skillset
The Sector Skills Council for Creative Media

Strategic Skills Assessment for the Fashion and Textiles Sector in Scotland

February 2010

Alliance
Sector Skills Councils

Contents

1. Introduction to the Sector Skills Assessment

The key role of Skillset as the Sector Skills Council for the Fashion and Textiles industry is to assess the industry's skills needs and work with industry and Government to respond to those needs. Within this context, the UK Commission for Employment and Skills (UKCES) charged Skillfast UK, the Sector Skills Council for fashion and textiles at the time (until March 2010), to carry out a Strategic Skills Assessment (SSA) of the UK fashion and textiles sector. This will now be carried out on an annual basis for the UK and each of the home nations by Skillset.

The report incorporates four key elements including:

1) What Drives Skills Demand?

The report will look at current and recent performance along with the competitive position of the sector and key sub-sectors; the economic structure and condition of the sector; the factors driving this performance, position and the skills implications.

2) Current Skills Needs

Leading on from the drivers of change, the assessment includes a robust analysis of current and expected skill needs in the sector and recruitment issues. This section details the character of skills needs, and how these differentiate across the full spectrum of skills and occupations.

3) Anticipating What Lies Ahead

As part of the assessment, Skillfast-UK is invited to offer a strategic insight, building on the current drivers of skills demand and skills needs, examining possible/likely future trends in the sector and anticipating the associated skills needs these will bring.

4) Geography

The assessment requires Skillfast-UK to pay particular attention to geographical composition of the sector and highlighting where specific skills issues are particularly manifest. This analysis allows for the correct interpretation of higher level skills information presented in the skills needs analysis.

2. Executive Summary

Sector footprint and demographics

The Skillfast-UK sector footprint in Scotland employs 23,000 people within 5,500 workplaces.

Using ABI data, the gross value added for the sector is estimated to stand at £600 million with gross value added per head standing at almost £35,000

Of the sub-sector boards, the apparel and sewn products element of the footprint proportionally accounts for the largest area of employment

In terms of demographics, 61% of the workforce is female, 16% are self-employed with a further 24% working on a part-time basis. Worryingly, 47% of the sector are aged over 45, many of whom hold key occupations and hard to replace skills.

Looking at qualifications, 42% are qualified at below SVQ level 2 whilst 32% hold an SVQ level 2 or above. This compares with 18% and 55% respectively for the wider Scottish workforce.

Current sector performance

Between 2003 and 2007, ABI data tells us employment within the sector reduced by 25% and GVA by 14% within the sector as the manufacturing base continued to be outsourced. However, GVA per head increased by 14% signifying the reduction and outsourcing in low value manufacture and the sectors movement towards high value production.

Within manufacturing, recent data suggests the decline falls in GVA had levelled out before the recession. GVA per head in the manufacturing sector has increased to over £40,000 per head, up from £22,000 in 1999.

Exports in textiles and apparel have been significant areas of strength for Scotland and represent an area in which high value Scottish produced goods have been successful in finding markets.

Key drivers of current sector performance and skills demand

The structure of the sector has been impacted more than any other by the onset of globalisation. Globalisation, enabled by the dismantling of trade barriers along with lower communication and transport costs, has seen lower value added manufacturing outsourced to low-cost nations and the Consumer Price Index for clothing decouple itself from the all item index.

This structural change has seen a transformation in the way sector firms operate, looking towards niche manufacturing, balanced supply sourcing or outsourcing operations all together in order to gain competitiveness in the global market place.

Key drivers of skills demand in this context are:

- the growth of fast fashion and technical markets;
- the Scottish style;
- adaptation to changing technology;
- the impact of migration;
- the image of the sector;
- the sustainability agenda

The skills implications of the above drivers include:

- a reliance on design creativity, allied to strong technical and commercial awareness; successful branding and marketing skills;
- the development of new technologies;
- the ability to compete in premium and niche markets on a global level by maintaining craft skills;
- maintaining the current trajectory of business start-ups by ensuring owner-managers have the correct skills available;
- ensuring Scottish firms have the ability to manage overseas supply chains and understand the product environment;
- the maximisation of production efficiencies enabling firms to reduce costs through multi-skilling;
- attracting a greater number of graduates into the sector. (This is a key problem where strong leadership is needed in times of rapid change)
- due to the long-term decline in apprenticeships and other development mechanisms, along with the negative image of the sector, the ageing workforce is going to be a key problem

Impact of the recession

Indicators from all available sources show how both export markets and employment in the sector have been impacted by the recession. However, by the end of 2009, there had been a stabilisation of the export market and a slight improvement within the jobs market although this pattern requires monitoring.

Current skills needs

National datasets show vacancy rates and hard-to-fill vacancy rates within the sector are similar to the picture at an all sector level.

However, hard-to-fill vacancies were more prevalent than reported at an all sector level in Scotland. Both national datasets and the Skillfast-UK employer survey confirmed that these shortages were in associate professional, skilled trades and operative occupations. Higher level skills issues were reported in design occupations, with the commercial and technical skills of graduate designers being identified as an issue.
Skills gaps, although less prevalent than skills shortages and below national all sector levels, are still highly prevalent within the sector. Again, both national datasets and Skillfast-UK's own employer survey found gaps in a range of occupations predominantly in operative and elementary positions but also sizable shortages in managers, administrative and sales occupations. Technical and practical skills such as upskilling, planning and organising skills were the main skills found lacking by employers, both far higher than seen nationally.

The impact of skills gaps were far more costly to employers in Scotland with increased running costs, difficulties in meeting customer service objectives and delays developing new products or services all major issues encountered because of these skills gaps.

Future skills priorities included the recruitment and retention of able young people, improving sales and marketing skills and finding colleges and training providers that can deliver relevant training and technical skills.

Scenario planning

Working Futures III data predicts a period of stability in the sector, with the decline in workforce numbers slowing compared to the large losses seen in the past decade. This suggests the Scottish fashion and textiles sector has found a level in the global economy. This in turn, will see positive net requirements for the sector to replace retirements.

It is envisaged that there will be a gross increase in the need for managers and senior officials and professional occupations, whilst transport and machine operatives and elementary occupations will continue to decline, signifying the continued restructuring forecast to occur.

Skillfast-UK's own bespoke scenario planning offers an insight into the patterns that will affect the sector, with continued emphasis on customer service, commercialisation of new technologies, strong craft skills, overseas sourcing and supply chain management seen as the drivers of sector behaviour and driving sector skills needs.

More recent scenario planning on a European level has shown there may be three directions in which the fashion and textiles sector could go down by 2020. The three scenarios present different influences at play on the sector and with it the skills mixes required by employers.

Geography

The Borders proportionally employs the largest number of people within the sector with more textiles and apparel employment located there than in any other unitary authority area. Dry cleaning and laundry employment is roughly proportional to the size of the population reflecting its service status whilst footwear and leather is heavily represented in Renfrewshire and neighbouring Glasgow city.

Skills requirements are similar within both the Lowlands and Highlands and Islands with sewn products operatives and production management occupations both featuring within the respective top three skills shortages and gaps.

Priorities

Taking into account the evidence presented, Skillfast-UK has identified a number of issues for action. These include:

- The supply of technical skills at operative and craft level
- Graduate level technical skills and commercial awareness
- Presenting a realistic picture of the sector
- International trade and the supply chain
- Management and leadership skills
- Information on sector jobs and careers
- Literacy and numeracy

3. Introduction to the Skillfast-UK Footprint

Skillfast-UK is the Sector Skills Council for fashion and textiles. The sector footprint covers the apparel, footwear and textiles supply chains, from the processing of raw materials, to product manufacture, to the after-sales servicing of products.

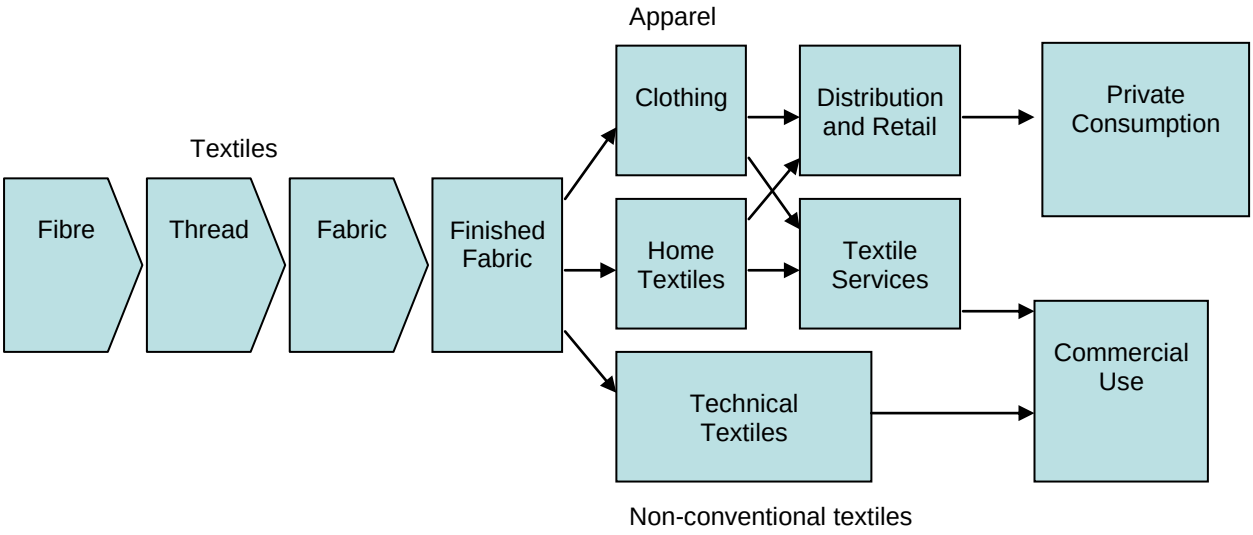
Within Skillfast-UK's remit are companies that undertake the following processes and activities, most of which occur within the UK fashion and textiles supply chain (see Figure 1).

- Materials production and processing, including processing of raw fibres, spinning and weaving, tanning of leather, finishing of textiles, manufacture of knitted and crocheted fabrics, production/processing of manmade fibres, production of non-wovens
- Product design (textiles, clothing, fashion design)
- Manufacture of made-up articles, including household textiles, carpets, apparel, knitwear, luggage, footwear and leather goods
- Trading in apparel, footwear and textile items, including sourcing, logistics, distribution, branding and marketing
- Servicing of apparel, footwear and textile items, including fitting of carpets, laundries, dry cleaning, textile rental and clothing and shoe repair

Companies within the footprint serve the following end-use markets:

- Carpets
- Home furnishings (e.g. curtains and upholstery fabrics, as well as "technical" components such as furniture platform cloths)
- Household textiles (e.g. bed linen, table linen, as well as "technical" components such as pillow tickings)
- Technical textiles for non-consumer applications (e.g. automotive, medical, industrial textiles)
- Technical consumer goods (e.g. tents, sleeping bags, rucksacks) and performance outdoor-wear
- Footwear (including repair services)
- Leather and leather-goods (including leather repair)
- Retail clothing
- Knitwear and hosiery
- Corporate clothing, work-wear and protective clothing (including support services such as laundering)

Figure 1: The fashion and textiles supply chain



Source: EMCC 2004, p.1 in EMCC 2008

Skillfast-UK's footprint is represented by six strategic sector boards, each of which represents a specific part of the Skillfast-UK footprint. These boards are:

- Apparel and sewn products
- Design
- Footwear and leather
- Laundry and dry cleaning
- Manmade fibres and technical textiles
- Textiles

4. Current Stock of Businesses and Employment

The Skillfast-UK sector footprint covers a wide range of sectors, each of which has performed differently in recent years and have been subjected to different drivers. This section therefore covers:

- Current stock of businesses and employment
- Sector demographics
- Recent sector performance
- The role of globalisation
- Key drivers of demand
- The implications for skills arising out of these key drivers.

4.1 Businesses and activity

Following a re-sizing exercise of the fashion and textiles sector in Scotland, the sector can be seen to account for 23,000 jobs and 5,500 workplaces within the Skillfast-UK footprint. (tbr 2008)

This is in comparison with data from the Annual Business Inquiry (ABI) 2007 that estimates the figure at 16,500 people and 1,400 firms. As the ABI excludes the self-employed workforce, it can be deduced from these figures the high number of micro and niche industries that exist within the Scottish fashion and textiles sector not accounted for within this analysis.

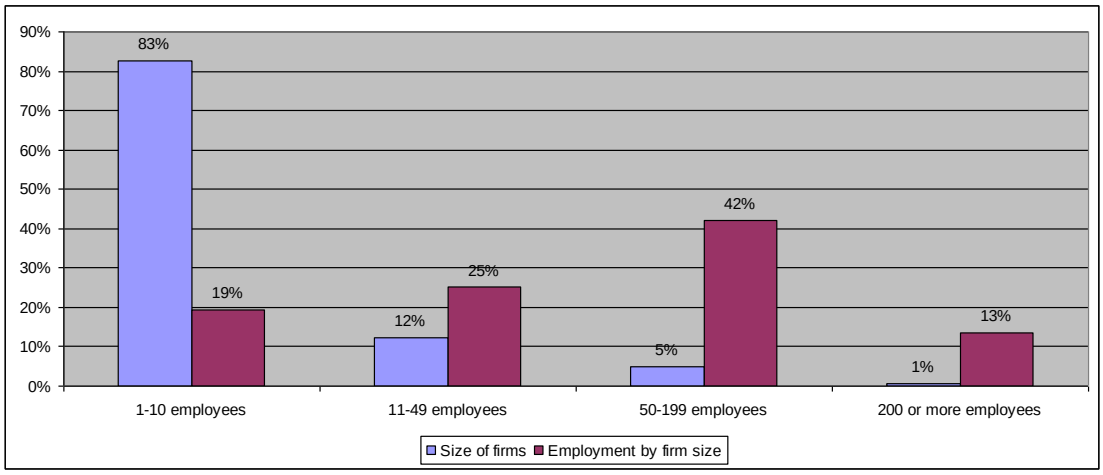
4.2 Business demographics

The following section is based on analysis of the ABI data. This is due to the practicalities of breaking down into regional level the information from the tbr study below the UK and Scotland total figure. However, it must be noted that this sizeable number within the workforce excluded from the ABI analysis must be taken into account.

4.3 Size of firms

Reflecting the high number of micro and niche businesses within the Scottish fashion and textiles workforce, it can be seen that 83% of businesses recorded in the ABI employ between one and ten people. However, in employment terms, the ABI notes that the majority of employees work in workplaces that employ between 50 and 199 employees.

Figure 2: Size of firms

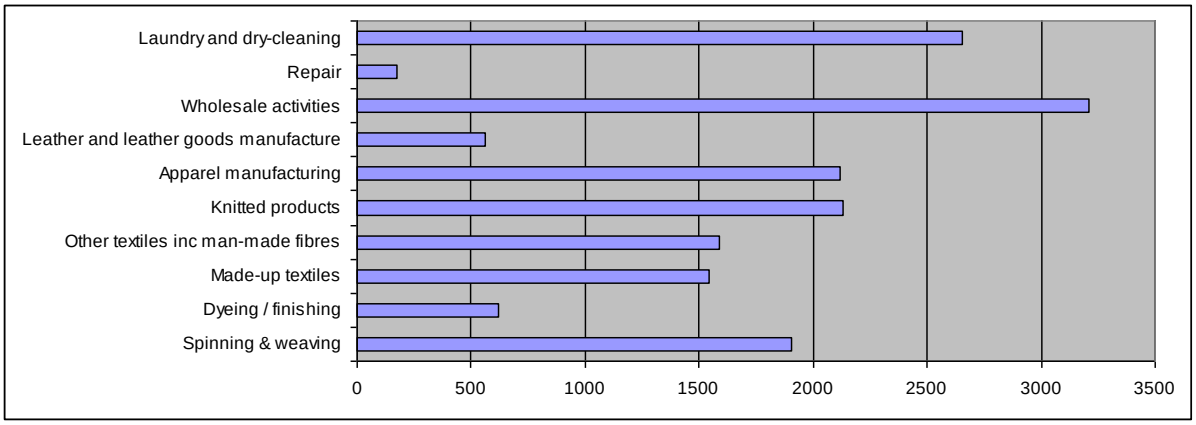


Source: ABI 2007

4.4 Employment within the fashion and textiles sector

Using ABI data where disclosable, (again taking into account these figures only include people in employment) it is possible to see that combined, the manufacture of textiles, apparel and knitted products is the biggest area of employment. This is followed by wholesaling, laundry and dry-cleaning and spinning and weaving.

