strategy itself was a product of the EU funded ADAPT project [see 2.2], and involved extensive consultation with key stakeholders, focusing on addressing the immediate problems then facing the industry. It recognises that such problems needed to be addressed firstly to ensure the long-term survival of the industry in the city, and secondly to provide the foundation for a shift into higher value production.

A ten-point plan for the Coventry Clothing Industry

3.50 Policy recommendations have typically centred on a diversification into high-value markets, investing in new technology, and developing clusters of innovative networks. Such a strategy for Coventry was not deemed appropriate, at least in the short- to medium-term. Higher value markets, for example, cannot be accessed until issues relating to skills and product quality are addressed, whilst moving into design-based production is not viable without suitably qualified employees and access to appropriate technologies. The Coventry strategy is therefore one which focuses on addressing immediate problems both to ensure long-term survival and to provide the platform for a shift into higher value production. It focuses on ten inter-related areas concerned with raising quality, improving standards, raising skill levels, improving business management, and improving the visibility and image of the industry.

3.51 A number of recommendations were identified in the Strategy. These are summarised below at three different levels. First, those which are infrastructural, and concerned with the role of partners and funding; second, those areas of concentrated support, focusing on those exemplar firms that have been, and are willing, to embrace change; and third, a series of underpinning initiatives designed to benefit the sector as a whole.

Level 1: Infrastructural support

- Re-establish Coventry Clothing Partnership as a mechanism to deliver the strategy (and sector support generally), bid for external funding and identify ways in which initiatives can be financed on a secure long-term basis footing.
- Re-examine the role and scope of the local Manufacturers Association.

Level 2: Concentrated support

- Ensure the availability of appropriate business support and market intelligence appropriate to assisting firms in diversifying into new markets.
- Host 'meet the buyer' events and fact-finding missions to learn from best practice elsewhere.
- Explore further the concept of a Coventry clothing label.

Level 3: Underpinning activities

- Undertake regular monitoring of firms to ensure that quality standards are not only maintained but improved.
- Apply and extend Manufacturers Quality Charter to facilitate enhanced product quality, business organisation and training.
- Seek funding to enable renewal of business premises.
- Publicise achievements of successful firms through annual events/launches.
- Utilise exemplar firms to cascade and disseminate best practice.
- Launch an industry website and newsletter to raise visibility, provide publicity, disseminate best practice and provide market/business support intelligence.
- Develop a database of products and services to more effectively market the industry on a sector-wide scale.
- Investigate the idea of promoting a Clothing Quarter and developing an industry logo as a marketing tool.

Ingredients for successful implementation of the ten point plan

3.52 It was identified that in order for the Strategy to work effectively, several key ingredients must be in place. Firstly, success demands a change in attitudes among manufacturers. Despite the availability of free business advice and assistance through the ADAPT project only a limited number of firms participated. Also the firms need to be more responsive and reactive, be prepared to learn, to change, and to adapt to new ideas and practices. A major challenge is to seek ways in which these traditional barriers can be broken down. The cascading of best practice via exemplar firms can represent a way forward in this respect.

3.53 Successful implementation also requires effective partnership, the combined efforts of key stakeholders in the industry. The Strategy recognised the vital roles to be played by Coventry City Council, not only through its commitment to resources such as the Clothing Centre, but also in promoting and marketing the industry; Coventry Chamber of Commerce and Trade, through providing access to training and business support and advice; the Clothing Centre itself, through providing a range of business advice and support services most appropriate to the industry's needs, Coventry University, through providing access to training opportunities and market intelligence on the industry; and perhaps most importantly, the firms themselves in terms of being prepared to accept and implement change. An effective co-ordinated Clothing Partnership, which represents these key interests, provides the ideal forum through which the strategy can be implemented and its progress monitored.

Summary of Portfolio of Evidence

3.54 The review of the portfolio of evidence has traced the emergence, growth and decline of the clothing industry in the West Midlands Region of the UK, and within Coventry in particular. It has analysed the readiness of the industry to adapt to change and reverse decline, through an examination of attitudes to diversification and growth, and the presentation of a SWOT analysis. It concluded with an examination of how the industry intends to move forward through the presentation of the Industrial Development Strategy for the Coventry Clothing Industry. It has revealed a complex set of common and unique factors at work that demand a local response, but also very much demand the continued engagement and support of key industry stakeholders. Moreover the review has demonstrated a clear connection between the research outputs as highlighted through the logic pathway diagram (Figure 3.1). This is explored further in the following section.

4. Research methodology, practice and theories that link the outputs together

4.1 The aim of this section of the thesis is to demonstrate the logic that links the outputs together. This is evidenced conceptually, methodologically, and theoretically.

Conceptualisation

4.2 Outputs are linked in a logical sequence that builds a picture of growth, resilience and decline of an industrial sector in the English West Midlands; one which has been labelled a 'sunset' or mature sector, but one it is argued here can survive and prosper given the appropriate level of institutional support. Through a case study of the clothing industry in the West Midlands Region (and Coventry in particular), the portfolio of evidence presented a series of outputs derived from research contracts managed by the author since 1998. As highlighted in Figure 3.1 (page 10) there is a clear logic pathway that links these outputs together:

- Firstly through **Output 1** the growth and subsequent decline of the clothing industry is situated through an historical analysis of the economic development of the West Midlands Region in particular the processes of deindustrialisation and immigration that sowed the seeds for the emergence of the clothing industry (Green and Berkeley, 2004).
- Secondly, drawing on **Outputs 2&3** the research then conceptualises the growth and decline of the clothing industry through an analysis and evaluation of the clothing manufacturing sector in the UK, placing decline within international contexts and examining spatial variations (Steuer et al, 2000; Berkeley and Steuer, 2000a/b).
- Thirdly, drawing on **Output 4**, reasons for the decline of the clothing manufacturing sector in the West Midlands Region, following a period of growth and resilience, are then analysed (Berkeley et al, 2005).
- Fourthly, the research then attempts to understand the readiness of the sector to adapt to change and reverse decline. This is done through **Outputs 4, 5&6** which: examine barriers to change; conceptualise the behaviour of firms in the clothing manufacturing sector in respect of their attitude to diversification, growth, networking and clustering as a means of enhancing competitiveness;

and presents a strengths, weaknesses, opportunities and threats analysis (Berkeley et al, 2005; Clark et al 2001; Tully and Berkeley, 2004).

- Finally, and drawing upon the research of the previous stages, strategic advice for moving the industry forward to a position of sustainability and competitiveness is presented. This draws upon **Output 7** which takes the form of an Industrial Development Strategy (and action plan) developed for, and adopted by, the Coventry Clothing Partnership (Berkeley et al, 2000b).

Methodologies

4.3 The research approach is grounded in the belief that there is a need to appreciate both external and internal operating environments if we are to fully understand how sectors and crucially the firms within them react and adapt to change. In the clothing industry, although the sector as a whole has faced the same external operating pressures e.g. the forces of de-industrialisation, globalisation and the retail revolution (see 4.5 and 4.6) the way in which firms have responded and adapted to these external forces does not follow a simple one-size fits all causal relationship. Issues such as firm size and structure, culture, and attitudes to growth, diversification and change vary markedly within sectors and between firms. In this sense the research philosophy is one which is necessarily objective and epistemologically adopts a critical realist perspective (Sayer, 2000). It is rooted in the view that individual behaviours as well as the structures within which they act are fundamental in the explanation of observed phenomena (Jarvis and Dunham, 2003). As such the research has adopted a mixed-methods approach to understand the reasons for the growth, resilience, decline and subsequent behavioural responses to adapting to change within the clothing industry. Secondary analysis is triangulated by empirical quantitative and qualitative research with firms, stakeholders and policy makers and is further validated through comparative analysis. The research draws upon two EU funded projects and a University funded project awarded between 1998 and 2004. Berkeley was grant holder/principal investigator on the EU ADAPT project (see Outputs 2, 3, 5 & 7) and the University project (Output 4). Together these are worth £245,000 in research funding. Methods are summarised in detail below.

- Reviews of academic literature and published reports formed key components of the research presented in all outputs. Output 1, for example, drew exclusively on secondary academic research and government reports; whilst the comparative analysis of EU and National Trends in the Clothing Industry drew heavily on published reports, academic literature and existing industry data provided by partners.
- Original quantitative data was also collected from approximately 40 interviews with Coventry clothing manufacturers and other key stakeholders. These were conducted by the author (alongside a research assistant) as part of the research forming Outputs 2, 3, 5 & 7, and by the author alone in research forming Output 6. Data was subsequently analysed using SPSS software for which the author has extensive training and has also provided training on for others on a commercial basis. In addition, data in the form of official sector statistics have been accessed (via NOMIS) and interrogated by the author.
- Qualitative methodologies have been employed in a number of ways. For example, the face-to-face interviews described above also collected qualitative data through questionnaires which combined open and closed questions, seeking opinion and insight as well as hard data. As part of the programme of research that formed Output 4, Berkeley and Noon undertook case study visits and facilitated focus groups with key local industry stakeholders.
- Logically the research concludes with policy recommendations in the form of the published and adopted Industrial Development Strategy for the Coventry Clothing Industry. Thus secondary research, in the form of reviews of published reports and academic literature, is triangulated by quantitative data analysis (both primary and secondary); qualitative research drawn from structured interviews, focus groups and company visits; and data interrogation and interpretation through SWOT analysis and case study analysis in order to inform and underpin strategy formulation.

Key themes and academic disciplines

4.4 Thematically, economic development knits the outputs together through the application of an inter-disciplinary research approach. Whilst much has been written on the UK clothing industry from the perspective of different disciplines, for example, on the form and nature of economic decline (Taplin & Winterton, 1996, 2000; Dicken 2007; Jones 1996); entrepreneurship and firm behaviour (Ram et al, 2002, 2003); business support (Husband & Jerrard, 2001); and issues of culture and gender (Phizacklea, 1990 and Phizacklea and Wolkowitz, 1995), very little has been done which bridges these disciplines in a systematic way. This research has added to the debate and advanced the *state of the art* by providing an economic development perspective that bridges the disciplines of geography, planning, social studies, business and regeneration to produce a new insight into the role of mature sectors in promoting regional economic development. In this sense it has been possible to present a more rounded outlook on the issues and challenges facing clothing manufacturers in relation to spatially specific issues such as: business culture, attitudes to business support, growth and diversification, and governance; alongside broader macro-economic issues such as globalisation. Moreover, through the application of this approach to a specific locality, the research has provided well grounded, joined-up and strategic direction to promote the competitiveness and growth of the industry in a particular locality. At the same time it provides transferable knowledge for policy makers elsewhere. In this sense the research has wider value and applicability; concepts have already been applied and extended from sector to cluster, and to different industries within Coventry and the wider West Midlands Region (see Section 5. Below).

Theoretical debates

4.5 Key theories that have been explored and applied through the portfolio of evidence include: deindustrialisation and globalisation. Theories of deindustrialisation in developed western economies are well rehearsed in academic literature, and whilst there is consensus that there has been a structural economic shift, witnessed in the decline of mass manufacturing and the rapid growth of services; there are various schools of thought as to why this occurred (Graham and Spence, 1995). For example, and pertinent to the clothing industry, one school of thought links deindustrialisation in developed nations to the rise of international competition, global trade and the rise of the multi-national corporation (e.g. Bacon and Eltis, 1976). This process has been exacerbated as globalisation, evidenced in the internationalisation of economic activity, left older economies ruthlessly exposed to competition (especially based on price) from developing nations. As such, a massive switch of the production of low value added manufactured goods to low cost producers in the developing world occurred (Dicken, 2007; Massey, 1984). Global variation in the cost of labour had a pronounced impact on clothing production because, at the traditional mass produced end of the market, it is highly labour-intensive. As a result, a new international division of labour has emerged in which clothing manufacture takes place within vertically disintegrated subcontracting networks (Massey, 1984; Christerson and Appelbaum, 1995). In clothing its key feature is that firms in core regions of the global economy which produce brand-name garments, concentrate upon value-creating activities of design, branding and marketing but have the product manufactured by independent subcontractors in the periphery (Dicken, 2007; Aspers, 2010).

4.6 A second school of thought links the process of industrial change to the switch from Fordist to post-Fordist modes of production; the movement away from mass manufacturing and economies of scale to flexible production characterised by economies of scope and a spatially disintegrated production process (Piore and Sable, 1984; Graham and Spence, 1995). In the clothing industry this process was starkly highlighted by the 'revolution' taking place in retailing from the 1980s. Whilst the process of globalisation is widely considered to have made a significant contribution to employment decline, many commentators have emphasised that changes taking place in the domestic market were equally as important (Crewe and Davenport, 1992; Gibbs, 1988; Zeitlin and Totterdill, 1989). The debate gives particular attention to the impact of changes in the attitude and behaviour of consumers in Britain who, it is argued, became more affluent, sophisticated and fickle. This resulted in the need for retailers to move towards specialising in well-made, high-quality designer clothes targeted at niche markets. An increase in the frequency of style changes in the industry has been an added dimension of what has been referred to as the "retail revolution" (Crewe and Davenport, 1992). The implications of these trends for British clothing manufacturers was that it demanded a system of production able to cope with short runs, minimum lead times between order and delivery, and frequent changes of product. The extent to which successful restructuring took place to meet these demands however was limited, especially as the industry in the UK was dominated by large firms beset with outdated premises, technology, labour and management practices. As a result, many such large firms lost their competitive advantage forced to shed labour to reduce costs. Smaller enterprises are considered to have fared better due to being more adaptable in their production techniques (Baker, 1996).

4.7 Adapting the work of, for example, Fothergill and Gudgin (1982) the thesis also explored how issues such as industrial structure (especially in terms of firm size), product diversification and the emergence of new centres of production by ethnic entrepreneurs in inner city areas can partly account for the spatial variations in the patterns of decline observed within the UK clothing industry. The emergence of a clothing sector in the West Midlands, dominated by ethnic entrepreneurs who were able to use family and community links to access finance, was shown to be a key factor in the initial resilience to decline displayed in the region, but also in its subsequent downfall. The work of Mitter (1986), Piore and Sabel (1984), Healey et al (1987), Phizacklea (1990) and Dicken (2007) was used to illustrate how resilience was founded on two key factors: firms being able to compete on price by keeping prices low, and through displaying considerable flexibility; although in both cases this was largely achieved through exploitation of co-ethnic and familial links. It is worth noting that whilst the issue of resilience has been a longstanding theme of this research, the term itself is very much in vogue in current academic debates, for example, around the 'resilient region' (see *Cambridge Journal of Regions, Economy and Society* Vol. 3, No.1, March 2010).