Figure 3: Employment within the fashion and textiles sector



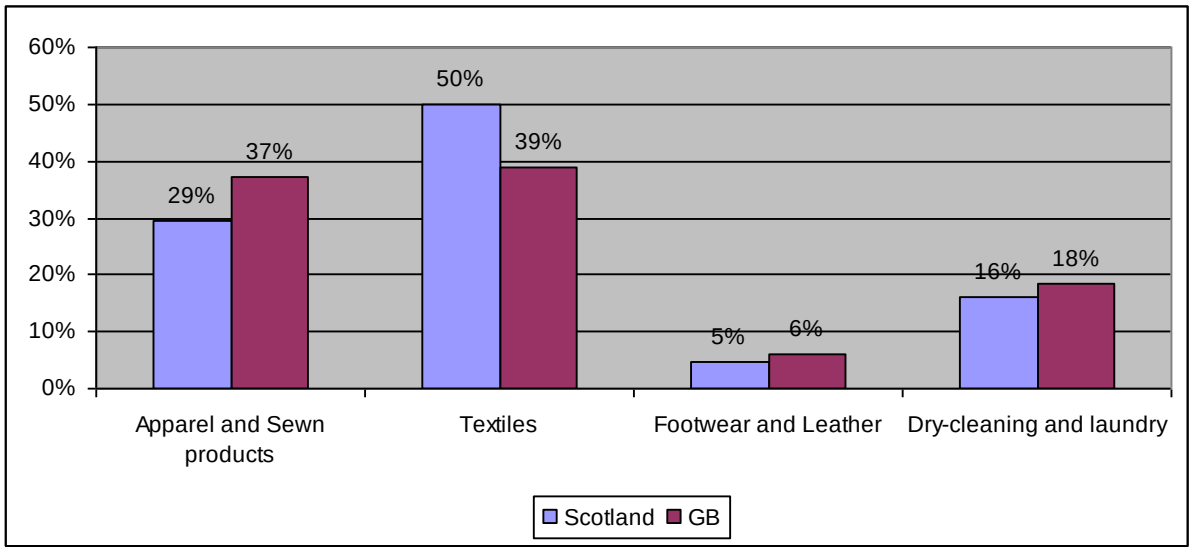
Source: ABI 2007

4.5 Employment by sub-sector board

Skillfast-UK footprint is separated into six distinct sub-sectors. However, national datasets only allow us to look at four of these. Using the four, it is possible to see that a high proportion of the Skillfast-UK Scottish footprint is dominated by the textiles sub-sector with 50% of employment within this sub-sector. This exceeds the total for Great Britain with is 39%

Proportionally, apparel, footwear and leather and laundry and dry cleaning accounts for a lower employment level in Scotland along with slightly less employed within as experienced in Great Britain.

Figure 4: Employment by fashion and textiles sub-sector



Source: ABI 2007

4.6 Sector gross value added

Gross value added (GVA) for the sector, including only firms within the ABI analysis is estimated to stand at close to £600 million with GVA per head standing at £35,000 per head. This is in contrast to the Skillfast-UK all sector figure of £38,000 per head. This is primarily due to Scotland's fashion and textiles sector having less of an emphasis on the high value wholesale activities than experienced at a Great Britain level.

Based on Skillfast-UK estimates of GVA by sub-sector, it is possible to see how a combination of traditional crafts such as weaving, spinning and knitted products; and newer technological advancements such as the creation of man-made fibres are proportionally more important to the Scottish fashion and textiles sector than the Great British equivalent.

4.7 Employment Demographics

Whilst official datasets do not allow us to look in detail at the demographics of the Scottish fashion and textiles workforce, the data does reflect the picture cast at a UK level. Using this knowledge, it is possible to see that the Skillfast-UK Scottish fashion and textiles footprint has a number of characteristics that distinguish itself from the wider Scottish economy.

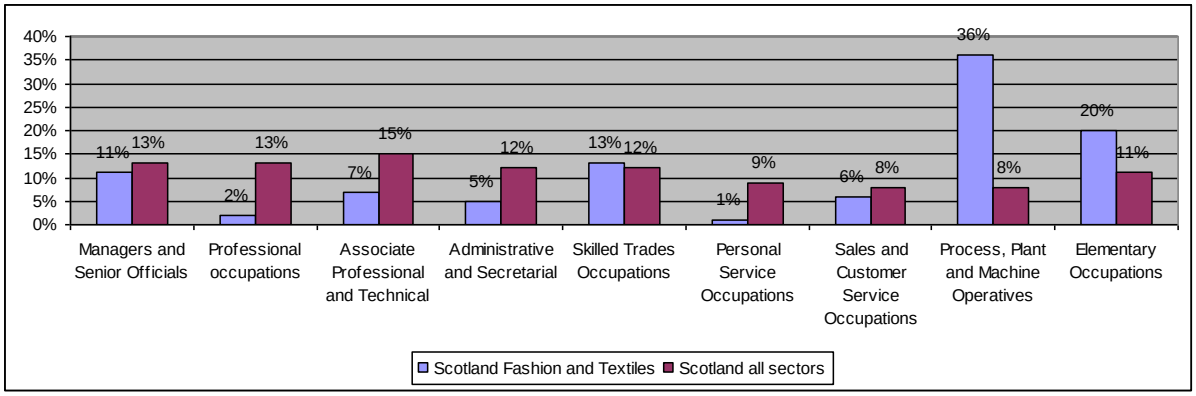
4.8 Sector demographics[1]

Occupational groupings

Compared to the wider economy, employment in the sector is heavily concentrated in lower skilled occupations (operatives and elementary occupations) together with managerial positions and skilled trades. On the other hand, the sector is under-represented in professional, associate professional and administrative occupations when compared to employment the wider economy.

Whilst operative level jobs are declining as an occupational grouping, they still account for over a quarter of all employment and represent the continuing importance that these jobs to the sector. The key occupational groups for the fashion and textiles sector are reported in Table 2 overleaf.

Figure 5: Occupational make-up of the sector



Source: APS 2008 (based on SIC 17-19, 2470, 5271 & 9301)

[1] For full citation of the APS dataset, please refer to the references

Table 2: Key occupations within the Skillfast-UK footprint

Occupational group	Occupation	Key job titles
Managers & senior officials	1121 Production, works & maintenance managers	Production manager, technical manager
Professional Occupations	2122 Mechanical engineers	Engineer
Associate professional and technical	3111 Laboratory technicians	Textile technologist, dyeing technician
	3422 Product clothing & related designers	Textile/clothing designer, garment technologist
	3542 Sales representatives	Technical sales, sales executive
	3543 Marketing associate professionals	Marketing executive
Skilled trades occupations	5223 Metal working production and maintenance fitters	Tufting engineer, loom technician, sewing machine mechanic
	5411 Weavers and knitters	Weaver, knitter
	5413 Leather and related trades	Shoe maker, saddler, clicker, shoe repairer
	5414 Tailors and dressmakers	Tailor, kilt-maker
Process, plant and machines operatives	8113 Textile process operatives	Scourer, spinner, tufter, twister, warper
	8114 Chemical and related process operatives	Leather worker, dye-house operative
	8136 Clothing cutters	Pattern cutter
	8137 Sewing machinists	Body linker, collar linker, mender, repair hand, sewing machinist, seamer
	8139 Assemblers and routine operatives nec.	Machinist – footwear/leather-goods
Elementary occupations	9234 Launderers, dry cleaners, pressers	Dry cleaner, garment finisher, laundry operative, presser

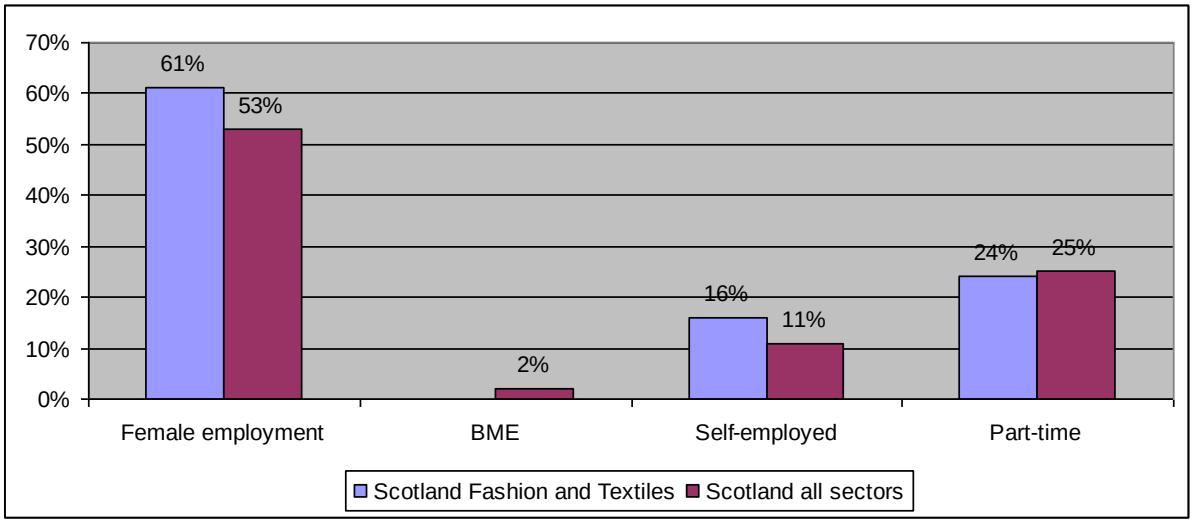
Source: Skillfast-UK (2005)

Employment demographics

At 61%, the Scottish fashion and textiles sector employs 11% more females than the sector at an all Scotland level. This largely reflects the high proportion of apparel manufacturing jobs that exist within the sector that have traditionally been the domain of the female workforce.

Self-employment is a key trait of the sector in Scotland, indicating the large amount of small and micro businesses that exist, whilst part-time working is roughly similar to the pattern exhibited at a Scotland all sector level.

Figure 6: Key demographic indicators



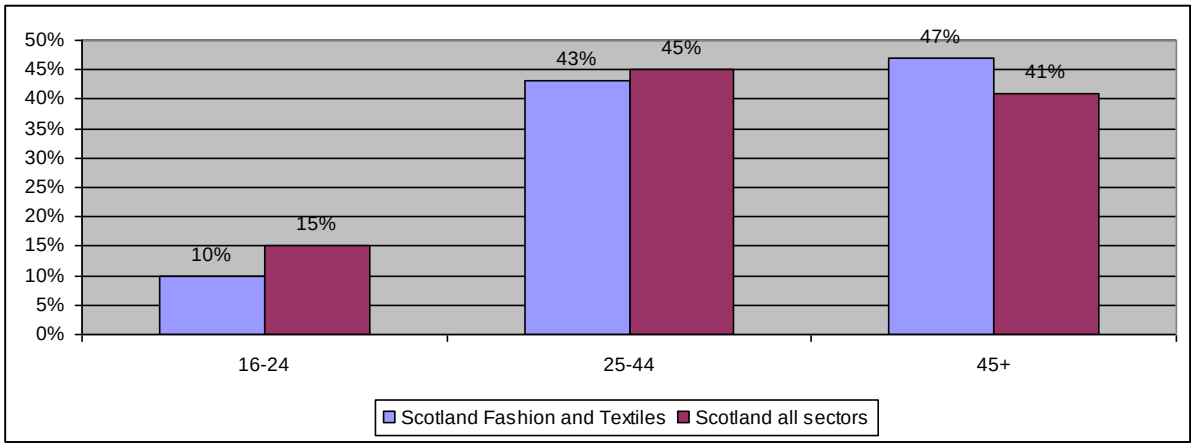
Source: APS 2008 (BME groupings for Scotland Fashion and Textiles undisclosable due to sample sizes)

4.9 Age-bands of the sectors workforce

The sector in Scotland has an ageing workforce that will have implications for the future direction of the sector. 47% of the sectors workforce is over 45, well above the picture exhibited nationally.

This situation is a key issue for the Scottish fashion and textiles sector as many older workers hold key management and technical positions in very specific craft based operations. As they retire their replacements will require extensive training and development over a prolonged period. Conversely the sector is underrepresented in the 16-24 age group.

Figure 7: Age groupings with the sectors workforce

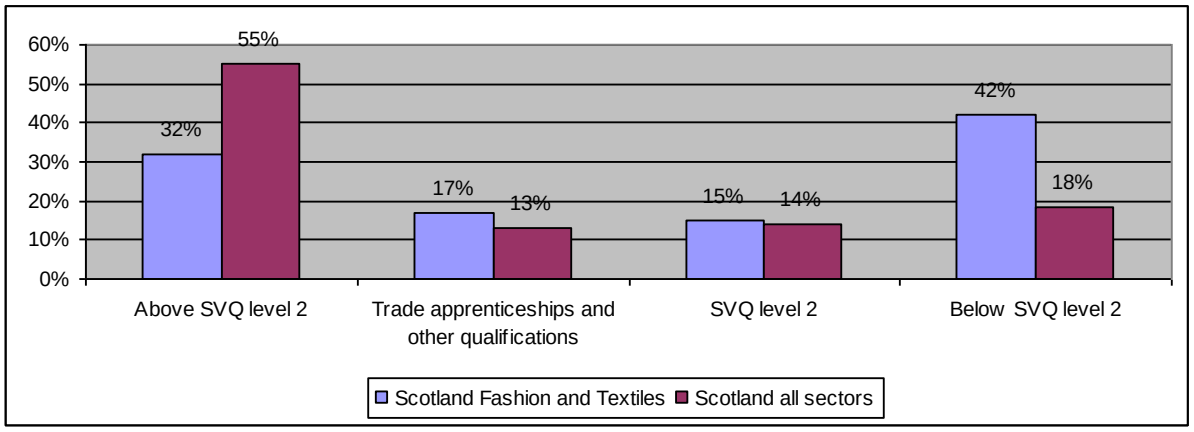


Source: APS 2008

4.10 Qualification levels

Qualification levels in the Scottish fashion and textiles sector show a large differences in certified qualifications compared to the sector at large. 42% of the workforce is qualified at below SVQ level 2 with a quarter of the workforce holding no qualifications what-so-ever. This is in relation to the wider Scottish workforce where far less at 18% are without an SVQ level 2 qualifications, less than half the number within the Scottish fashion and textiles sector.

Figure 8: Qualification levels



Source: APS 2008

4.11 Scottish manufacturing employment within a European context

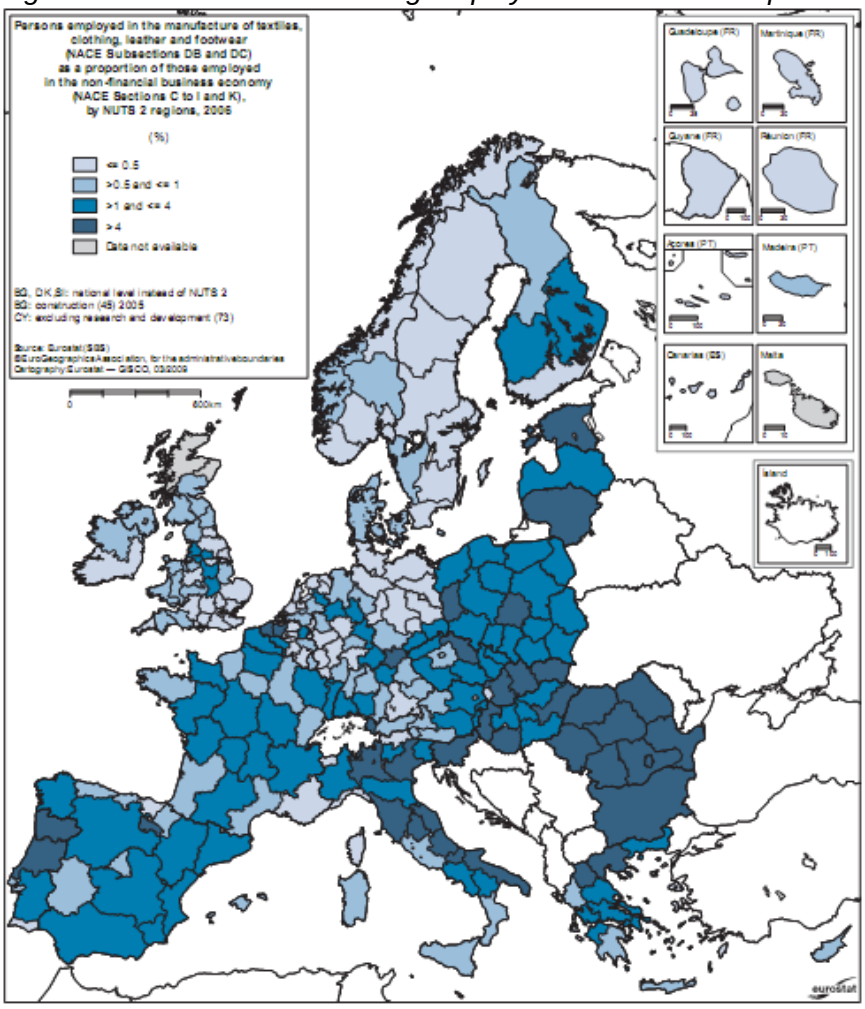
Information from Eurostat clearly shows employment in the manufacture of textiles, clothing, leather and footwear within a European context is lower in Scotland than in many other countries.