4.8 Theories of risk aversion, grounded in the conception of the firm as an economic unit embedded within a wider social context which shapes owner/manager behaviour (Granovetter, 1991; Grabher, 1993); and clustering, adapting Gordon & McCann's (2000) conceptualisation of firm behaviour into 'pure agglomeration', 'industrial complex' and 'social network' cluster types, were used to analyse the readiness and willingness of SME's in clothing manufacture to adapt to change within a global economic environment. In essence this illustrated that whilst many firms, for a variety of reasons, are averse to growth and happy to maintain the status quo or even manage decline, many are also embracing change and displaying classic 'clustering' type behaviour, even though they operate outside a formally defined cluster. In the clothing industry, such exemplar firms are typically producing high-quality design-led products for niche markets, for example in technical textiles. This is consistent with Christopherson's (2009) description of 'phoenix' industries rising from the ashes of deindustrialisation.

4.9 In summary, the research approach adopted has necessitated drawing upon a number of key theories. None of these can be seen in isolation as the most critical in underpinning the research, rather they need to be considered in combination in order to provide a more rounded and holistic explanation for the patterns observed. As noted in section 4.3 this is important in order to fully appreciate the effect of both external and internal operating environments on how sectors and the firms within them behave. As such theories have been used in order to account for the trends witnessed in the clothing sector in terms of (i) the external national and international operating environment (e.g. de-industrialisation, globalisation, flexible production and the retail revolution), (ii) the differential outcomes in performance observed at a regional level (e.g. ethnic entrepreneurship and resilience) and (iii) the differential response of firms at the local level (e.g. culture, risk aversion, clusters). In accounting for the growth, resilience, decline and subsequent behavioural responses to adapting to change within the clothing industry in the West Midlands, this broader holistic theoretical approach has enabled the research to capture and understand the crucial role played by individual firm behaviour within a wider context of global economic change.

5. Impact of the research in terms of its contribution to knowledge, policy and practice

5.1 Research presented in the portfolio of evidence makes a significant contribution to knowledge through providing an economic development bridge across work in several disciplines (economics, geography, planning, social studies, business and regeneration) to produce a new insight into the role of mature sectors in promoting sustainable economic development. As previously mentioned, this research extends the scale and scope of previous studies to gain a much broader perspective on the issues and challenges facing SME's in sectors such as clothing, thereby providing a firmer basis for informing strategy and policy in particular localities.

5.2 The research applies a range of relevant theories and processes across several disciplines for example to help understand how well placed firms in such sectors are to adapt to change. It also triangulates evidence through employing a suite of methodological techniques (quantitative, qualitative, descriptive and analytical) in order to provide the broader economic development perspective that makes this approach unique.

5.3 The research offers a number of unique and original insights into processes and trends impacting on the clothing industry. These include: accounting for regional and local variations in the performance of the sector within the UK; comparison of trends across and within EU member states; explaining resilience of clothing manufacture in the West Midlands region and its subsequent decline; a unique examination of the readiness of the sector to adapt, overcome barriers and become competitive and sustainable; situating the West Midlands through a comparative analysis with the same sector in another locality; and offering policy makers a way forward through a formulation of a sector strategy.

5.4 The research has also had a significant impact on policy and practice. For example, the Industrial Development Strategy for the Coventry Clothing Industry (Output 7) was adopted and implemented by Coventry's Clothing Partnership in 2000. The re-establishment of the Partnership (involving Coventry City Council, Coventry University, Business Link, the Chamber of Commerce and the Sector Skills Council) itself was a key recommendation of the Strategy. The author was invited to serve on the Partnership from the outset and continued to do so when it was restructured in 2008 (see 5.7 below). The Partnership role involved the provision of research intelligence and strategic advice, co-operating on joint opportunities for funding. Notably the author was commissioned to evaluate the success of the Clothing Manufacturers (Quality) Charter developed as part of the EU ADAPT project and continued as part of the recommendations in the Strategy. This subsequently involved being an invited speaker at the Manufacturers Association Charter Awards Dinner (Berkeley and Osgathorp, 2002).

5.5 This ongoing research agenda is still playing an important role for policy makers. By way of example, in November 2009, Advantage West Midlands published a sector profile of the clothing industry in the region, designed to "help address some of the negative and out-dated perceptions that have developed around the sector". In doing so, the ongoing importance and impact of the research presented in this thesis is recognised. The report cites a "significant programme of research undertaken by Coventry Business School, Coventry University" (Advantage West Midlands, 2009, page 1). Moreover, despite the time lag, the messages presented in this Regional sector profile are consistent with those presented in the thesis, in particular around the state of the market, the sector's regional importance in economic and social regeneration, and the opportunities available through moving to high-value market segments. Technical textiles are emphasised as a key growth area. Since the publication of the Report an action plan has been produced which, strategically bears many similarities to the Industrial Development Strategy (Output 7) cited in the portfolio of evidence.

5.6 Work has continued beyond the funded research concerning the clothing sector to look more broadly at issues facing 'clusters' of mature industries and more recently to examine growth sectors such as creative industries. This is a logical progression of the research given that the clothing sector in the Region became part of a wider High Value Added Consumer Products [HVACP] 'Cluster' as part of RDA policy in 2001. As a measure of esteem, this led, through the previous expertise in the clothing sector, to a research commission [from the Learning and Skills Council] to map the HVACP cluster [since rebranded 'Interiors and Lifestyles'] in the West Midlands Region and forecast future skills needs. Berkeley was Project Director for this work, which has produced four client reports and two conference papers (Jarvis et al, 2005a, 2005b; Jarvis et al, 2006a, 2006b; Berkeley et al, 2005b; Berkeley et al, 2007).

5.7 Flowing logically from previous work in the clothing industry and the research into the high-value added consumer products cluster, recent research (commissioned by Coventry City Council) has examined the potential role of creative industries in the process of urban regeneration within the Coventry & Warwickshire sub-region. The research, in which Berkeley was Project Director, mapped for the first time the scope and scale of creative industries within the sub-region highlighting particular areas of strength (e.g. software and design), opportunities for growth and recommendations for policy makers (including sub-regional partnership working). Designer-led fashion as a sector has recently been subsumed into the wider policy remit of promoting creative industries within particular localities. In 2010 the remit of Skillfast transfers to Skillset the creative industries Sector Skills Council. Locally, the Coventry Clothing Partnership has been rebranded as the Creative Partnership, resulting from recommendations in the Creative Industries report. Research findings were disseminated at a major local stakeholders' event in September 2008 and subsequently reported in the local media. A journal article stemming from the theoretical component of this research project has been published. This provided a critique of the economic development and urban regeneration potential of creative industries (Jarvis et al, 2009). This research has led the authors to be commissioned in 2010 to conduct a similar exercise for the environmental technologies sector in the same sub-region.

5.8 The legacy of clothing research was also crucial in supporting a bid for funding with the Chamber of Commerce in Coventry & Warwickshire to understand reasons why ethnic minority owned businesses (many of which are clothing manufacturers) are reluctant to engage with mainstream business support. This research [Berkeley and Jarvis] employed a user-engagement philosophy to provide a series of recommendations for better engagement that have been successfully adopted and implemented by the Chamber (see paragraph 3.39).

5.9 Academically, the research presented carries esteem in several respects. Firstly, it has attracted significant funding for projects that the author has managed (EU Adapt £245,000; University grant £3,000). Secondly, it has led to further commissioned research: on the clothing industry from Oxford University (EU Fifth Framework); and on the high-value added consumer products cluster and creative industries sector (see above). Thirdly, it has led to the production of some **29 research outputs**. These include: published conference proceedings, chapters in books, journal articles, applied research reports and international conference presentations (see Appendix 1). The research has also been cited by other academics. For example, Output 6, Tully and Berkeley (2004) has been cited at least 14 times, whilst Output 5, Clark et al (2005) has been cited at least 4 times (See Appendix 2).