The map in Figure 9 demonstrates that large parts of Scotland, particularly within the Lowlands are still significant employers for the sector with between 0.5% and 1% of the population employed in the manufacture of fashion and textiles (further analysis of the geographical breakdown of Scotland is explored in Section 4).

What the map clearly demonstrates is the extent to which textiles, clothing, leather and footwear manufacturing is clearly concentrated within the Central and Eastern states of Europe where lower production costs make these nations an attractive proposition for production centres.

Of the western European nations, Italy, with it's combination of an interdependent supply chain and global demand for Italian produced goods and Portugal which was originally a beneficiary of outsourcing in the early 1980's, remain a proportionally higher employers within fashion and textile manufacture.

Figure 9: Scottish manufacturing employment within a European context



Source: Eurostat Business Review 2009

5. Current Sector Performance

The key role of Skillfast-UK as a Sector Skills Council is to develop and facilitate a plan of action that will ensure that fashion and textiles businesses can access the skills they need for current and future productivity and competitiveness. To achieve this it is necessary to set out a clear picture of the current make-up of the sector, the forces that drive and shape competitiveness and productivity within the sector, and to assess the implications for skills arising out of these key drivers.

5.1 GVA and employment

Between 2003 and 2007 the Scottish fashion and textiles sector has undergone a substantial change in its composition as factors such as globalisation have impacted the sector and led to an increased number of activities within the fashion and textiles supply chain being outsourced.

Using figures obtained from the ABI, it is possible to see that within Scotland, a clear movement has been made from lower value production to production and functions higher up the value chain.

Employment, although now beginning to slow in terms of movement, has declined by 25% with GVA also falling 14%. However in contrast to this, by 2007, GVA per head had increased by 14% representing this shedding of low value primary tasks and the movement to higher value production and functions within the sector.

Table 3: Headline indicators for Scotland 2003-2007

	% change
Employment	-25%
GVA	-14%
GVA per head	14%

Source: ABI 2003 & 2007 based on Skillfast-UK estimates

Further interrogation of the figures suggests that in absolute terms, sectors that have faired worst have been within the manufacturing sectors most vulnerable to overseas competition and outsourcing. For instance, general apparel manufacture, manufacture of made-up textiles and primary functions such as spinning have all seen considerable drops in estimated GVA.

Sectors that have seen growth in absolute terms include the wholesale of clothing and footwear, leather goods manufacture and dyeing/finishing. These figures correspond with the patterns noted within the overall UK profile of the rises and falls in business registrations by sub-sector.

5.2 Fashion and Textile sector GVA in relation to all manufacturing industries

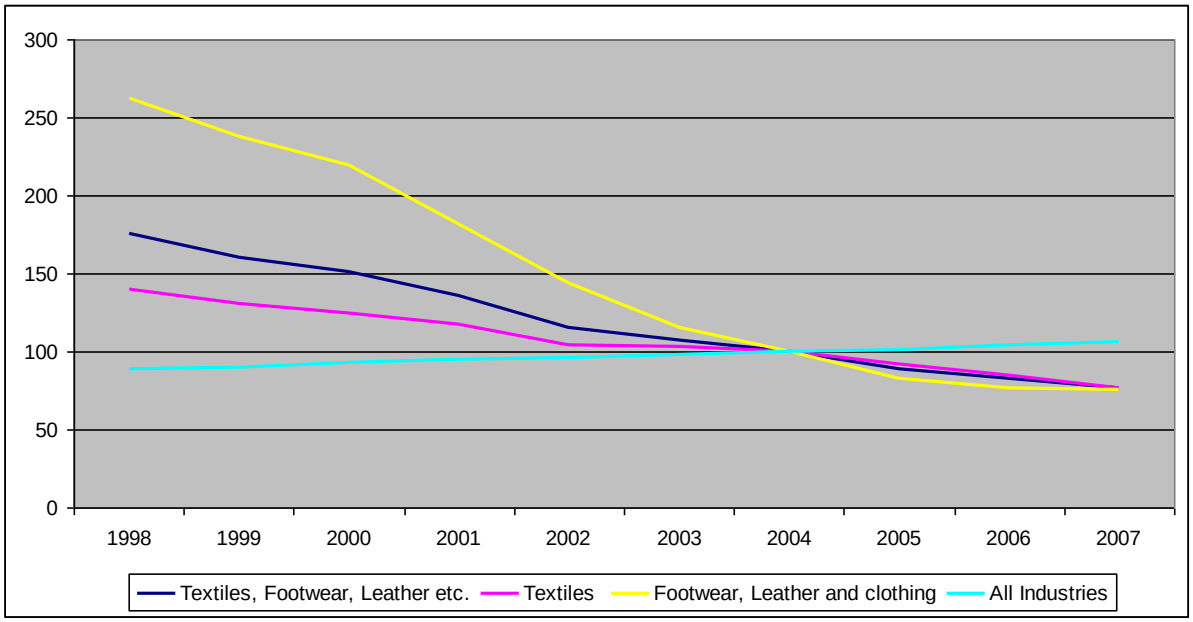
To continue the point alluded to in Table 3, the performance of the manufacturing part of the Scottish fashion and textiles footprint is demonstrated by looking at the rate of output for the manufacturing industries.

Figure 10 demonstrates the textiles, footwear, leather and clothing manufacturing industries have experienced a large decline in GVA since 1998 whilst the pattern for all manufacturing

industries showed relative stability and nominal growth. Of the sub-sectors, footwear leather and clothing manufacturing have shown the greatest vulnerability during this period.

Before the recession, the signs were however that the situation was beginning to bottom out and a certain amount of stability was returning to the sector. However, the full fall out of the recent economic climate is yet to be assessed although initial signs are showing that further falls in GVA for the manufacturing element of the fashion and textiles sector are to be expected.

Figure 10: GVA at basic prices by category of output (2004 = 100)



Source: Scottish Government 2008 (2004 weight for textiles is 4.5, footwear and leather is 3.2, textiles is and footwear leather and clothing is 1.3)

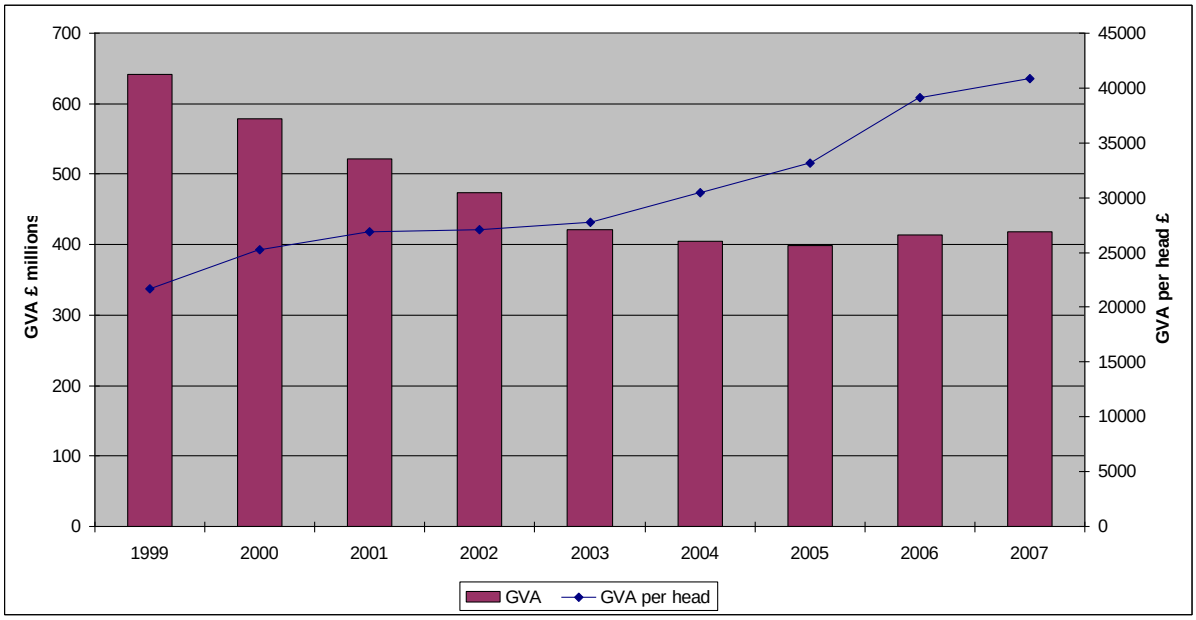
5.3 GVA vs GVA per head in the manufacturing sector

Reflecting the rapid structural changes to the Scottish fashion and textiles manufacturing base, the latest available figures show how GVA has declined significantly since 1999.

However, by the last available pre-recession figures of 2007 the situation had stabilised and moderate growth was experienced, indicating the sector had began to found its niche or level within the global market place.

The move to higher value production can be seen in the GVA per head indicators that show how the Scottish fashion and textiles manufacturing GVA per head has almost doubled to over £40,000 between 1999 and 2007.

Figure 11: GVA & GVA per head for Scotland



Source: ABI & ONS Regional GVA accessed from StatWales beyond 20/20 database based on SIC 17-19 for Scotland (please note. The method of collecting ABI data changed between 2005 and 2006 for which the employment estimates were made. Therefore, the figures are not strictly comparable between these years.)

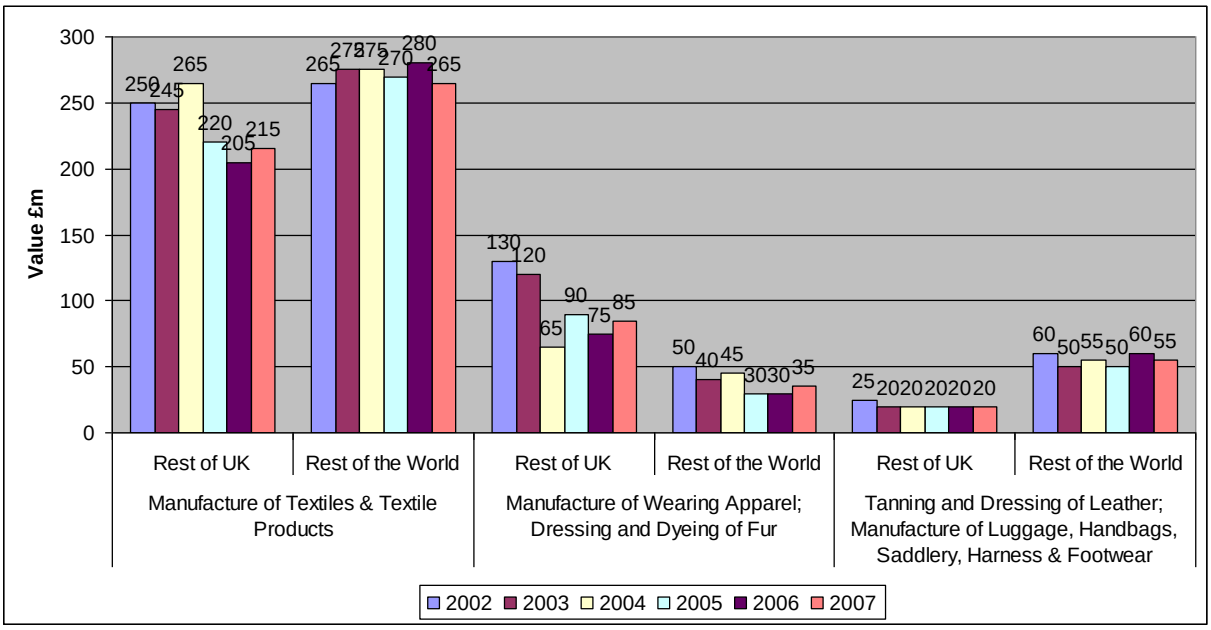
5.4 The continuing importance of the export sector

Despite the continued loss of GVA as firms take advantage of moving production overseas, one advantage Scotland continues to enjoy within a manufacturing context is that there is a distinctive Scottish style which is recognised in world markets. This adds generally to the attraction of Scottish branded goods, particularly in areas such as kilt's, cashmere knitwear and Harris Tweed. This style typically relies on a high level of product quality from Scottish manufacturers.

Figure 12 shows how Scottish exports of manufactured fashion and textile goods have remained stable in the three major manufacturing sub-sectors despite the huge falls of GVA experienced in the sector as a whole. This trend has remained consistent in export sales to both the rest of the UK and to the rest of the world.

These figures give a clear indication that whilst domestic manufacturing demand is now being satisfied by cheaper overseas produced textiles, clothing, leather and footwear products, there is a consistent demand for high quality, high value Scottish produced items.

Figure 12: Estimates of Scottish Exports to Rest of the UK and Rest of the World



Source: Scottish Government 2009

6. The Role of Globalisation in Shaping the Sector

To fully understand the dynamics that have shaped the structural change within the UK and in turn Scottish fashion and textiles sector, it is important to contextualise these changes within the impact of globalisation.

Globalisation of the supply chain has driven structural change in the UK and Western European fashion and textiles sector at a far greater rate than experienced by most other sectors of the economy.

Coupled with price deflation in the UK market, this has continued to lead to pressure on margins and reduced profitability for the sectors manufacturing firms, whilst creating opportunities for UK companies to reduce their manufacturing cost base through outsourcing.

Global outsourcing is not a new phenomenon for the fashion and textiles sector, a sector that has traditionally been sensitive to global political and economic changes. However, recent academic thinking is beginning to place these changes within two distinct phases in an attempt to understand the current phenomena.

Bottini et al, (2007) note that the first phase of globalisation and outsourcing of production was initially driven by the clustering of production, enabled by the fall in transportation costs on the basis of specialisation in the production of completed goods.

However, a new second phase has been identified, characterised by the increasing separation of various production stages and a trade in tasks that has occurred in the past 20 years (Baldwin, 2006 in Bottini et al, 2007) and one which UK fashion and textiles firms have actively been taking advantage of and been particularly adept at.

As Bottini, et al (2007 p.7) recognise, *"this change has been driven by the ability of firms to take advantage of the mobility of capital in the pursuit of efficiency savings as political, economic and technological drivers have combined. Material off-shoring, predominantly in labour-intensive industries such as consumer electronics, textiles and apparels and footwear and leather goods was an early key characteristic of this movement."*

Within this context the outsourcing experienced by the textiles and fashion sector has been made possible by two key drivers.

Firstly, the liberalisation of trade policy, enabled by legislative drivers such as the phasing out in 2005 of the Agreement on Textiles and Clothing that had protected developed countries from low cost competition from low production cost countries. The abolition of this legislation was key to opening up manufacturing opportunities for low cost countries to supply existing markets whilst also improving access to labour markets for companies to off-shore (although anti-dumping legislation remains in place).

Secondly, the continued sophistication of communication technology has allowed the managing of processes taking place overseas. Coupled with a fall in logistics costs to supply end markets, this has enabled companies to outsource and control the supply chain with far less disruption that would previously have been the case.

Summarising the significance of these changes, research by Clutier et al (2007) attempts to place the UK's position within the global context. The significance of this Table is that it offers a clear steer of high cost European producers such as the UK and Scotland towards high value, innovative and niche production areas and reinforces the findings of the Skillfast-

UK SWOT analysis conducted with employers in the UK (Skillfast-UK 2005). This highlights strengths and opportunities within the areas highlighted as positives for high cost producers within this analysis.

Table 4: Competitive analysis of Scotland as a high cost producer in global TLC networks

Competitive factors	EU High Cost (inc Scotland)	EU Medium Cost	Euromed Non-EU	Turkey	Asia
Labour costs	---	-/+	+	=	++
Qualification of labour	++	+	=	+	+
Labour availability	-	=	+	+	++
Management skills	++	+	=	+	+
Design/fashion	+++	+	-	=	-
Communication skills	++	=	=	+	--
Innovation	++	+	-	=	=
Market sensitivity	+++	+	=	+	--
Reliability/quality	++	+	=	+	=
Reactivity/flexibility	++	+	=	+	--
Local market base	+++	+	=	++	++
Access to raw materials	++	+	--	++	+++
Local trimmings/components	++	+	--	++	+++
Equipment	+	+	=	+	-/+
R&D	+++	++	--	=	+
Institutions/fairs	+++	-	-	-	+++
IT	+++	++	+	+	---/+++
Financial health/profitability	-	-	=	++	++
Access to capital	-	-	=	++	+++
National infrastructures	+++	++	=	=	-
Energy costs	-	+	=	=	-
Low administrative burden	+++	+++/---	--	--	--
Low regulations	---	--	=	=	+++

Source : Clutier et al 2007 p.22

+++ major competitive advantage; --- major weakness; +++/--- indicates where huge discrepancies in countries within a region exist.

6.1 Price structure of goods within the sector

Demonstrating the trend towards the transfer of manufacturing capacity – and jobs – offshore, research conducted by the Allwood et al (2006), and illustrated in Table 6, shows how the value in the supply chain lays within the higher value wholesale and retail operations by highlighting the price structures of a number of products and where they are produced as different phases of manufacture.