6. A statement on the contribution of other authors to the outputs

6.1 The book chapter (Output 1) was jointly written with Anne Green (Principal Research Fellow, Institute of Employment Research, University of Warwick) and revised continuously through the sharing of drafts. Berkeley focused on the historical development and growth of the West Midlands and the changing form of governance and its role in driving the region forward in the 21st century. Green focused on the economic, social and demographic trends and wrote the conclusion.

6.2 Berkeley was Project Manager for the ADAPT project which lead to Outputs 2, 3, 5 and 7. For Output 2, he worked jointly with Steuer (Research Assistant) on conducting the research interviews and the production of the paper with both authors contributing equal parts.

6.3 Berkeley worked jointly with Steuer on Output 3 producing the six national profiles and the comparative analysis. The latter had not been attempted before [for this sector] in anything like the same depth. Berkeley was also responsible for drawing out key issues affecting the industry at an EU level and for managing the process of having the report translated into partner languages.

6.4 Berkeley was principal investigator and grant holder for the comparative analysis project which produced Output 4. He was responsible for liaising with colleagues in South Africa [Cape Peninsula University of Technology] over the securing of reports and data, as well as the Study Visit to Cape Town to jointly facilitate [with Noon] the stakeholder's workshop and company visits. Berkeley subsequently wrote the SWOT analysis of the Western Cape clothing industry and jointly produced [with Noon] the comparative analysis. Drawing on previous research Berkeley also contributed the West Midlands Case Study, including the SWOT analysis. Barnes (Research Assistant) was responsible for drawing together the literature review and the assimilation and production of the Western Cape Case Study.

6.5 Whilst Clark was the lead author for Output 5, and responsible for the literature review and drafting the paper; the concept, and the evidence upon which it is based, draws extensively upon interviews with clothing manufacturers conducted by jointly

Berkeley and Steuer, and crucially their insights into the individual attitudes of business owners towards growth. The paper was jointly revised by the three authors prior to submission for publication.

6.6 Tully was the lead author for Output 6 and responsible for the initial literature review and automotive components case studies. Berkeley brought his longstanding experience of the clothing industry to bear contributing three case studies and jointly producing the subsequent discussion drawing the two sectors together in terms of patterns of business behaviour. Berkeley was also responsible for contributing the section on cluster policy in the West Midlands and took the lead on revising the paper following referees comments.

6.7 Berkeley was responsible as grant holder and project manager on the ADPAT project for completion of the Strategy document (Output 7). He worked jointly with Steuer on its production, which also drew upon Godfrey's (external consultant) extensive programme of benchmarking, quality auditing, business planning and mentoring with local firms undertaken as part of the same project. Steuer was responsible for the overview of the Coventry Clothing Industry, with Berkeley leading on the development of the ten-point strategy. All three authors jointly contributed to the production of the adopted action plan. Berkeley was subsequently asked to join the Clothing Partnership as the research lead.

7. Conclusions and further research

7.1 In the introduction to the thesis five objectives were presented. These have to a large extent been achieved. The portfolio of evidence highlighted how the processes of deindustrialisation and immigration in 1970s Britain helped to sow the seeds for the emergence of clothing manufacture in new inner-city locations. The reasons for the decline of clothing manufacture in the UK were analysed, focusing on the roles played by globalisation and the ability of firms to embrace the retail revolution. At the same time the research highlighted that the process of decline was not uniform; some areas, such as the West Midlands displaying considerable resilience. The emergence of new inner-city ethnic-minority owned enterprises taking advantage of low barriers to entry, cheap premises and exploiting mainly family labour to keep costs low, were presented as key factors explaining resilience. However, this position was not sustained and decline has characterised the industry in the West Midlands since the late 1990s. Reasons for this include: trade liberalisation; the failure or inability of manufacturers to diversify into new markets; the need for manufacturers/retailers to continually squeeze production costs in an increasingly competitive market, prompting rapid growth in offshore production; a sector characterised by poor working conditions, finding it increasing difficult to recruit skilled workers or maintain family businesses; and a risk averse culture hindering the diversification process. Risk aversion has been highlighted as a key issue affecting the readiness of the clothing industry to adapt to change. In recognising barriers which exist to firms shifting into higher value markets an industrial development strategy has been developed which highlights the need to put key building blocks in place to underpin and facilitate the diversification process.

7.2 In bringing together a substantial body of research it is felt that PhD equivalence is achieved. Firstly, the portfolio provides evidence of training in a number of research methods appropriate to the area of study. These include: literature reviews, incorporating both academic and grey literature; surveys, face-to-face interviews and stakeholder workshops; quantitative data analysis and interpretation; comparative and SWOT analyses; and strategy formulation. Secondly, the research provides significant evidence of knowledge in the general field of economic development policy, globalisation and structural change in local economies, and specifically the clothing manufacturing sector at a variety of spatial scales. Thirdly, it presents evidence of originality, evidenced through publication in refereed journals, books and strategy documents; through the award of EU and institutional funding; and through the impact of the research on policy and practice. Fourthly, the research demonstrates the ability for critical independent judgement in prescribing strategies and actions for the sustainability of a mature “sunset” industry within modern knowledge-based economies. Fifthly, the portfolio of evidence presents a clear and logical pathway linking the research together, namely a process that (i) situates the decline of the clothing industry in its wider regional economic development context (ii) conceptualises that decline (iii) describes the industry’s readiness to reverse decline and (iv) presents a strategy for moving the clothing industry forward. Finally, the research has been taken forward beyond that presented here to apply the suite of analytical tools developed to logically embrace the re-classification of the clothing sector into a broad high-value added design led cluster and more recently the creative industries. The fact that this most recent work has secured external funding is testament to the impact of the research presented in this thesis.

REFERENCES

ADVANTAGE WEST MIDLANDS (2001a) **Midwest Clothing 2000: West Midlands clothing industry research project**, Advantage West Midlands/Midlands Clothing Link, Birmingham.

ADVANTAGE WEST MIDLANDS (2009) **Textile and Clothing Industries in the West Midlands: Sector Profile**, Advantage West Midlands, Birmingham.

AEKTA (1988) **Clothing Workers in the West Midlands Find Their Voice: The first three years of the AEKTA project**, Clothing Industry Research Project, Birmingham.

APPAREL GROUP WEST MIDLANDS (2003) Comment, in **W-Magazine**, February 2003.

ASPERS P (2010) Using design for upgrading in the fashion industry, **Journal of Economic Geography**, Vol. 10, pp. 189-207.

BACON R. and ELTIS W. (1976) **Britain's Economic Problem: Too Few Producers**, Macmillan Press, London

BAKER P. (2006) Reactive restructuring in textiles and clothing, in Taplin I.M. and Winterton J. (Eds), **Restructuring within a labour intensive industry**, pp. 142-157, Avebury, Aldershot

BERKELEY N., JARVIS D. and BEGLEY J. (2007) Supporting Competitiveness in the West Midlands High Value Added Consumer Products Cluster, **Regional Studies Association International Conference: Regions in Focus**, 2-5 April, University of Lisbon, Portugal

BERKELEY N. and JARVIS D. (2006) **Business cultures and communities in the Coventry and Nuneaton Regeneration Zone: Phase One Final Report (Engaging BME Enterprises).** Report for Coventry & Warwickshire Chamber of Commerce and Business Link

BERKELEY N. and JARVIS D. (2005) **Business cultures and communities in the Coventry and Nuneaton Regeneration Zone: Business Mapping Report**. Report for Coventry & Warwickshire Chamber of Commerce and Business Link

BERKELEY N., BARNES S. and NOON D. (2005) **Comparative analysis of the Clothing & Textiles Industry in Western Cape, South Africa and the West Midlands Region in the UK**. Research Report funded by Coventry University Small Research Grant Scheme.

BERKELEY N., JORDANE C. and JARVIS D. (2005b) The role of mature sectors in promoting regional economic development: the case of the High Value Added Consumer Products Cluster in the West Midlands Region, **Regional Studies Association International Conference, Regional Growth Agendas**, 28-31 May, Aalborg University, Aalborg

BERKELEY N. (2003) A stitch in time? Institutional support for the clothing industry in the West Midlands Region of the UK, **Regional Studies Association Conference, Reinventing Regions in a Global Economy**, 12-15 April, Pisa Congress Centre, Italy

BERKELEY N. AND OSGATHORP L. (2002) **Evaluation of the Coventry Clothing Manufacturers Charter**, presentation at Charter Certificate presentation awards ceremony, Coventry, May.

BERKELEY N. and STEUER N. (2000a) **Comparative Analysis of EU and National Trends in the Textile and Clothing Industry**, Report by Centre for Local Economic Development, funded by ESF ADAPT programme

BERKELEY N. and STEUER N. (2000b) **Comparative Analysis of EU and National Trends in the Textile and Clothing Industry: Summary Report**, Report by Centre for Local Economic Development, funded by ESF ADAPT programme

BERKELEY N., STEUER N. AND CLARK D. (2000a) SMEs in the Coventry clothing industry: a strategy for long-term sustainability, in FOX T.B. and STEEPLE D. (Eds) **Proceedings of the Third International Conference on Stimulating Manufacturing Excellence in Small and Medium Enterprises** (SMESME 2000), pp 63-73. Coventry University, Coventry

BERKELEY N., STEUER N. AND GODFREY D. (2000b) **Industrial development strategy for the Coventry clothing sector**, Centre for Local Economic Development, Coventry University, Coventry.

BERKELEY N., STEUER N. AND CLARK D. (1999) Comparative analysis of EU and national trends in clothing and textile industry. **ADAPT-COSTEX Conference**, Santo Tirso, Portugal, December

CHRISTERSON B. and APPLEBAUM R. P. (1995) Global and local subcontracting: space, ethnicity and the organisation of apparel production, **World Development**, Vol. 23, No. 8, pp. 1363-74

CHRISTOPHERSON S. (2009) Building “phoenix industries” in our old industrial cities, in Tomaney J. (Ed) **The Future of Regional Policy**, pp. 78-86, The Smith Institute, London

CLARK D., BERKELEY N. AND STEUER N. (2001) Attitudes to business growth among owners of SMEs and the implications for business advice, **International Small Business Journal**, Vol. 19, pp. 72-77.

CREWE L. and DAVENPORT E. (1992) The puppet show: changing buyer-supplier relationships within clothing retailing, **Transactions of the Institute of British Geographers**, Vol. 17, pp. 183-197

DICKEN P. (2007) **Global Shift**, Paul Chapman, Routledge, London (5th Edition)

DURY G.H. (1978) **The British Isles**, Heinemann, London

FOTHERGILL S. and GUDGIN G. (1982) **Unequal growth: Urban and Regional Employment Change in the UK**, Heinemann, London

GIBBS D. (1988) Restructuring in the Manchester clothing industry: technical change and interrelationships between manufacturers and retailers, **Environment and Planning A,** Vol. 20, pp. 1219-1233.

GODLEY A. (1996) The emergence of mass production in the UK clothing industry, in TAPLIN I. M. and WINTERTON J. (Eds) **Restructuring within a labour intensive industry**, pp. 8-24. Avebury, Aldershot.

GORDON I. R. and McCANN P. (2000) Industrial clusters: complexes, agglomerations and/or social networks, **Urban Studies**, Vol. 3, No. 3, pp. 513–532

GREEN A. AND BERKELEY N. (2006) The West Midlands: The 'hinge' in the middle, In Hardill, I., Benneworth, P., Baker, M. and Judd, L. (Eds): **The Rise of the English Regions?** pp. 156-167, Routledge, Oxford

GRABHER G. (1993) **The embedded firm: the socio-economics of industrial networks**, Routledge, London

GRAHAM D. AND SPENCE N. (1995) Contemporary Deindustrialisation and Tertiarisation in the London Economy, **Urban Studies**, Vol. 32, No. 6, pp. 885-911.

GRANOVETTER M. (1991) The social construction of economic institutions, in Etzioni A. (Ed) **Socio-Economics: Towards a New Synthesis**, pp 75-81, Armonk, New York

HEALEY M.J. and ILBERY B. (1990) **Location and Change: Perspectives on Economic Geography**, Oxford University Press, Oxford.

HEALEY, M. J., CLARK, D., SHRIVASTAVA, V. (1987) The clothing industry in Coventry, in **City of Coventry Economic Monitor**, No.97, pp. 42-53. Coventry City Council, Coventry

HENRY N., McEWAN C. AND POLLARD J.S. (2002) Globalization from below: Birmingham – postcolonial workshop of the world?, **Area**, Vol. 34, No. 2, pp. 117-127.

HUSBAND J. AND JERRARD R. (2001) Formal aid in an informal sector: institutional support for ethnic minority enterprise in local clothing and textiles industries, **Journal of Ethnic and Migration Studies**, Vol. 27, 115-131

JARVIS D. and DUNHAM P. (2003) Conceptualising the 'Competitive' Strategies of Rural Manufacturing SMEs, **Tijdschrift voor economische en sociale geographie**, Vol. 94, No. 2, 246-257.

JARVIS D., LAMBIE H. and BERKELEY N. (2009) Creative Industries and Urban Regeneration, **Journal of Urban Regeneration and Renewal**, Vol. 2. No.4, pp. 364-374.

JARVIS D., JORDANE C. and BERKELEY N. (2005a) **Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: FE and HE Provision in the West Midlands**. Second Report for Learning and Skills Council Staffordshire/Advantage West Midlands.