Table 5: Price structure of goods paid by UK consumers

T-Shirt		Blouse		Carpet	
Retail UK	£7.00	Retail UK	£22.00	Retail UK	£30.00
Wholesale UK	£2.65	Wholesale UK	£7.00	Wholesale UK	£18.00
Knitted T-shirt China	£1.96	Woven blouse India	£3.21	Manufactured carpet UK	£10.35
Knitted fabric China	£1.08	Woven Fabric India	£1.55	Carpet pile	£9.37
Cotton yarn USA	£0.55	Viscose yarn India	£0.70	Secondary backing	£0.83
				Primary backing	£0.83

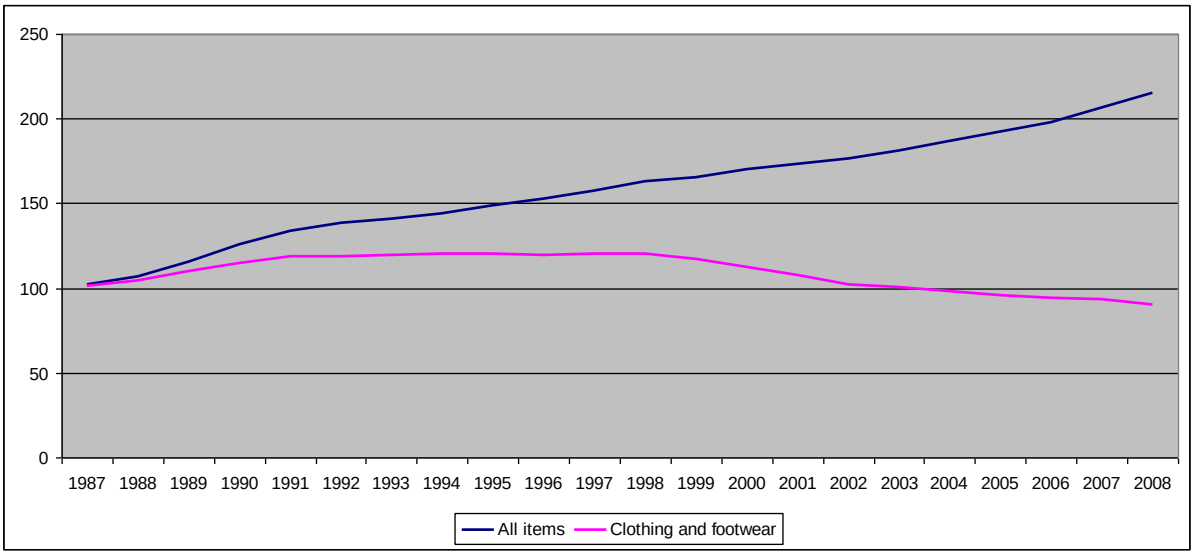
Source: Allwood et al 2006

In this analysis, Allwood et al (2006) recognise that, *"despite the exit of manufacturing in clothing and textiles from the UK, the sector continues to be highly valuable, as the biggest profits in the sector are at the end of the supply chain – in retail and branding. The cost and price structure of the sector globally is now characterised by there being potential for high profit from innovation, marketing and retailing but low profit from sourcing, production, assembly, finishing, packaging and distribution."*

6.2 Consumer Price Index for Clothing

This pressure on costs has seen the consumer price index for clothing and footwear uncouple itself from other consumer items as low cost imports have now become normal. As Figure 13 demonstrates, as the price of all items within the wider UK economy have more than doubled since 1987, clothing and footwear has remained at roughly the same level.

Figure 13: CPI for clothing and footwear 1987=100



Source: ONS Monthly digest of statistics

6.3 Developing countries percentage share of manufacturing of clothing and textiles

The impact of outsourcing is indicated by figures from the World Trade Organisation (WTO, 2008) and illustrated in Figure 14. Their annual report shows how these changes have facilitated the rise of China as a low waged textile and clothing manufacturing nation, increasing its export base in textiles by 19% and clothing by 16% within an eight year period.

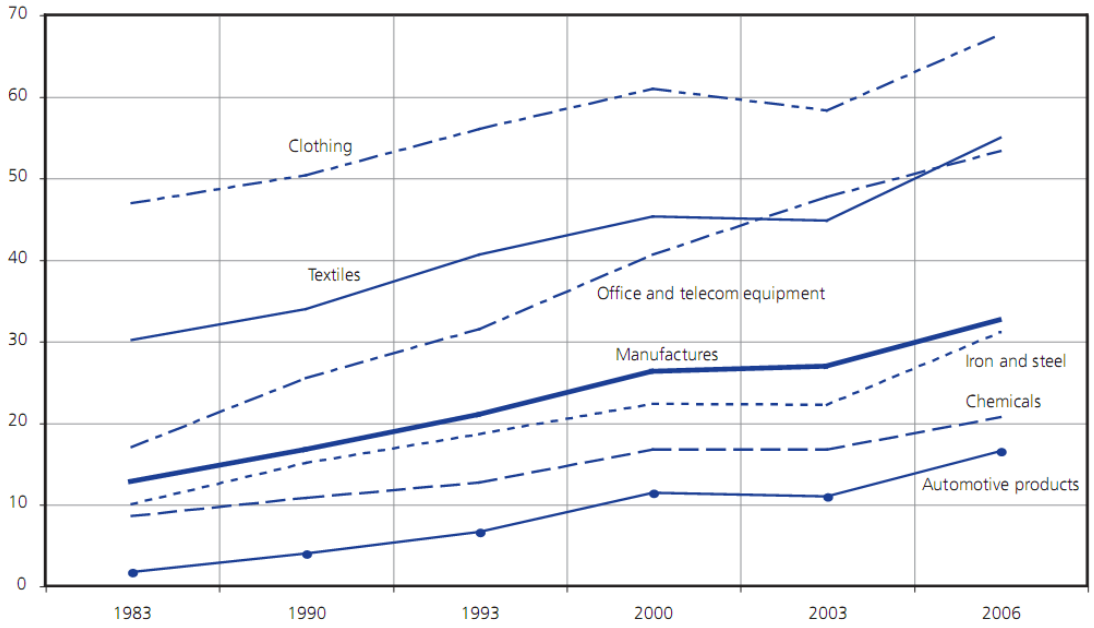
This must also be seen in the context of taking fashion and textile production from other Asian countries who have seen falls in production and that the value of European textiles

and clothing manufacture has increased in the same period. However, it must be noted this value is related to the role of Central and Eastern European countries as manufacturing nations who themselves enjoy competitive wage advantages.

In terms of the Scottish fashion and textiles sector, the ECOTEC report to the Scottish textiles team reported that amongst businesses who reported outsourcing, manufacturing or processing internationally, the most common cited locations were China (32%) and India (16%) with Sri Lanka, Turkey and Italy amongst those listed. (ECOTEC 2007c)

This situation and movement of lower cost manufacturing may not be significantly altered by the recent fall in the value of sterling and consequent upward pressure on the cost of imported goods. Indeed, this factor may well be offset by the continuing process of trade liberalisation.

Figure 14: Developing countries percentage share of manufacturing of clothing and textiles



Source: WTO World Trade Report 2008 (p.25)

6.4 The fashion and textile sector's current position and ability to improve market conditions

Within this backdrop, a scenario planning exercise commissioned by Skillfast-UK in 2005 identified the key sub-sectors within the UK fashion and textiles footprint that were most at risk from these changes, and were identified as lower value cost sensitive production.

Although areas such as dyeing and finishing within high value production, heritage crafts, and processes within bespoke product development pre-recession had not been impacted as much as predicted, Table six below largely offered a correct assessment of the previous five years as borne out of both the business registration/de-registration and GVA per head figures.

This analysis is especially pertinent for Scotland, given that spinning and apparel and textile manufacture that were key components of the Scottish fashion and textiles sector have seen large drops in GVA in recent times.

Table 6: The fashion and textile sector's current position and ability to improve market conditions

		Ability to improve market position		
		Low	**Medium**	**High**
Current Market Position	**Strong**		• Branded outdoor performance clothing • Technical textiles, finished products	
	Average	• Carpets • Wool system fabrics • Fabrics - Linen, silk, etc • Apparel lace • Merchant converting • Knitted fabrics • Wool/early processing	• Branded fashion; bespoke products • Home furnishings • Technical textiles fabrics • Speciality leathers • Importing and wholesaling • Corporate wear • Work wear and protective clothing • Leather-goods	• Designer apparel • Speciality MMF • Smart garments
	Poor	• Chain store own-label • Household textiles • Regular MMF • Yarn spinning • Cotton system woven fabrics • Commodity leather • Dyeing and finishing • Printing • Technical consumer goods		

Source: David Rigby Associates 2005

6.5 Movement towards a new typography

These forces have at present seen a movement towards a new typography for the UK and Scottish fashion and textiles sector and are illustrated in research undertaken by David Tyler (2003).

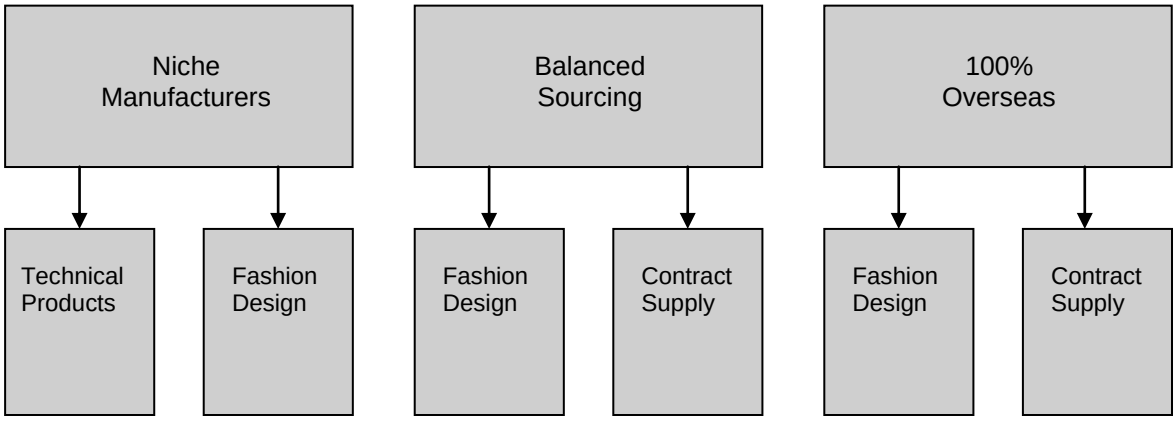
Tyler recognises there are three different strategies that firms are currently following to maximise their competitive position within the fashion and textiles sector. These are:

Niche manufacturers – these businesses serve markets requiring small batch sizes of products commanding a higher margin. They rely on the development of technical products or a high level of design innovation to command a market.

Balanced sourcing suppliers – these businesses have a UK manufacturing base for sampling and a small batch production for a quicker response. Larger orders are sub-contracted to low cost countries. These businesses rely on a combination of design innovation and contract supply skills.

100% overseas suppliers – these companies have moved completely out of UK manufacturing, although they may retain a facility for sampling. As with balanced sourced suppliers, the key priorities for these firms are to ensure their designs are responsive to consumer demand and place a great deal of emphasis on managing, in some instances, large complex and multi-staged supply chains.

Figure 15: The new manufacturing typology



Source: Tyler 2003

Within such a climate, it is possible to see how these three strategies have been influencing Scottish fashion and textiles firms' behaviour in recent years as firms decide the best way to approach the pressures and opportunities international trade has had on their business models.

7. Drivers of Skill Demand

Given the backdrop of the economic climate and the impact of globalisation on sector performance, the key drivers of change identified by Skillfast-UK that impact on the level and mix of skills demand within the sector in Scotland are[2]:

7.1 Technical textiles

Technical textiles are a growing area for traditional textile companies to branch into as firms seek new markets away from their traditional textile manufacturing base in the face of low cost competition and actively exploit new opportunities in higher value manufacturing. A recent DTI report put the contribution of technical textiles to the UK economy at £1.5 billion. (DTI 2007).

Technical textile products are synonymous with the servicing of a number of end-user products. Drawing on the UK Technical Textiles: A Strategy for Growth (2004-2009) document, these materials include providing advanced materials to service the needs of a number of end user markets including.[3]

- Automotive and Aerospace;
- Composite Textiles;
- Industrial Biotechnology;
- Nanotechnology;
- Others, e.g. cross cutting performance clothing, workwear and technical textiles

Scotland has experienced a large growth in technical textiles by demand from other end user sectors and in the performance apparel/smart garment market.

Within this context, firms in Scotland have been highly successful in that traditional textiles and apparel manufacturers have spotted opportunities and diversified away from their traditional consumer markets to lead the market.

Scottish Enterprise (2007a) has identified a number of firms involved in this growing sector and illustrating the numerous uses for technical textiles, as being:

- Culzean Fabrics in Kilmarnock who design space tethers for NASA.
- Dundee-based Bonar Yarns & Fabrics who supply 3rd generation sports surfaces for football, hockey and tennis.
- Muir of Ord who specialise in the manufacturer of carbon fibre products.
- SGL Technic who produce material for half of the world's market in aircraft brake discs.
- Corporate Insignia of Cumbernauld who provide name badges for over six million people each year;
- Girvan-based BDF who manufacture dental floss;
- Scotland's largest sailmaker, Owen Sails; and Ayrshire-based Morton Young & Borland who combine the unlikely roles of being the last traditional decorative Nottingham lace-maker in Britain with the supply of digital print cloth for outdoor advertising.
- United Wire whose woven wirecloth products find their way into a variety of applications, ranging from the high-tech filters used in military aircraft to simple fireguards and the conveyor belts that give Digestive biscuits their distinctive criss-cross pattern.

[2] This analysis draws mainly on Skillfast-UK (2005), *Skills Needs Assessment for apparel, footwear, textiles and related businesses*, including more recent sectoral developments
[3] Please see Annex C for a full table of Technical textile uses

7.2 Fast fashion

The rise of fast fashion to satisfy changing consumer tastes has put increasing pressures on companies to supply their retail markets quickly and cheaply. This has meant firms have had to think carefully on how best and most quickly they can satisfy the needs of the end user.

This process has also greatly impacted the role of the design function to ensure products are suited to the fashions developed that season, given the long turn around times from design board to products sold within the shops.

7.3 The Scottish style

There is a distinctive "Scottish style" recognised in world markets which adds generally to the attraction of Scottish branded goods in segments such as formal outerwear and cashmere knitwear, along with traditional Scottish produced textile products such as hand loomed Harris Tweed in the Highlands and Islands and also kilt making.

Research conducted by ECOTEC (2007a & 2007b) demonstrates how 39% of Scottish textile firms within their sample reported selling to overseas markets (primarily the USA, France, Germany, Italy and Japan) whilst for two-thirds of cashmere producers, exports account for over 50% of total sales.

More tellingly, the research also demonstrated how innovation in this regard was pushing the agenda in Scotland, with firms actively seeking new markets in developing countries away from the more mature market opportunities.

For instance, recent reports have shown a number of Scottish designer brands such as Peter Scott, Todd and Duncan and Johnston's of Elgin have seen increased demand for their luxury cashmere in European markets (Twist, Dec 2009) whilst the middle classes in developing countries have been targeted for investment, namely China and Japan. (Scottish Enterprise 2009a)

Indeed, Todd and Duncan were recently subject to investment from China to meet luxury demand and that has helped to secure jobs within the manufacture of high value Cashmere products for the company. (Scottish Enterprise 2009b)

The ECOTEC report also highlights how Scottish produced cashmere products "have a potentially powerful role to play in terms of further enhancing the international reputation of Scottish luxury products more widely" (ECOTEC 2007. p.2).

7.4 Adaption to changing technology

The competitiveness of the sector partly relies on the ability of companies to harness continually emerging technologies in a whole host of areas, including computer-aided design, materials technologies, processing technologies and lifecycle management.

The 2005 UK Fashion and Textiles Sector Needs Agreement (Skillfast-UK 2005) notes how the application of technology has major implications for the sector's skills requirements. For instance, key applications were recognised to span the following:

- Computer aided design and computer controlled machinery
- Production and resource planning

- Labour saving textile production technologies such as 3D knitting
- Supply chain management and industrial sales (including the use of EDI by larger manufacturers and traders to manage relationships with retail customers)
- Virtual networking and collaboration in the areas of production development, engineering and design
- The development of innovative materials such as new generation of non-woven fabrics, new fibres and technical textiles

In addition to these functions, there has also been a definite trend in Scotland within the fashion and textiles sector to utilise direct on-line sales and e-commerce with fashion and textiles firm increasingly selling their goods independently from source, opening up new potential revenue streams and direct sales opportunities. (ECOTEC, 2007c)

7.5 Image of the sector

A recent survey of 14-19 year olds conducted by Skillfast-UK (Skillfast-UK 2009) found that fashion and textiles was ranked ninth out of a selection of ten industry sectors in terms of its attractiveness as a career option.

Although the sample for Scotland is limited (the image of the sector was identified in Scotland as an issue in the 2007 SNA, the 2008 employer skills survey and the ECOTEC report), a number of messages came through. Whilst sectors that enjoy either a high profile or well signposted career paths such as media, health and retail were the top ranking sectors, the fashion and textiles sector was not seen as a sector individuals would like to work in.

The research confirmed that the perception of the sector is affected greatly by the awareness of job roles available within the sector. The respondents were aware of higher profiles roles such as fashion designers and buyers with over half of the respondents claiming to know a little or a lot about their function.

However, key occupations that are expected to contribute to the continued success and future strength of the sector and expected to see major staffing needs in the short-medium term all suffer from a lack of awareness as to the role carried out. Occupations such as fashion production managers that are responsible for ensuring the quality of production across the supply chain, and technical occupations that are currently shaping the direction of the sector are areas that are not well understood.

7.6 The sustainability agenda

The sustainability agenda is the one key driver that has gained most in prominence since the publication of the Skillfast-UK SSA in 2005 and is becoming a key influencer on company behaviour.

Recent research conducted by Skillfast-UK (2009b) highlights four main drivers on company behaviour in the fashion and textiles sector to modify their behaviour and how the skills needs of firms were being changed by the legislation. This is described through how the offerings of professional bodies, trade associations and providers were being adapted to allow firms to meet their objectives including:

- Legal regulations
- Taxes
- Consumer demand

- Preparation for expected increases in energy and resource prices

Whilst conducted on a UK scale, the Skillfast-UK research found that companies were keen to deliberately use the sustainability agenda as a marketing tool to differentiate their businesses and to stimulate consumer demand for sustainable products. Indeed, membership of organisations that differentiate their products as being sustainably produced were identified as key drivers of behaviour.

In addition, EU legislation (EU, 2007) such as the Regulation, Evaluation, Authorisation and Restriction of Chemicals (REACH), which came into force in 2007 and involves EU member nations ensuring all manufacturers and importers of chemicals must identify and manage risks linked to the substances they manufacture and market.

Other EU legislation such as the Integrated Pollution Prevention and Control (IPPC) that entails plants for the pre-treatment (operations such as washing, bleaching, mercerisation) or dyeing of fibres or textiles where the treatment capacity exceeds ten tonnes per day are subject to the IPPC Directive, and are required to obtain an authorisation (environmental permit) to operate. The EU biocides directive and Emissions Trading system are also pieces of legalisation that may impact areas of the sector.

As well as a number of key legislative drivers deriving from the European Union and the Department for Environment, Food and Rural Affairs (DEFRA), in September 2009, DEFRA published a Sustainable Clothing Action Plan (SCAP) (DEFRA, 2009). The SCAP has attracted a large number of endorsements from a variety of retailers and manufacturers and has encouraged companies such as Marks and Spencer to publish a 100 step sustainability plan for its textiles and clothing business.

Within an exclusively Scottish context, Scottish government enacted the Scottish Sustainable Development Plan (SSDP)[4] in October 2009. The SSDP endorses the DEFRA plan through setting guidelines for firm behaviour when tendering for public service procurement. At a business level, the Scottish Enterprise Textile Industry Support Programme (TISP) for 2009/12 has identified sustainability as one of its five key action areas and looks likely to influence firm behaviour in the coming years.[5]

[4] http://www.scotland.gov.uk/Publications/2009/10/sspap/Q/Page/1
[5] http://www.scottish-enterprise.presscentre.com/Industry-briefings/Textiles-59.aspx

8. Skills Implications

In summary, the operation of these drivers in the context of the global forces that surround the sector, points to a strategy of differentiation being the optimal one for the sector rather than one of cost leadership. In view of this, there are a number of key factors for success which have important implications for human resources in the sector in the UK that translate into the sector in Scotland.

8.1 Design creativity

Many firms in the sector rely on creative design to add value to products build brands and secure a competitive advantage in world markets. To realise this creativity design excellence needs to be allied to strong technical skills/knowledge and commercial awareness.

Comparative research (Owen, 2003) looking at parts of the UK and Italian sectors at a micro level places a significant emphasis on the importance of skills in areas such as design, marketing and garment construction to the overall superior competitiveness of the sector in Italy. This gives a clear steer to the skills development that employers in Scotland require to ensure their products are able to remain competitive.

8.2 Branding and marketing

Successful UK and Scottish companies differentiate their offer from that of low-cost competitors through the development of strong brands. This calls for specialist skills as does the requirement to identify and exploit new product and geographic markets in order to remain one step ahead of competitors.

8.3 New product development and commercialisation of new technologies

To develop the products needed to compete in technical markets identified in the analysis of technical textiles as becoming a prominent driver, firms in the sector need access to specialist technologists, such as textile technologists, as well as graduates across a wide range of STEM disciplines, including chemistry and engineering.

New product development also typically entails process development, creating a need for up-skilling at technician and operator level to facilitate these changes.

8.4 Ability to compete in premium and niche markets on a global level

The UK and Scotland's competitive advantage in this area typically relies on low-cost, small scale manufacturing of high added value and difficult to make products. Success in this area depends, in turn, on specialised craft skills. This is especially important to Scotland given the specialist skills that are required within the sector, especially within heritage crafts. These skills are typically "tacit": they cannot be easily documented and must be passed on through hands-on experience over a considerable period of time.

8.5 New business start-ups

The emergence and growth of niche markets has led to a high start-up rate of businesses seeking to meet this new demand, adding to an already large micro-business population in the sector. Owner-managers require a combination of business/management skills and technical knowledge.

8.6 Overseas sourcing

As the evidenced form the globalisation of the supply chain and the behaviours identified within the Scottish fashion and textile sector, firms' focus is increasingly on the management of overseas supply chains. This function requires direct experience and understanding of the production environment together with knowledge of materials/product technology.

8.7 Cost reduction

There are some capital-intensive elements of the sector where scope lies to maximise productive efficiencies and reduce unit labour costs. An issue that is especially pertinent in the current financial climate. This creates a need for upskilling and multi-skilling, particularly at operator level.

8.8 Management and leadership

The sector performs poorly in terms of attracting its fair share of graduates into management positions and many managers lack wider experience and formal management knowledge having been promoted from within the company. This is a key problem when strong leadership is required in a time of rapid change and when there is a need to maximise the contribution of workers.

8.9 Ageing workforce

As noted in the sector demographics, a large number of the workforce are aged over 45 and a high proportion of workers in key technical roles are nearing retirement. The requisite technical skills are in short supply as a result of a long-term decline in apprenticeships and other development mechanisms. Moreover, the negative image of the sector restricts employers in their efforts to bring in new recruits to fill core technical roles.

9. Impact of the Recession

Given the sensitivity of the fashion and textiles market to economic conditions, the impact of the recession has been especially hard on the Scottish economy and the fashion and textiles sector in general.

Therefore the assessment in general must be read in these terms as identified by a number of key measures.

9.1 Index of Production

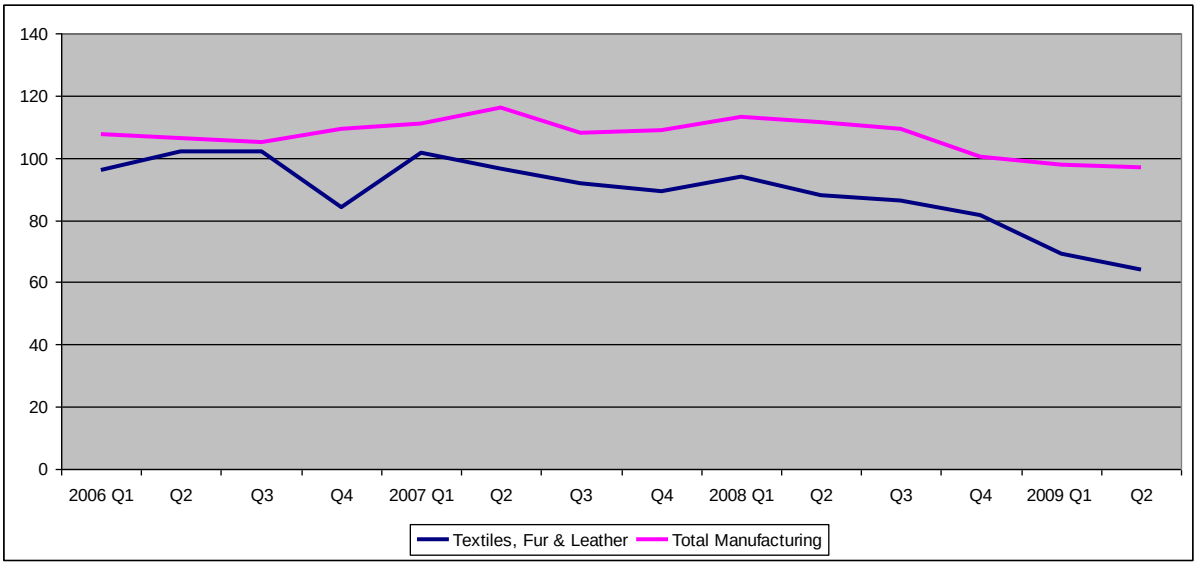
The Index of Production shows that the Scottish fashion and clothing sector has experienced large falls in output during the recession and by quarter 2 2009 the situation was continuing to decline.

Figure 16 clearly indicates how Scotland's fashion and textiles manufacturing has declined by almost 40% in a two year period as a contraction of demand for products reliant on discretionary consumer spending have seen very difficult conditions.

This is in comparison to the wider Scottish manufacturing figures that have shown a flat performance over this time.

In respect to this decline, recent questions were raised in Scottish Parliament concerning the perilous situation many firms in the textiles sector now face. (Scottish Parliament 17th Dec 2009)

Figure 16: Quarterly Index of Productivity for Scotland 2004 = 100



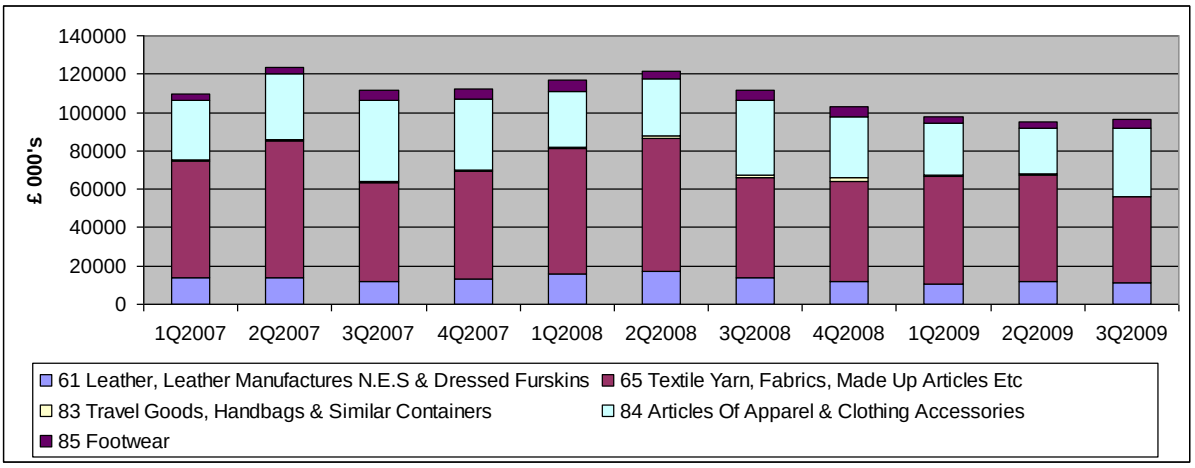
Source: Scottish Government Quarterly GDP Index q2 2009

9.2 Falls in the export market

As Figure 17 suggests, the Scottish export market which is dependant on high value goods has been particularly hard hit by recessionary pressures. Whilst the export trade in key fashion and textiles products was worth over £120 million in quarter 2 2008 using HMRC figures, by the corresponding quarter in 2009, the market had fell by roughly a sixth as weak global demand impacted the ability of the sector to find a market for its products.

However, by quarter three 2009 there were signs of stabilisation whereas this quarter traditionally has seen falls in export trade in relation to quarter two numbers. This has mainly been driven by strong performance in the export sale of apparel and clothing accessories.

Figure 17: Value of Scottish Exports by Standard Industrial Trade Code



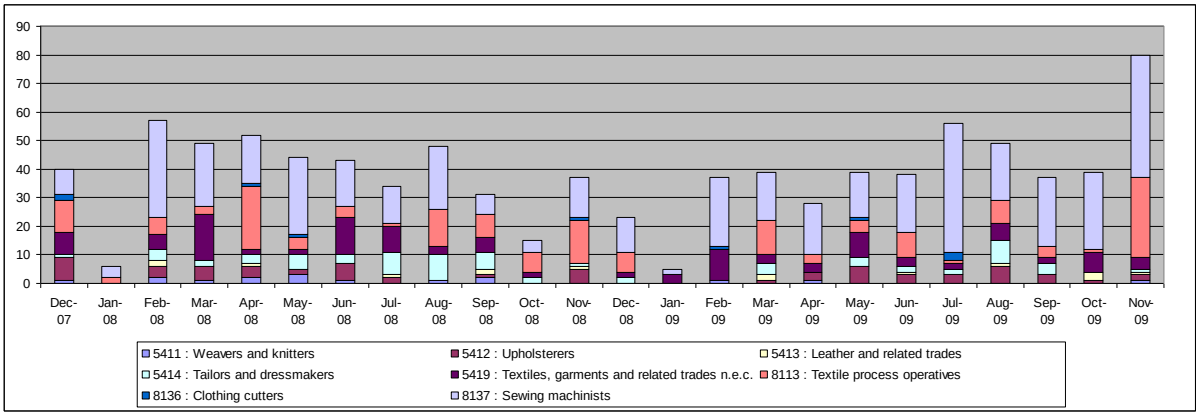
Source: HMRC

9.3 Vacancies as advertised through Job Centre Plus

Figures for vacancies as advertised through Job Centre Plus for key occupations also points to a gradual increase in job market activity. However, the job market using these figures still remains very weak.

Whilst Job Centre Plus figures are not fully indicative of the sector (due to the way jobs in the sector are not always advertised through this channel combined with overall low numbers vacancies), the job market looked to have hit a trough in May of 2009 and is slowly creeping back. This is evidence by strong figures coming from November 2009 which saw a sharp increase in the Index, fuelled mainly by increasing demand for sewing machinists and textile process operatives.

Figure 18: Vacancies as advertised through Job Centre Plus



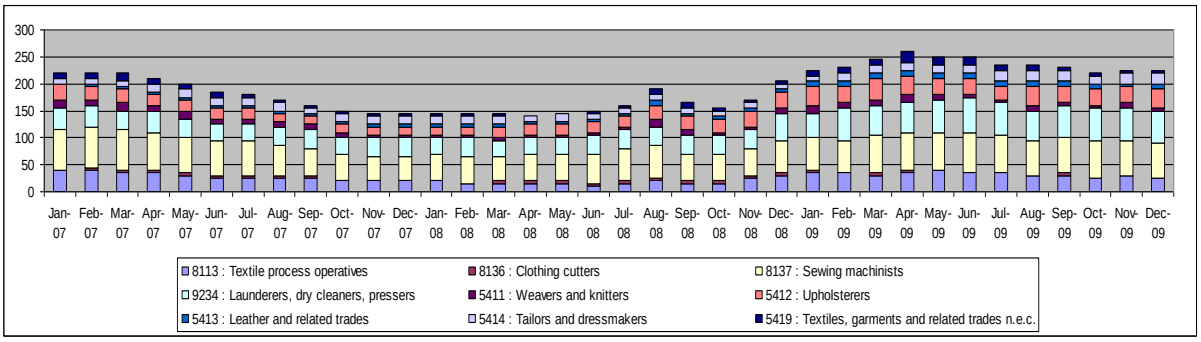
Source: Job Centre + via NOMIS

9.4 Claimants by sought occupation in Scotland

The claimant count by sought occupation also shows a weakening of this trend. This count demontrates how during the end of 2008 and the beginning of 2009, there was a sharp increase in claimants looking for textiles and fashion related occupations within Scotland with the peak occurring in April 2009.

As with the Job Centre Plus figures that showed an increase in jobs advertised in the sector by the end of the year, claimants looking for fashion and textiles sector related work had begun to tail off by the end of the 2009. However, by December this reduction had flattened out with the claimant count still far higher than seen in the late 2007/early 2008 period when the economy and job market was more buoyant.

Figure 19: Claimants by Sought Occupation in Scotland



Source: DWP via NOMIS

10. Current Skills Needs

The following section examines the level and nature of skills needs in the sector, focusing specifically on recruitment problems and shortfalls in the skills and knowledge of existing members of the sector workforce as their employers seek to meet new challenges arising out of the marketplace, emerging technologies and other factors. It has been shown that the occupational structure of the sector workforce is very different to that of the broader economy. This factor strongly influences the character of skills needs in fashion and textiles.