JARVIS D., JORDANE C., DONNELLY M. and BERKELEY N (2005b) **Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: Report of Desk Research,** for Learning and Skills Council Staffordshire/Advantage West Midlands

JARVIS D., BEGLEY J., BERKELEY N. and JORDANE C. (2006a) **Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: GIS Maps of HVACP Firms**. Fourth Report for Learning and Skills Council Staffordshire/Advantage West Midlands

JARVIS D., BEGLEY J., BERKELEY N. and JORDANE C. (2006b) **Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: Analysis of Training Needs**. Third Report for Learning and Skills Council Staffordshire/Advantage West Midlands

JERRARD R. and HUSBAND J. (1999) Design and Ethnicity: The failure of West Midlands clothing enterprises to enter the design market, **The Design Journal**, Vol. 2, No.1, pp. 14-23

JONES R. (1996) Changes in regional employment in the U.K. clothing industry, 1971-1991, in TAPLIN I. M. and WINTERTON J. (Eds) **Restructuring within a labour intensive industry,** pp. 61-111. Avebury, Aldershot

JONES R. AND HAYES S (2004) The UK Clothing Industry: Extinction or Evolution?, **Journal of Fashion Marketing and Management**, Vol 8, No 3, pp. 262-278

LLOYD C. (1989) Restructuring in the West Midlands clothing industry, **New Technology, Work and Employment**, Vol. 4, pp. 100-107

MASSEY D. (1984) **Spatial Divisions of Labor: Social Structures and the Geography of Production**, Metheun, New York

MITTER S. (1986) Industrial restructuring and manufacturing homework: immigrant women in the UK clothing industry, **Capital and Class**, Vol. 27, pp. 37-80

OFFICE FOR NATIONAL STATISTICS (1998) **Annual Employment Survey**, Office for National Statistics, London

OFFICE FOR NATIONAL STATISTICS (2001) **Annual Business Inquiry**, Office for National Statistics, London

MARKUSEN A. (1996) Sticky places in slippery space: a typology of industrial districts, **Economic Geography**, Vol. 72, pp. 293–313

PHIZACKLEA A. (1990) **Unpacking the fashion industry**, Routledge, London

PHIZACKLEA A. AND WOLKOWITZ C. (1995) **Homeworking women: gender, racism and class at work**. Sage, London

PIORE M. AND SABEL C. (1984) **The second industrial divide**. Basic Books, New York

RAM M. and SMALLBONE D. (2001) Ethnic Minority Enterprise: Policy in Practice, **SME Seminar Series: Linking Research and Policy**. DTI Conference Centre, London, May

RAM M., JERRARD B. and HUSBAND J. (2002) West Midlands: Still Managing to Survive, in Rath J. (Ed) **Unravelling the rag trade, immigrant entrepreneurship in seven world cities**, pp. 73-87. Berg, New York

RAM M., GILMAN M., ARROWSMITH J. and EDWARDS P. (2003) Once more into the sunset? Asian clothing firms after the national minimum wage, **Environment and Planning C**, Vol. 21, pp. 71-88

SAYER A. (2000) **Realism and Social Science**. Sage, London

SKILLFAST-UK (2004) **Survey of apparel, footwear, textiles and related businesses in the West Midlands**, research report for Birmingham and Solihull Learning and Skills Council, Birmingham

STEUER N., BERKELEY N. and CLARK D. (1999) Clothing manufacture in Great Britain: Developing local strategies for a nationally declining industry. **Business and Economics Society International Conference**, Gran Canaria, July

STEUER N., BERKELEY N. and CLARK D. (2000) Clothing Manufacture in Great Britain: Developing Local Strategies for a Nationally Declining Industry, in KANTARELIS, D. (Ed.) **Business & Economics for the 21st Century, Volume III**, pp 67-77. Business & Economics Society International, Worcester, Ma.

TAPLIN I. (2006) Restructuring and reconfiguration: the EU textile and clothing industry adapts to change, **European Business Review**, Vol. 18. No. 3, pp. 172-186

TAPLIN I. and WINTERTON J. (2004) The European clothing industry: Meeting the competitive challenge, **Journal of Fashion Marketing and Management**, Vol. 8 No. 3, pp. 256-261

TAPLIN I. and WINTERTON J. (2000) Diversity in global restructuring of garment manufacture, paper presented at **Strategies for competitive success: responses to global restructuring in the clothing and textiles sector**. Workshop at Sheffield Hallam University, June

TAPLIN I. and WINTERTON J. (1996) **Restructuring within a labour intensive industry**, Avebury, Aldershot

TAPLIN I., WINTERTON, J. and WINTERTON R. (2003) Understanding labour turnover in a labour intensive industry: evidence from the British Clothing Industry, **Journal of Management Studies**, Vol. 4, No. 4, pp. 1021-1046

TEXTILE OUTLOOK INTERNATIONAL (1998) **World textile trade and production trends, Textile Outlook International**, July

TOKATLI N. and KIZILGUN O. (2010) Coping with the changing rules of the game in global textiles and apparel industries: evidence from Turkey and Morocco, **Journal of Economic Geography**, Vol. 10, pp.209-229

TULLY J. and BERKELEY N. (2004) Visualising the operating behaviour of SMEs in sector and cluster, **Local Economy**, Vol. 19, pp. 38-54

TULLY J. and BERKELEY N. (2002a) Visualising the operating behaviour of SMEs in sector and cluster: Evidence from the West Midlands, **Regional Science Association: British and Irish Section 32nd Annual Conference**, 21-23 August, Brighton

TULLY J. and BERKELEY N. (2002b) Visualising the operating behaviour of SMEs in sector and cluster: Evidence from the West Midlands, **European Regional Science Association Conference**, 27-31 August, Dortmund

UPTON C. (1999) **Regional Identity and the West Midlands**, Comenius Project seminar presentation, University of Caen

WALSH J. (1991) The performance of UK textiles and clothing: recent controversies and evidence, **International Review of Applied Economics**, Vol. 5, pp.277-309

WINTERTON R. and BARLOW A. (1996) Economic restructuring of UK clothing, in TAPLIN I. M. and WINTERTON J. (Eds) **Restructuring within a labour intensive industry**, pp. 25-60. Avebury, Aldershot

WOOD P. (1976) **The West Midlands**. David & Charles, London.

ZEITLEN J. and TOTTERDILL P. (1989) Markets, technology and local intervention: the case of clothing, in Hirst P. and Zeitlen J. (Eds), **Reversing Industrial Decline**, Berg, Oxford.

APPENDIX 1:

LIST OF WEST MIDLANDS AND CLOTHING INDUSTRY RELATED OUTPUTS

Jarvis, D., Lambie, H. and Berkeley, N. (2009) Creative Industries and Urban Regeneration, *Journal of Urban Regeneration and Renewal*, Vol. 2. No.4, pp. 364-374. ISSN: 1752-9638.

Jarvis, D., Lambie, H. and Berkeley, N. (2008a) *Creative Industries in Coventry and Warwickshire,* Research Report for Coventry City Council Business and Investment Team

Jarvis, D., Lambie, H. and Berkeley, N. (2008b) Creative Industries and Urban Regeneration, *Regional Studies Association International Conference: the Dilemmas of Integration and Competition*, 27th-29th May, Prague, Czech Republic

Berkeley, N.P., Jarvis, D. and Begley J. (2007) Supporting Competitiveness in the West Midlands High Value Added Consumer Products Cluster, *Regional Studies Association International Conference*: *Regions in Focus,* 2-5 April, University of Lisbon, Portugal

Berkeley, N. and Jarvis D. (2006a) *Business cultures and communities in the Coventry and Nuneaton Regeneration Zone: Business Mapping Report.* Report for Coventry & Warwickshire Chamber of Commerce and Business Link

Berkeley, N. and Jarvis D. (2006b) *Business cultures and communities in the Coventry and Nuneaton Regeneration Zone: Phase One Final Report (Engaging BME Enterprises).* Report for Coventry & Warwickshire Chamber of Commerce and Business Link

Jarvis, D., Begley, J., Berkeley, N. and Jordane C. (2006a) *Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: GIS Maps of HVACP Firms.* Fourth Report for Learning and Skills Council Staffordshire/Advantage West Midlands

Jarvis, D., Begley, J., Berkeley, N. and Jordane C. (2006b) *Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: Analysis of Training Needs.* Third Report for Learning and Skills Council Staffordshire/Advantage West Midlands

Green, A. and Berkeley N. (2006) The West Midlands: The 'hinge' in the middle, In Hardill, I., Benneworth, P., Baker, M. and Judd, L. (Eds): *The Rise of the English Regions?* Routledge, Oxford. pp. 156-167. ISBN: 0415336325.

Berkeley, N., Barnes, S. And Noon D. (2005a) Comparative analysis of the Clothing & Textiles Industry in Western Cape, South Africa and the West Midlands Region in the UK. Research Report funded by Coventry University Small Research Grant Scheme.

Berkeley, N., Jordane, C. and Jarvis D. (2005b) The role of mature sectors in promoting regional economic development: the case of the High Value Added Consumer Products Cluster in the West Midlands Region, *Regional Studies Association International Conference, Regional Growth Agendas,* 28-31 May, Aalborg University, Aalborg

Jarvis, D., Jordane, C. and Berkeley, N. (2005a) *Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: FE and HE Provision in the West Midlands*. Second Report for Learning and Skills Council Staffordshire/Advantage West Midlands.

Jarvis, D., Jordane C., Donnelly, M. and Berkeley N. (2005b) *Foresighting Future Skills Needs for the HVACP Cluster in the West Midlands Objective 2 Core Area: Report of Desk Research* for Learning and Skills Council Staffordshire/Advantage West Midlands

Tully, J. and Berkeley, N. (2004) Visualising the Operating Behaviour of SMEs in Sector and Cluster: Evidence from the West Midlands, *Local Economy,* Vol 19, No.1, pp. 38-54 ISSN 0269-0942.

Berkeley, N.P. (2003) A stitch in time? Institutional support for the clothing industry in the West Midlands Region of the UK, *Regional Studies Association Conference, Reinventing Regions in a Global Economy,* 12-15 April, Pisa Congress Centre, Italy

Berkeley, N.P. and Noon, D.M. (2002) The role of a Higher Education Institution in providing strategic assistance to industry: The case of clothing in Coventry, *TABEISA International Conference on Higher Education and Regeneration*, November, Cape Town, South Africa

Berkeley. N. and Osgathorp L. (2002) *Evaluation of the Coventry Clothing Manufacturers Charter,* Report by Centre for Local Economic Development for Coventry Clothing Partnership, presented to Clothing Manufacturers Association Charter Awards Ceremony, May

Tully, J. and Berkeley, N.P. (2002a) Visualising the operating behaviour of SMEs in sector and cluster: Evidence from the West Midlands, *Regional Science Association: British and Irish Section 32nd Annual Conference*, 21-23 August, Brighton

Tully, J. and Berkeley, N.P. (2002b) Visualising the operating behaviour of SMEs in sector and cluster: Evidence from the West Midlands, European *Regional Science Association Conference*, 27-31 August, Dortmund

Clark, D., Berkeley, N.P. and Steuer, N.C. (2001) Attitudes to growth among owners of SMEs and the implications for business advice: Some evidence from the clothing industry in Coventry, *International Small Business Journal,* Vol 19, No.3, pp. 72-77 ISSN: 0266-2426.

Berkeley, N. and Steuer, N. (2000a) *Comparative Analysis of EU and National Trends in the Textile and Clothing Industry.* Report by Centre for Local Economic Development, funded by ESF ADAPT programme

Berkeley, N. and Steuer, N. (2000b) *Comparative Analysis of EU and National Trends in the Textile and Clothing Industry: Summary Report.* Report by Centre for Local Economic Development, funded by ESF ADAPT programme

Berkeley, N., Steuer, N. and Godfrey, D. (2000a) *Industrial Development Strategy for the Coventry Clothing Sector.* Report by Centre for Local Economic Development, funded by ESF ADAPT programme

Berkeley, N.P., Steuer, N.C. and Clark, D. (2000b) SMEs in the Coventry clothing industry: A strategy for long-term sustainability, *Proceedings of the Third International Conference on Stimulating Manufacturing Excellence in Small and Medium Enterprises (SMESME2000)*, Coventry, Coventry University. pp. 63-73 ISBN: 0905949862.

Berkeley N., Steuer N. and Clark D. (2000c) SMEs in the Coventry clothing industry: A strategy for long-term sustainability. *Third SMESME International Conference*, Coventry, April

Berkeley, N., Botchway, Q. and Collis, C. (2000d) *Review of the Coventry/Birmingham Area as a Benchmark for Bergamo/Milan*' Benchmark Report by Centre for Local Economic Development for OECD

Steuer, N.C., Berkeley, N.P. and Clark, D. (2000) Clothing manufacture in Great Britain: Developing local strategies for a nationally declining industry In: *Business and Economics for the 21st Century, Volume 3*. Worcester, MA, USA: Business & Economics Society International. pp. 67-77. ISBN: 0965983129.

Berkeley, N., Steuer, N. and Clark, D. (1999a) Globalisation in the clothing industry: industrial adaptation through co-operative networks, *Regional Studies Association International Conference*, Bilbao, September

Berkeley N., Steuer N. and Clark D. (1999b) Comparative analysis of EU and national trends in clothing and textile industry. *ADAPT-COSTEX Conference*, Santo Tirso, Portugal, December

Botchway Q., Berkeley, N. and Noon, D. (1999) *Mid-term Evaluation of SRB Projects in Coventry and Warwickshire*. Report by Centre for Local Economic Development for Coventry & Warwickshire Partnerships Ltd.

Steuer, N., Berkeley, N. and Clark, D. (1999) Clothing manufacture in Great Britain: Developing local strategies for a nationally declining industry. *Business and Economics Society International Conference*, Gran Canaria, July

Berkeley, N. and Steuer, N. (1998) *Walsall Economic Review*, Research Report, with KPMG for Walsall Training and Enterprise Council

Clark, D., Smith-Canham, J., Steuer, N. and Berkeley N. (1998) *Clothing in Coventry: A Market Information Survey.* Report by Centre for Local Economic Development funded by ERDF RETEX II programme

Collis, C. and Berkeley, N. with Jones G. and Smith-Canham J. (1998) Labour Market and Skill Trends: Prospects for the West Midlands Economy, in *West Midlands Labour Market and Skills Trends 1998/99*, pp 1-7, Government Office for the West Midlands.

Collis, C. and Berkeley, N. (1997) The West Midlands, in Swales, C. and Gudgin, G. (Eds) *Regional Economic Outlook*, Oxford Economic Forecasting and Northern Ireland Economic Research Centre (Spring 1997) pp 52-59. NIERC, Belfast.

Collis, C., Berkeley, N. and Smith-Canham, J. (1997) *An Industrial Vision for the Black Country*. Research Report with KPMG for CBI

Noon, D., Berkeley, N., Smith-Canham, J., and Collis, C. (1997) *Black Country Regeneration Framework*, Research Report with KPMG for Black Country Partners

Collis, C. and Berkeley, N. (1996a) The West Midlands, in Swales, C. and Gudgin, G. (Eds) *Regional Economic Outlook*, Oxford Economic Forecasting and Northern Ireland Economic Research Centre (Spring 1996) pp 78-88. NIERC, Belfast.

Collis, C. and Berkeley, N. (1996b) The West Midlands, in Swales, C. and Gudgin, G. (Eds) *Regional Economic Outlook*, Oxford Economic Forecasting and Northern Ireland Economic Research Centre (Autumn 1996) pp 78-86. NIERC, Belfast.