It should be noted that much of the data relating to skills deficiencies originate from before the recession and the sharp change in labour market conditions seen since then must be factored into any assessment of the current situation.

Nonetheless, consultation with the sector in recent months indicates that the profile of skills issues has retained the pattern set out below.

This section, therefore explores in detail the following specific topics:

- vacancies
- skill shortages
- skills gaps
- generic skills priorities based on support from the training system
- higher educational skills needs

10.1 Vacancies

Vacancies as a proportion of employees were lower for the sector than reported for Scotland at an all sector level. The vacancy rate was also in-line with the fashion and textiles sector in England, and marginally different to Wales and Northern Ireland.

In terms of hard-to-fill vacancies as a proportion of employees, the Scottish fashion and textiles rate was half of that experienced in Scotland at an all sector level. Again, the figures for fashion and textiles in Scotland were in-line with what has been reported at an England, Wales and Northern Ireland level.

However, hard-to-fill vacancies as a proportion of vacancies was higher than reported at an all sector Scotland level and only Northern Ireland of the home nations had a higher rate of hard-to-fill vacancies.

This demonstrates the difficulties employers in Scotland have in terms of attracting workers into the sector when vacancies occur. This is particularly telling, especially as Scotland has a smaller wholesaling base than England, relying more on craft and technical based skills. This indicates that candidates may recognise they do not have these required skills or are not attracted to type of job and therefore deciding not enter the sector.

Table 7: Vacancy issues

Vacancy type	Skillfast-UK Scotland	Scotland All Sectors	Skillfast-UK England	Skillfast-UK Wales	Skillfast-UK N.I
Vacancies as % of employees	2%	4%	1.9%	2.5%	1.3%
Hard-to-fill vacancies as proportion of employees	1%	2%	0.7%	1.4%	0.9%
Hard-to-fill vacancies as a % of all vacancies	51%	43%	35%	57%	61%

Source: SESS 2006, NESS 2007, FSW 2005, NISMS 2008

10.2 Skills shortages

Skills shortages are defined as those vacancies which are proving hard-to-fill because of a shortage of candidates with the required skills, qualifications or experience.

In Scotland, the density of skills shortages in the sector at 0.2% of the workforce is almost a fifth of the average for the wider Scottish economy and around half that for the English fashion and textiles sector. Comparisons with both the Welsh and Northern Ireland fashion and textiles sectors demonstrate a lower level of skills shortage vacancies as a proportion of employees.

Table 8: Skill shortage vacancies as a % of employees and all vacancies

	Skillfast-UK Scotland	Scotland All Sectors	Skillfast-UK England	Skillfast-UK Wales	Skillfast-UK N.I
Skills shortage vacancies as % of employees	0.2%	0.9%	0.5%	1%	0.4%
Skill shortages as a % of all hard-to-fill vacancies	*%	61%	71%	68%	77%

Source: SESS 2006, NESS 2007, FSW 2005, NISMS 2008 * indicates no data available

10.2.1 Skills shortages by occupation from the Skillfast-UK employer survey

The Skillfast-UK 2008 survey of employers, asked about the specific technical job roles for which skilled candidates are in short supply if the individual employer was looking to recruit,

66% of respondents to the survey perceived the existence of skills shortages if they were looking to recruit in comparison to the UK figure of 59% showing a higher level of apprehension for employers within Scotland.

This study identified shortages at associate professional level as well as for skilled trades and operative level jobs illustrated in Table 9.

Table 9: Absolute number of skills shortages in Scotland

Level of skills	Occupation
Operative level	Sewn products operations
	Textile process operations
	Laundry and dry-cleaning operations
Skills trades	Garment alteration and repair
	Pattern cutting and grading
	Hand-craft garment making
Higher level technical skills	Designers
	Production management
	Textile/fabric technologists

Source: Skillfast-UK employer survey 2008

However, there are also niche areas which although they employ relatively few people are characterised by a very high incidence of shortages within the Scottish fashion and textiles workforce.

For instance, the footwear and leather sub-sector characterises this situation, with leather technology and leather processing scoring highest across the whole of the Scottish fashion and textiles sector in terms of the incidence of technical shortages reported by employers.

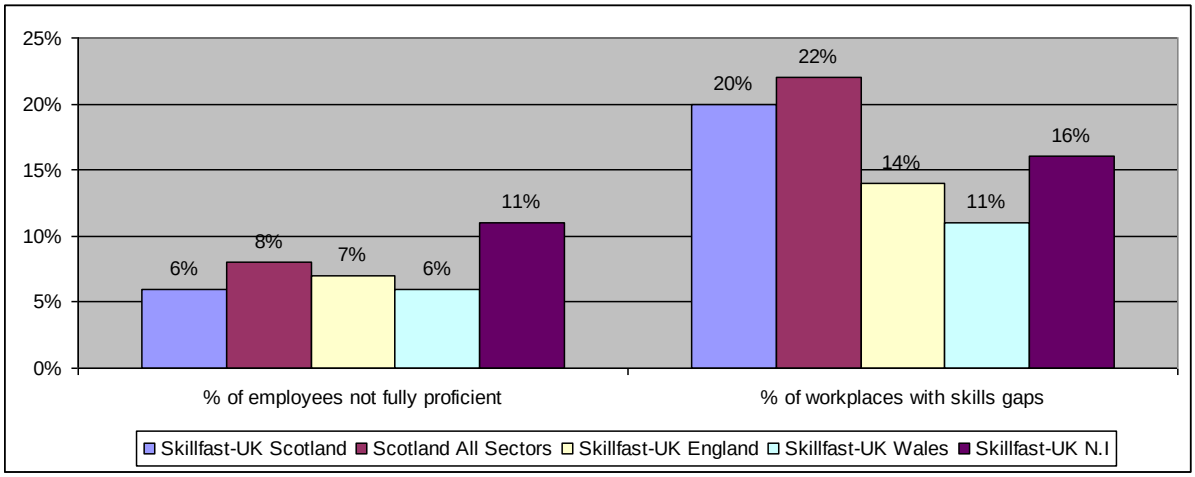
The overriding message of these figures is that employers are currently unable to attract candidates of a specific calibre to these job roles. With an ageing workforce with further retirements and an increasing demand for replacement staff forecast, employers within the sector will be in need of skilled staff as a matter of urgency.

10.3 Skills gaps

Skills gaps exist where employers consider that employees are not fully proficient at their job. Using national datasets, it can be seen that employers in the Scottish fashion and textiles sector report similar proportions of employees that are not fully proficient than at all sector level and with skills surveys in other UK nations.

However, Scottish fashion and textiles companies report they have a higher prevalence than shortages, with a fifth of workplaces reporting a skills gap. This is far higher than the pattern found within the fashion and textiles sector of the other home nations. The Scotland all sector figure is high too, suggesting that skills gaps within the workforce may be an issue across the Scottish economy in general and not just limited to the fashion and textiles sector.

Figure 20: Employees not proficient and skills gaps



Source: SESS 2006, NESS 2007, FSW 2005, NISMS 2008

10.3.1 Skills lacking in employees with skills gaps

Scottish fashion and textile employers report that the skills lacking in employees with skills gaps are that of other technical and practical skills. This is far higher than reported at an all Scotland level and is indicative of the demand for specialist skills that are prevalent in the sector. Planning, organising and team working skills were also significant issues.

Table 10: Skills lacking in employees with skills gaps

	Skillfast-UK Scotland	All Scotland
Other technical and practical skills	62%	46%
Planning and organising	60%	55%
Team working skills	53%	49%
Customer handling skills	47%	55%
Oral communication skills	45%	42%
Problem solving skills	39%	54%

Source: SESS 2006

10.3.2 Skills gaps reported in the Skillfast-UK employer survey

The Skillfast-UK employer survey results for Scotland add an interesting dimension to skills gaps reported, with 19% of employers reporting the existence of a skills gap within their workforce in relation to 16% for the UK.

Reflecting the needs of Scottish employers at an operative level, sewn product and textiles process operatives were subject to the highest levels of skill needs.

Reflecting the nature of the needs within the skill trades occupations, a number of competencies concerned with apparel manufacture were identified whilst higher level skills gaps were prevalent amongst designers, production and supply chain managers.

Table 11: Skill gaps reported by Scottish fashion and textiles employers

Level of skills	Occupation
Operative level	Sewn products operatives
	Textile process operatives
Skilled trades	Garment alterations
	Pattern cutting and grading
	Hand-craft garment making
	Sampling
Higher level technical skills	Designers
	Production managers
	Supply chain management

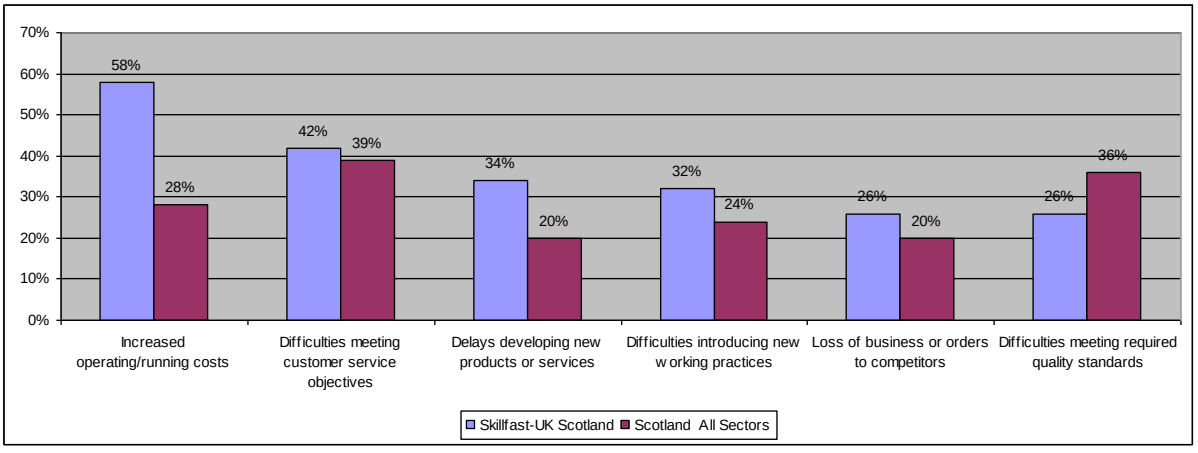
Source: Skillfast-UK employer survey 2008

However, there were also a number of areas in which skills gaps have a disproportionate presence, some at a higher level. Consistent with the pattern at a UK level, leather goods manufacturing operations, leather technology roles and textile fabric technologists all exhibit high densities of skills gaps.

10.3.3 Impact of skills gaps

Illustrating the sensitivity that skills gaps have had on company performance in the competitive fashion and textiles sector, 58% of employers reported that increased operating/running costs were the direct result of skills gaps. This is more than double the all sector figure for Scotland. Difficulties meeting customer service objectives and delays in developing new products and services were also reported as key issues facing Scottish fashion and textile employers when skills gaps were identified within their workforce. These figures demonstrate how the skills base is critical to business performance within the fashion and textiles sector.

Figure 21: Impact of skills gaps



Source: SESS 2006

10.3.4 Responses to skill gaps by employers

What is striking about the skills gaps reports in Scotland is how firms in the fashion and textile firms are more likely to attempt to adopt practices and "live with" these issues than reported nationally.

For instance whilst providing further training was the most common response to a skills gap, it was a full 25% lower than the all sector average. Changing working practices and relocating work were both methods that employers used far more than nationally in all sectors to combat skills gaps within their workforce.

Table 12: Responses to skill gaps by employers

	Skillfast-UK Scotland	**Scotland All Sectors**
Provided further training	56%	81%
Changed working practices	50%	42%
Increased/expanded trainee programmes	37%	51%
Relocated work within the company	32%	20%
Expanded recruitment channels	26%	14%
Increased recruitment	18%	18%

Source: SESS 2006

10.4 Generic skills needs

Turning to "generic" skills, a number of key areas encompassing all parts of the sector and levels of occupation were identified by employers as issues. From the Skillfast-UK employer survey, Scottish employers saw recruiting and retaining able young people and improving sales and marketing skills as the key priority areas they need support from the education system in obtaining.

48% of employers recognised these skills as important or very important indicating how both the ageing workforce demographic and the need to consolidate sales within existing markets as well as developing new ones is of importance to their businesses.

Related to the issues surrounding technical skills, finding colleges that can deliver relevant training to counter these is a big issue for employers. Interestingly and whilst still high, improving numeracy and literacy skills and improving managerial and supervisory skills whilst both major issues for employers in Scotland, were not as prevalent a need as reported by fashion and textiles employers in the UK.

Proving the continued importance of Science, Technology, Engineering and Maths (STEM) recruitment into the sector, especially in respects to the drivers identified as key to the Scottish fashion and textiles sector, a fifth of employers saw this as a skills priority area.

Table 13: Fashion and textiles skills priorities based on support from the educational system

Priority area	Scotland	UK
Recruiting and retaining able young people to replace workers who are nearing retirement	48%	48%
Improving sales and marketing skills including the skills needed for international trading	48%	48%
Finding colleges and/or training providers that can deliver relevant training in technical skills	43%	39%
Improving the quality of our in-house training	41%	42%
Improving numeracy literacy and other basic skills	41%	48%
Improving management leadership and supervisory skills	40%	47%
Finding graduates with the right practical and commercial skills and knowledge	27%	27%
Implementing new productivity techniques such as lean manufacturing approaches	24%	24%
Attracting science and technology graduates who can help to develop new products and processes	19%	16%
Bringing in and training migrant workers from Eastern Europe and elsewhere	11%	11%

Source: Skillfast-UK employer survey 2008

10.5 Skills priorities for the education and training supply system by sub-sector

Responses from employers within the different sector boards of the Scottish fashion and textiles sector show there are a number of variations between sub-sectors that act as a useful indicator for current and future skills needs.

With the increasing reliance on competing in a global market, it is noted how the sub-sectors most exposed to the global market place (namely apparel and sewn products, design and the textiles sub-sectors) all place the greatest emphasis on improving sales and marketing skills including the need for international trading.

In contrast, domestic facing services such as laundry and dry cleaning report issues around recruiting and retaining able young people into roles within this sub-sector.

A common theme reported by all five sub-sectors was the need for better recruitment and retention of young people and improving management and leadership skills. These were within each sector boards top four skills priorities they were keen for the education and training system to deliver.

It is also telling how the availability of provision is something employers in Scotland were particularly in need of with all subsectors reporting the need to find college provision or to develop their own in-house expertise as of paramount importance to aiding their business development.

Table 14: Skills priorities from the education system by sub-sector in Scotland

No	Apparel & Sewn Products	Design	Footwear & Leather	Laundry & Dry Cleaning	Textiles
1	Improving sales and marketing skills including the skills needed for international trading	Improving sales and marketing skills including the skills needed for international trading	Recruiting and retaining able young people to replace workers who are nearing retirement	Recruiting and retaining able young people to replace workers who are nearing retirement	Improving sales and marketing skills including the skills needed for international trading
2	Recruiting and retaining able young people to replace workers who are nearing retirement	Improving management leadership and supervisory skills	Improving numeracy literacy and other basic skills	Improving management leadership and supervisory skills	Improving management leadership and supervisory skills
3	Improving management leadership and supervisory skills	Finding colleges and / or training providers that can deliver relevant training in technical skills	Improving sales and marketing skills including the skills needed for international trading	Improving the quality of our in-house training e.g. through development of in house coaches	Recruiting and retaining able young people to replace workers who are nearing retirement
4	Finding colleges and / or training providers that can deliver relevant training in technical skills	Finding graduates with the right practical and commercial skills and knowledge	Improving management leadership and supervisory skills	Improving numeracy literacy and other basic skills	Finding colleges and / or training providers that can deliver relevant training in technical skills

Source: Skillfast-UK employer survey 2008

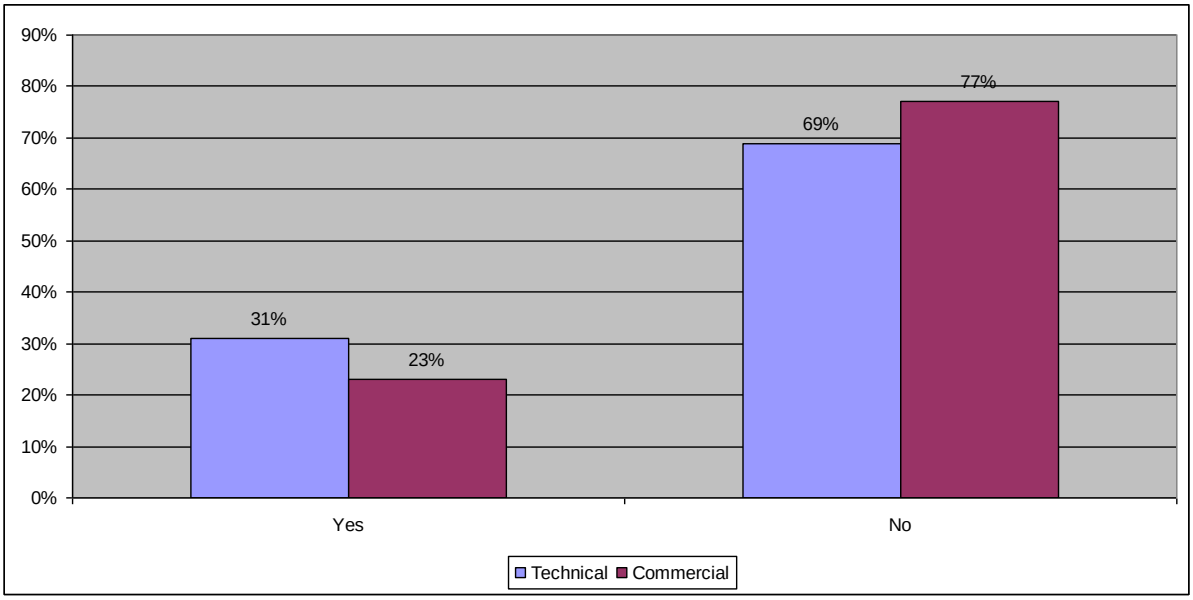
10.6 Higher educational skills in the design sector

With design being an important facet of the sector and a key area that is vital to the well being of the Scottish fashion and textiles sector, a number of results from the Skillfast-UK Scotland survey offer a variety of issues. **38%** of firms within the Skillfast-UK survey reported they employed a designer.