Noon, D., Berkeley, N. and Smith-Canham, J. (1996) *Stafford Regeneration Partnership: Single Regeneration Budget Bid*, Research Report with KPMG/Associated Architects for Stafford Borough Council

Smith-Canham, J. and Berkeley, N. (1996) *Dudley MBC: Performance in European Funding,* with KPMG for Dudley Metropolitan Borough Council.

Collis, C., Berkeley, N. and Fletcher D.R. (1995) *Atherstone Town Centre Regeneration Strategy*, Report the Centre for Local Economic Development for North Warwickshire Borough Council, Atherstone Chamber of Trade and Coventry & Warwickshire Training and Enterprise Council

Collis C., Gray K., Noon D. and Berkeley N. (1994) *Recent Trends in FDI in the Regions of the UK,* for the West Midlands Development Association

Elias, P., Healey, M., Abraham, H., Beel, S., Berkeley, N., Clark, D. and Noon D. (1991) *People and Work in Coventry: A Survey of Employers.* Report by the Institute of Employment Research and Centre for Local Economic Development for Coventry City Council.

Collis, C., Noon, D., Berkeley, N. and Roberts, P. (1990) *Benefits of Inward Investment to the West Midlands Region.* Report by the Centre for Local Economic Development for the West Midlands Industrial Development Association.

APPENDIX 2:

CITATIONS

(i) TULLY J. and BERKELEY N. (2004) Visualising the operating behaviour of SMEs in sector and cluster, Local Economy, Vol. 19, pp. 38-54

Cited in...

Bailey D. and MacNeill S. (2010) Changing policies for the automotive industry in an 'old' industrial region: an open innovation model for the UK West Midlands, **International Journal of Automotive Technology and Management**, Vol. 10., pp. 128-144

Bailey D. and Kobayashi S. (2009) Life after Longbridge? Crisis and Restructuring in the West Midlands Auto Sector, in Farshchi M.A, Janne O.E.M. and McCann P (Eds) **Technological change and mature industrial regions: firms, knowledge and policy**, pp. 129-154, Edgar, Cheltenham

Bailey D., Kobayashi S. and MacNeill S. (2008) Rover and out? Globalisation, the West Midlands auto cluster, and the end of MG Rover, **Policy Studies**, Vol. 29, No.3, pp. 267-279

Bailey D. and MacNeill S. (2008) The Rover Task Force: A case study in proactive and reactive policy intervention, **Regional Science Policy and Practice**, Vol. 1, No. 1, pp. 109-124

Bailey D. and Driffield N. (2007) Industrial Policy, FDI and Employment: Still 'Missing a Strategy', **Journal of Industry, Competition and Trade**, Vol. 7, pp. 189-211

Bailey D. (2007) Globalization and restructuring in the auto industry: the impact on the West Midlands automobile cluster, Strategic Change, Vol 16, No. 4, pp. 137-144

Burfitt A. and Macneill S. (2008) The Challenges of Pursuing Cluster Policy in the Congested State, **International Journal of Urban and Regional Research**, Vol. 32. No.2, pp. 492-505

Burfitt A., Macneill S. and Gibney J. (2007) The Dilemmas of Operationalizing Cluster Policy: The Medical Technology Cluster in the West Midlands, **European Planning Studies**, Vol.15, No.9, pp. 1273-1290

Carroll M.C., Reid N. and Smith B.W. (2008) Location quotients versus spatial autocorrelation in identifying potential cluster regions, **The Annals of Regional Science**, Vol. 42, No.2, pp. 449-463

Jayne M. (2005) Creative industries: the regional dimension, **Environment & Planning C: Government and Policy**, Vol. 23, No.4, pp. 537-556

Hart D. (2009) Issues in developing an audio-visual cluster in the West Midlands, **Creative Industries Journal**, Vol. 2, No.1, pp. 105-112

Huggins R. and Williams N. (2009) Enterprise and public policy: a review of Labour government intervention in the United Kingdom, **Environment and Planning C: Government & Policy**, Vol.27, No.1 pp. 19-41

Lyon F. and Bertotti, M. (2007) Measuring the contribution of small firms to reducing poverty and social inclusion in the United Kingdom, in Stoner J.A.F. and Wankel C. (Eds) **Innovative Approaches to Reducing Global Poverty**, pp.175-202, Information Age Publishing

Palazuelos, M. (2005) Clusters: Myth or realistic ambition for policy-makers?, **Local Economy**, Vol. 20, No.2, pp. 131-140

(ii) **CLARK D., BERKELEY N. and STEUER N. (2001). Attitudes to growth among owners of small and medium-sized enterprises and the implications for business advice some evidence from the clothing industry in Coventry. International Small Business Journal 19 (3), 72-77**

Cited in...

Achtenhagen L., Naldi L. and Melin L. (2010) "Business Growth"—Do Practitioners and Scholars Really Talk About the Same Thing?, **Entrepreneurship Theory and Practice**, Vol. 34, No.2, pp. 289-316

Majumdar S. (2008) Modelling Growth Strategy in Small Entrepreneurial Business Organisations, **Journal of Entrepreneurship**, Vol. 17, No.2, pp. 157-168

Pasanen M. (2003) **In Search of Factors Affecting SME Performance: The Case of Eastern Finland,** Doctoral Thesis, University of Kuopio, Finland

Standing C. and Stockdale R. (2003) **Supporting Rural SMEs in the Selection of E-Marketplaces**, A report for the Rural Industries Research and Development Corporation, Australia

(iii) **STEUER N., BERKELEY N. and CLARK D. (2000) Clothing manufacture in Great Britain: Developing local strategies for a nationally declining industry In: *Business and Economics for the 21st Century, Volume 3*. Worcester, MA, USA: Business & Economics Society International. pp. 67-77**

Cited in...

Evans Y. and Smith A. (2006) Surviving at the margins: Deindustrialisation, the creative industries, and upgrading in London's garment sector, **Environment and Planning A**, Vol.38, No.12, pp. 2253-2269

APPENDIX 3:

PORTFOLIO OUTPUTS

1. GREEN A. AND BERKELEY N. (2006) The West Midlands: The 'hinge' in the middle, In Hardill, I., Benneworth, P., Baker, M. and Judd, L. (Eds): **The Rise of the English Regions?** pp. 156-167, Routledge, Oxford

2. STEUER N., BERKELEY N. and CLARK D. (2000) Clothing Manufacture in Great Britain: Developing Local Strategies for a Nationally Declining Industry, in KANTARELIS, D. (Ed.) **Business & Economics for the 21st Century, Volume III**, pp 67-77. Business & Economics Society International, Worcester, Ma.

3. BERKELEY N. and STEUER N. (2000a) **Comparative Analysis of EU and National Trends in the Textile and Clothing Industry**, Report by Centre for Local Economic Development, funded by ESF ADAPT programme

4. BERKELEY N., BARNES S. and NOON D. (2005) **Comparative analysis of the Clothing & Textiles Industry in Western Cape, South Africa and the West Midlands Region in the UK**. Research Report funded by Coventry University Small Research Grant Scheme.

5. CLARK D., BERKELEY N. AND STEUER N. (2001) Attitudes to business growth among owners of SMEs and the implications for business advice, **International Small Business Journal**, Vol. 19, pp. 72-77.

6. TULLY J. and BERKELEY N. (2004) Visualising the operating behaviour of SMEs in sector and cluster, **Local Economy**, Vol. 19, pp. 38-54

7. BERKELEY N., STEUER N. AND GODFREY D. (2000b) **Industrial development strategy for the Coventry clothing sector**, Centre for Local Economic Development, Coventry University, Coventry.