Firstly, with regard to fashion, Figure 22 demonstrates that design businesses admit “finding graduates with the right practical and commercial skills and knowledge” is an important priority.

Moreover, among those sector businesses that employ designers, 69% say that recent design graduates lack the necessary technical skills for a job in the sector, whilst a high 77% lack the required commercial awareness. This tallies with the skills priorities for sectors employing designers as demonstrated in Table 14.

Figure 22: Do you believe that recent graduates have the right level of technical skills needed for design jobs within your business?



Source: Skillfast-UK employer survey 2008

11. Scenario Planning

As noted earlier in the report, there are a wide number of forces and drivers at play in the Scottish fashion and textiles sector. How these forces and drivers will shape the sector's future is a point of much conjecture and many conflicting scenario plans and analysis exist that illustrate this point.

With the recent slowing down of loss of employment numbers within manufacturing after the patterns of the mid 2000's and the growth of factors such as sustainability issues and the demands of fast fashion, it is important to take stock of where the sector has come from and to offer a reader into the various scenarios as to where these recent market trends may lead.

This section therefore draws on the following scenario plans and modelling frameworks, each of which offers a relevance to the current and potential direction of the Scottish fashion and textiles sector:

- Working Futures III (2007)
- Skillfast-UK's bespoke scenario planning to 2015 (2005)
- Economix's European 3 scenario plan (2008)

11.1 Working Futures III

Working Futures III is a forecasting scenario series produced by the Warwick Institute for Employment Research and Cambridge Econometrics. This research uses existing survey work on employment trends across the sectors to give a view of employment estimates.

Data from the latest Working Futures III study for the Scottish fashion and textiles sector highlights the following broad level data as outlined in table below.

Table 15: Working Futures III

						2007 - 2017		
Employment Levels (000s)	**1987**	**1997**	**2007**	**2012[6]**	**2017**	**Net Change**	**Replacement Demand**	**Total Req**
Scotland Skillfast –UK Footprint	74	51	22	18	16	-6	8	2
UK Skillfast –UK Footprint	770	543	272	246	228	-44	94	50
Scotland All Sector Employment	2,231	2,437	2,662	2,715	2,764	102	981	1,082

Source: Working Futures III

[6] The projections in this study were forecast before the recession impacted the economy and employment levels. For this reason the longer term 2017 figures must be used to give a clearer indication of future trends.

Key highlights from the Working Futures III data for Scotland are:

Overall sector picture

Working Futures III forecasts a continuing decrease in workforce numbers with employment by 2017 continuing to fall, albeit at a slower rate than previously seen.

Despite this continued decline in the gross number employed, the sector will experience large positive net employment requirements. This is due to the large proportion of people forecast to leave the sector through retirements as reported in section one, and the need to fill these emerging vacancies. In all, taking 2007 figures as a base, a third of the workforce will require replacement by 2017.

Compared to the sector at a UK level, the Scottish fashion and textiles sector is forecast to see a greater drop in net workforce numbers. This indicates that the Scottish fashion and textile sector's still has a number of structural issues within the manufacturing base that will need to be worked out before the sector finds it optimum output level.

However, in contrast to the pattern forecast to be exhibited in the fashion and textiles sector, Scotland at an all sector level is expected to increase its gross employment needs to 2017 by four percent. This highlights how whilst overall employment in Scotland will continue to rise, it has been forecast there will be little additional domestic demand for Skillfast-UK sectors stemming from the extra working population. This demonstrates the continued reliance on the export markets to stimulate demand.

Structural changes

Whilst figures for Scotland are undisclosable due to sample sizes, closer examination of the data shows the sector is following key patterns as experienced on a UK level.

Occupational make-up

The sector will continue, albeit at a slower pace to lose jobs within the operative elements of the sector along with elementary occupations and sales and customer service occupations. Although these occupational grouping within the Scottish fashion and textile footprint are forecast a gross decline in demand, positive replacement demand will see only small change in requirements.

The sum of these changes suggests a continued movement of manufacturing and process based operations overseas through off-shoring and outsourcing. However, this movement can be seen in the overall sector perspective to have begun to stabilise by 2017, suggesting the Scottish fashion and textiles sector will have found its specialism for manufacture and operative positions in the global marketplace.

Managerial and technical positions will proportionally make up a larger part of the workforce. As companies spend a greater amount of time managing processes such as supply chain and customer relations, the level of technical expertise, both in terms of processes employed and ICT needs, will ensure both of these positions will require filling.

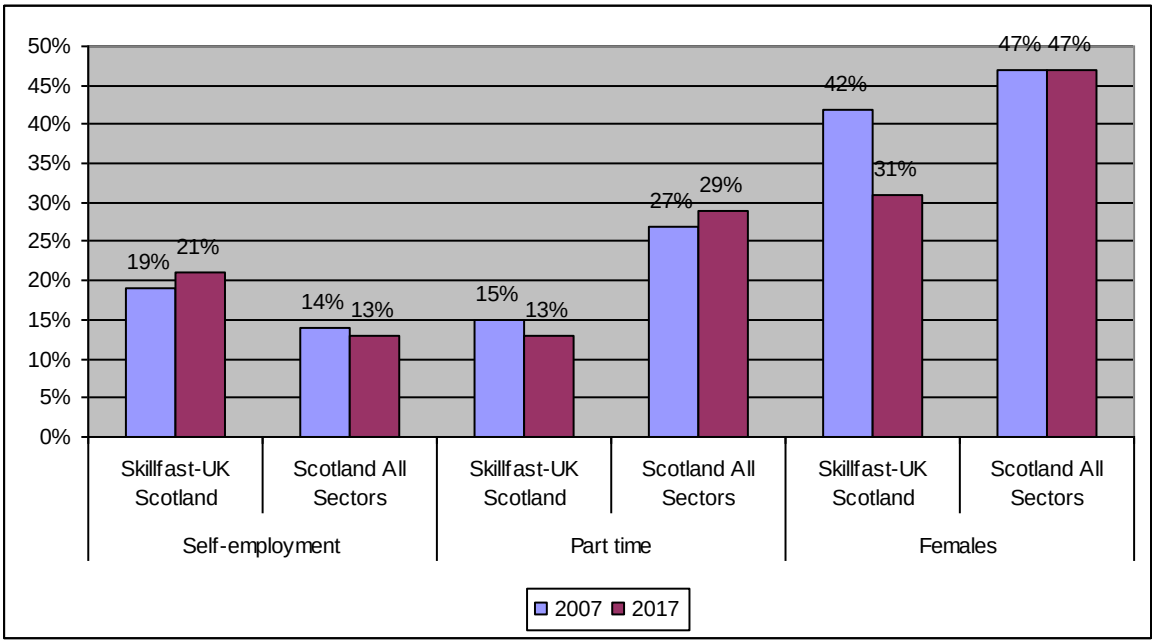
The reduction in operative level recruitment opportunities and the need for management level skills illustrates the point that the sector will require far less employees with lower level skills (below SVQ level 2) and more with higher level skills (SVQ level 3 and above) to enable the sector in Scotland to compete.

International research (Jagger, 2005) suggests that there is an association between growth in total factor productivity (TFP) in a country's fashion and textiles manufacturing sector and the presence of intermediate skills (up to and including SVQ Level 3 equivalent) in the sector's workforce.

The research highlighted that whilst the UK was above average for TFP, TFP growth figures were poor in comparison. This is an important consideration when looking at key drivers for future movements in the sector.

Demographics

Figure 23: Demographic composition of the sector



Source: Working Futures III

Reflecting the continued niche and micro level that the sector operates and is continuing to work to, self-employment will continue to be a key feature of the sector compared to all sectors in Scotland rising to a fifth of the workforce by 2017.

Conversely, part-time working will not be as prominent and will decline in contrast to the high proportions and continued growth the all-sector in Scotland figure is predicted to demonstrate.

The share of female employment is forecast to reduce significantly as a proportion of the workforce from 40% of the workforce to little more than a quarter. This reflects the high level of structural change that is occurring within the sector as operative and elementary occupations that are traditionally the domain of females (especially within clothing and textiles manufacture) are lost. This again is in contrast to the Scotland all sector figure that will see stable employment numbers.

11.2 Skillfast-UK's bespoke scenario planning[7]

In 2005, Skillfast-UK commissioned David Rigby Associates (DRA) to scenario plan the potential future direction of the UK fashion and textiles sector to 2015 and relevant to Scotland. What was reported formed the scenario planning for the 2005 Sector Skills Agreement. Reviewing the evidence from the current sector performance, what DRA reported has largely come to pass to where we now are in 2010.

Drawing directly from the 2005 SSA, the study was conducted with the assumption there are no variables that could potentially change the direction of the core UK apparel, footwear and textiles industry which over the next decade could conceivably lead to particularly significant differences in the way the sector will evolve.

For the core manufacturing and wholesale elements of the sector, the patterns of evolution of several key drivers were already well established and seen unlikely to change significantly. It was also assumed that any conceivable changes over the next decade in the world economy, exchange rates or in available technologies were unlikely to lead to significant changes in the UK sector's market position, prospects or future industry structure.

Overall, the industry which will exist in 2015 was predicted to be focused on producing higher added value and differentiated products for world markets as the pattern to where we are in 2010 demonstrates has been occurring. The key influences, activities and actions to ensure the future competitiveness of the sector were identified as illustrated in Table 16.

Table 16: Sector Futures to 2015

Predicted Sector Influences	Key Activities	Competitiveness of the Sector
• Competition from low-cost countries • Continuing liberalisation of world trade • Increasing demand for fashion products among a growing world middle-class • An unwillingness to invest in the UK in volume manufacturing of sector products • Globalisation of tastes in clothing and footwear • Higher ethical standards in both production and consumption	• Brand creation and development and the international marketing of branded products • The application of new technologies in all areas of the business • Creative design of both aesthetic and technical products • Low-cost, small scale manufacturing of high added value and difficult to make products • International sourcing of both materials and other finished products • Supply chain planning and management • The creation, exploitation and protection of intellectual property and proprietary know-how • The industry will employ fewer people than now, and in manufacturing, many fewer. There will be a growth, however, in the number of qualified staff in all other functional business areas	• Better customer service • Brand creation and development • Commercialisation of new technologies • Creative design • Customer relationships • Strong craft and operator skills • International marketing and distribution • Manufacturing and/or sourcing overseas • Marketing, not just selling • New product development • Strong customer relationships • Supply chain management

Source: DRA (2005) from Skillfast-UK SNA (2005)

[7] This section draws directly on a specially-commissioned scenario planning study 'The UK Apparel, Footwear and Textile Industry in 2015', David Rigby Associates, 2005 as published in the 2005 Skillfast-UK Sector Needs Analysis

11.2.1 Scenarios for the dry cleaning and textile/leather servicing subsector

Due to its nature of being a service led sector, the DRA analysis offered a separate perspective for the dry-cleaning/laundry and textile/leather servicing sub-sectors. The future of this sub-sector was considered separately because of the service-based nature of its activities and the distinctive nature of the external driving forces that act upon it. The scenario presented for these sub-sectors are as follows and links directly into the economic implications that would drive discretionary consumer spending.

Table 17: Scenarios for the dry cleaning and textiles/leather servicing sub sector

Key Drivers	Most Optimistic 5% Annual Growth	Most Likely 1% Annual Growth	Most Pessimistic 5% Annual Decline
• Clothing and shoe technology (such as the growing availability of easycare garments) • The availability of home cleaning options • Economic conditions (which have a direct impact on consumer and corporate demand for the sub-sector's services) • Demographics and lifestyles (the trend towards casual dressing and the ageing of the population)	• No further technology, reducing the need for professional aftercare • Smart dressing increases • Strong UK economy • High employment and consumer confidence	• Some new disruptive fabric and clothing technologies and aftercare products • Slow growing UK economy • Higher unemployment. • More fragile consumer confidence	• Many disruptive technologies • Weak UK economy • Increased unemployment • Low consumer confidence

Source: David Rigby Associates 2005

11.2.2 Scenarios for the textile, clothing and leathergoods aftercare sector

The textile, clothing, shoe and leather-goods aftercare sector was seen as relatively mature in the analysis. At best it was envisaged to achieve only modest rates of growth and therefore could actually suffer a significant decline as a consequence of further technical advances.

Therefore, in all three of the scenarios, strategies and action plans appropriate to a mature service sector were identified to allow businesses operating in this sub-sector to increase market share and profitability. These strategies and action plans include:

- Reducing costs
- Market segmentation; identifying profitable niches
- Introducing new and/or improved products for target segments
- Improving customer service
- Improving staff skills in line with all these

The SNA 2005 reported that in the case of scenario three occurring and a fall off in demand, this sector would require special actions and assistance to help with the changes brought about by downsizing and business closures.

11.3 Building on the premise of the DRA scenario study at a European level

What was reported in the scenario planning of the 2005 SNA report on the whole been seen to be occurring, although the uncertain economic climate has seen fluctuations in business fortunes.

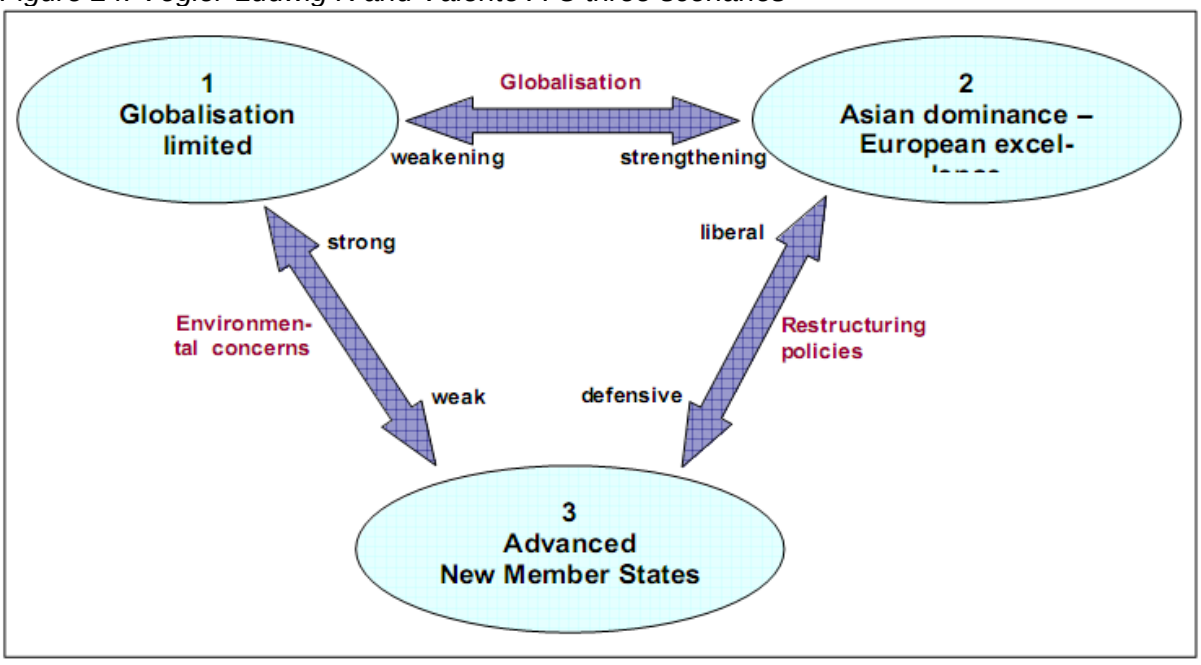
However, what is in need of updating since the publication of the report in 2005, is the way differing drivers, such as sustainability and environmental issues, the demands of fast fashion and in itself the uncertain global economy, have begun to impact the sector and how this could lead to a variety of interesting directions in which the European, UK and Scottish fashion and textiles sector can progress.

Vogler-Ludwig and Valente (2008) propose three potential scenarios to the year 2020 for the future direction of the European fashion and textiles sector and its implications for current high value manufacturers such as the UK and Scotland.

The reported scenarios in each of these instances impact differently on the European fashion and textile sector that likewise will have ramifications for the UK fashion and textiles skills base.

The three scenarios put forward in this paper are “Globalisation Limited”, “Asian Dominance-European Excellence” and “Advanced New Member States.” Each of these scenarios are based on how the three major sector drivers of globalisation, environmental concerns and the restructuring of trade and economic policies will play within the fashion and textiles sector.

Figure 24: Vogler-Ludwig K and Valente A C three scenarios



Source: Vogler-Ludwig K and Valente A C (2008)

Each of the key drivers at play and how that will influence each scenario is highlighted in Table 18 below the three scenarios can therefore be summarised as such:

Scenario 1: Globalisation Limited

Globalisation limited sees the effects of climate change and the environmental agenda change the way in which consumers, the government and producers all currently make their decisions. This in turn sees production return to a European base as manufacturing production is seen as desirable to be carried out closer to the home market.

Whilst this pattern reduces the level of outsourcing and off-shoring that has been seen in the recent past, the employment implications for Europe as a whole are still negative with a 20-25% cut forecast from current levels.

Scenario 2: Asian Dominance – European Excellence

Asian Dominance reports the present trends the market has seen in the recent past of strengthening globalisation and continued liberalisation of trade policies. Placed in these terms, the fashion and textiles sector will continue as it has been with industrial manufacturing continuing to be outsourced and off-shored to lower waged countries as the developing world is able to improve the quality of the products offered.

EU countries will strengthen their technological lead and dominance of the high value, high technology market as has been seen in recent times with the growth of Scottish firms within technical textile markets.

This scenario will see the greatest falls in employment terms for the European economy with a halving of current employment forecast. However, this scenario will have positive impacts for future employment within skilled and technical occupations as European producers continue to innovate and command a market lead in high value production.

Scenario 3: Advanced New Member States

This scenario sees the lower cost EU Accession countries continue to offer a production facility for the EU to continue manufacturing. As globalisation continues to negatively impact manufacturing employment, policy will be targeted at ensuring an integrated role for Europe.

This will produce strong demand for production related skills in lower waged European countries and professionals in high-cost countries in an attempt to prevent the erosion of the manufacturing capability from within the European Union.

Again, as with Globalisation Limited, it is forecast this scenario will see a 20-25% cut in European employment levels to 2020. However, the configuration of jobs will be different with a significant loss of trade workers and a far greater emphasis on administration brought by the need to manage supply chains within a European context than at present.

Skillfast-UK recognises that this model is the one which is most likely not going to occur, given the large amounts of manufacturing already sourced to Asian countries that still offer cheaper alternatives.

Table 18: Key drivers of change for the scenarios

Driver	Scenario 1 Globalisation limited	Scenario 2 Asian dominance- European excellence	Scenario 3 Advanced New Member states
Environmental Costs	Rising significantly; Climate risks are strongly visible; Environmental policies with limited efficiency	Rising; Environmental policies are effective; Climate risks remain manageable	Rising; Environmental policies are effective; Climate risks remain manageable
Markets	Consumers strongly concerned about climate risks; Global economy disintegrates due to environmental conflicts; Slow macro growth	Consumers appreciate environmental politics; Global market for top qualities; Global labour division is further developed; Strong macro-growth	Consumers prefer job creation and remain price-sensitive; Medium macro-growth
Knowledge Base	Innovation concentrated on ecological technologies; Revival of traditional crafts; switch from foreign productivity to energy productivity	Strong product innovation for speciality textiles; Design marketing and sales very important; Management of the value chain	Mainly process innovation provided by machinery and organisational changes; Strong increase of labour productivity
Competitiveness	Declining competitiveness of emerging countries due to high environmental costs; Ecological and social criteria have strong impact on competitiveness	Strong position of emerging countries on low and medium quality segments; Strong position of European production of high value markets and speciality textiles	Strong position of low-cost areas in Europe on medium quality segments; Strong position of high-cost areas on high value markets and speciality textiles
Branch Structures	Locally concentrated value chains due to high transport cost; small sized production networks; Rising share of craft business	Closure of mass production; small sized innovation companies; Global networks of producers; Highly specialised crafts businesses	Mass production remains in European low-cost areas; Switch from subcontractors to independent suppliers; Top qualities and international brands in high-cost areas
Foreign Trade	Low growth of world trade	Strong growth of world trade	Medium growth of world trade
Employment Change 2006-2020	-25%	-50%	-20%
Skills Needs	Revival of production related trades; More managers and professionals in low-cost areas; Specialists for traditional crafts; General need for ecological competences	Strong decrease of production related trades; Limited demand for highly specialised craftsmen; Strong increase for technical and commercial specialists; Computer professionals	Strong demand for managers and commercial professionals in low-cost areas; Limited demand for technical specialists in high-cost areas; Decrease of production-related trades and craftsmen

Source: Vogler-Ludwig K and Valente A C (2008)

Impacts on employment by occupation

Taking the above drivers as a norm, how each of these scenarios will impact the skills mix on a European level, which in turn has implications for the sector at a UK and Scotland level and is presented in Table 19 below:

Table 19: Occupation changes in the textiles and manufacturing sector impacted by the three scenarios

Occupation	Scenario		
	1	2	3
Managers	+	+	+
Computing professionals, associate prof	+	++	++
Engineers, associated engineers	+	++	++
Business professionals, associated prof	-	+	+
Other professionals	--	=	+
Office clerks and secretaries	--	=	+
Service and sales workers	=	+	++
Textile, garment and related trade workers	++	--	--
Pelt, leather and shoemaking trades workers	++	--	--
Other craft related trade workers	+	+	--
Textile, fur and leather products machine ops	=	--	--
Plant and machine operators, assemblers	-	--	-
Labourers	-	=	-
European employment impact to 2020	**-20-25%**	**-50%**	**-20-25%**
++ strong increase; + increase; = no change -- strong decrease; - decrease			

Source: Vogler-Ludwig K and Valente A C (2008)

Scenario 1: Globalisation Limited

The implications of this scenario for the UK and Scotland will be that the demand for UK and Scottish produced goods driven by the sustainability agenda (and to an extent increasingly lessening advantage of wage drivers to off-shore and outsource) will continue to find a market.

Assuming specialisation on existing operations occurs, there will be a large increased demand for trade workers within the apparel sector. At the same time this change will also see moderate returns for managers, computing professions (in relation to increasing technological changes in both production and management of supply chains functions) and engineers to enable this process to happen.

Scenario 2: Asian Dominance – European Excellence

The trend that has occurred over the past ten years will continue to impact on the UK and Scotland. Textiles and clothing firms continue to move production away from the UK as the duel impact of increasing sophistication of overseas competitors able to replicate current high value goods produced in the nation.

Whilst this has large negative effects on the industry, it does create opportunities at managerial, computing, engineering and business professional levels as design functions and the management of supply chain activities become increasingly important.

Scenario 3: Advanced New Member States

The UK and Scotland will experience continuing structural changes as supply chains reconfigure themselves once more. Production will slowly creep back to new EU member states driven by increasing consumer demands for more responsive fast fashion and the sustainability agenda. The ability of UK producers to compete lies on their ability to cultivate customer relations and manage production from design through to branding and marketing activities.

In Summary

Reflecting on how these drivers will impact the sector, the scenarios each put a difference emphasis on the critical competencies needed by the sectors workforce. The competencies identified by Vogler-Ludwig and Valente to compete are presented in Table 20 below.

Table 20: Critical competences

	Scenerio 1 Globalisation Limited	Scenario 2 Asian Dominance- European Excellence	Scenario 3 Advanced New Member states
General Management	Change management Network management	Strategic, visionary, intercultural	Quality management, market orientated
Marketing and Sales	Consumer-orientated, socially and environmentally responsible	Client orientated, technical know how, trend-setting, intercultural	Competition-orientated, Market knowledge; Intercultural
Administration	Environmental legislation (REACH)	International business	International business
Research & Development	Sustainable products and technologies; Traditional techniques	Interdisciplinary; Multi-skilled Creative	Market –orientated Efficiency orientated Creative
Process Engineering	Energy and emission control; Cost control	Supervision of global supply chain	Cost control Quality control
Production	Small-scale, specialised, crafts-orientated	Client orientated, Technical know-how	Quality orientated; mass production
Quality Control	Environmental standards Network operations	Diversified standards	Large-scale control systems Network operations
Logistics	Energy-efficiency-orientated	Delivery-time orientated	Delivery-time-orientated

Source: Vogler-Ludwig K and Valente A C (2008)

What is interesting to note is that the competencies listed by the firms within the Skillfast-UK analysis sit easiest within the Asian Dominance-European Excellence model as firms have increasingly seen movements to niche and technical markets and indicates how the original David Rigby Associates analysis has played out thus far.

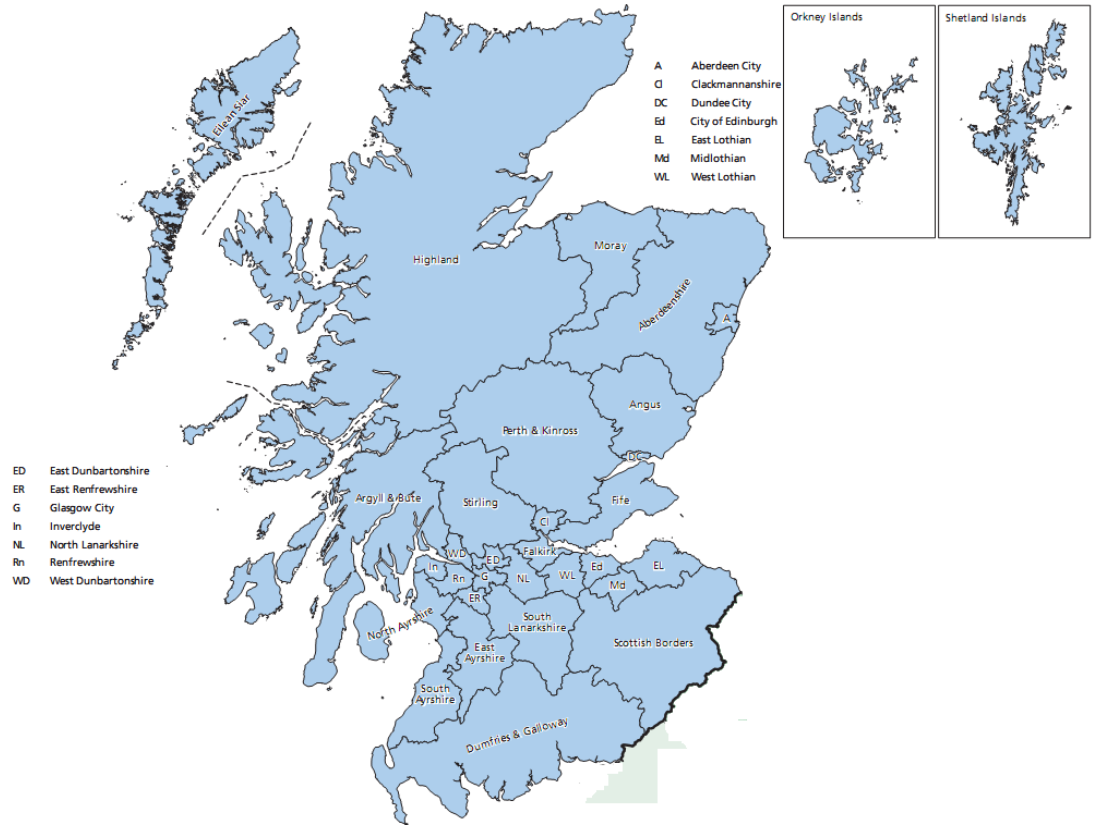
Whilst the Asian Dominance-European Excellence model presents the greatest issues for the manufacturing side of the sector in terms of potential loss of employment, the competencies needed to take full advantage of global opportunities as reported in the priorities from the education sector, suggest employers at this moment in time believe this model is the one that is currently driving forward the sector.

However, given the recent slowing down of the rate of decline in employment and GVA within the Scottish fashion and textiles sectors manufacturing base, the situation requires monitoring as evidence may be beginning to suggest much of the transition caused by globalisation has already occurred.

In this respect, the scenario as described within the Globalisation Limited scenario could emerge as more stringent environmental legalisation, the impact of the sustainability agenda and consumer demand to shape the future for fashion and textiles manufacturing. However, evidence points to the export market rather than improving domestic demand that is driving current employment and GVA trends.

12. Geography of Skills Need

Figure 25: Map of Scotland



Source: ONS

12.1 Geographical locations for Scottish sub-sectoral employment

Given the way in which sub-sectoral employment is cluster driven in many cases, the make-up of the fashion and textiles sector within Scotland looks very different when analysed this way.

The following tables display the employment hotspots within the Scottish nation at unitary authority level for the four identifiable sub-sectors.

Textiles

Textiles employment is very much focused within the Scottish borders and Angus area. Sizable employment is also present in Dundee City whilst a number of other areas have a number of employment levels.

Table 21: Textiles

Textiles	
Scottish Borders	14%
Angus	13%
Dundee City	*%

Source: ABI 2007 *undisclosable

Apparel and Sewn Products

Again, a sizable proportion of apparel and sewn products is located in the Scottish Borders area with a quarter of all employment located here. Glasgow City also employs a sizeable proportion of people within this sector.

Table 22: Apparel and Sewn Products

Apparel and Sewn Products	
Scottish Borders	24%
Glasgow City	13%
Moray	*%
West Lothian	*%
North Lanarkshire	*%

Source: ABI 2007 *undisclosable

Dry cleaning and laundry

As would be expected, the majority of dry cleaning activity occurs within highly concentrated population areas where these services are mostly needed and in demand. To this extent, Fife, Glasgow City and Edinburgh which are the top three population areas by Scottish Council area are responsible for much of the employment within this sector.

Table 23: Dry cleaning and laundry

Dry cleaning and laundry	
Fife	21%
Glasgow City	11%
Perth & Kinross	11%
Edinburgh, City of	*%
Falkirk	*%

Source: ABI 2007 *undisclosable

Footwear and leather:

Whilst not a significant employment category, a large majority of footwear and leather employment is carried out within Renfrewshire and its neighbouring district authority of Glasgow City. East Renfrewshire which also borders both can see an important employer in this sub-sector showing a distinct clustering of the footwear and leather within this area.

12.2 Skills differences between Lowland and Highland Scotland

Both the Lowlands and Highland regions reported similar patterns of skills shortages at 65% and 66% respectively according the Skillfast-UK employer survey. They also both reported sewn products and production management within their top 3 skills shortages in absolute terms.

However, whilst Lowlands employers reported more skills issues with designers, the Highlands and Islands reported garment alterations as a key skill shortage highlighting the specialised craft nature of the fashion and textile industry located there.

Looking at skills gaps, employers within the Highlands and Islands reported a greater amount that in the Lowlands. Again, both areas reported sewn products and production management as key skills gaps. However, emphasising the reliance in the Lowlands on designers this was recorded as the top skills gap whilst sampling roles were seen as a skills priority in the Highlands and Islands.

Table 24: Skills shortages and gaps within the Lowlands and Highlands & Islands

	Lowland Scotland	**Highlands and Islands**
Skills shortages	65%	66%
Top 3 skills shortages in absolute terms	Sewn products	Sewn products
	Production management	Garment alterations
	Designers	Production management
Skills gaps	17%	22%
Top 3 skills gaps in absolute terms	Designers	Production management
	Production management	Sewn products
	Sewn products	Sampling roles

Source: Skillfast-UK employer survey 2008

These findings though must be contextualised by the different skills needed to undertake these elements whilst maintaining stringent quality controls.

For instance, within the Highlands, the process of producing Harris Tweed can only be undertaken on the Isles of Harris and Lewis, involves yarn being beamed at the mill before being passed on to individual weavers to weave on handlooms in their own homes. This process enables the finished products to obtain the Orb trademark of the Harris Tweed Association.

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14. Appendices

14.1 Annex A: The Skillfast-UK footprint

The Skillfast-UK sector boards defined by four digit Annual Business Inquiry. n.b. This analysis is based on the 4 sector boards for which is possible to gather information on. It therefore excludes the role of design, manmade and technical textiles in the analysis.

Apparel and Sewn products

1821 : Manufacture of workwear
1822 : Manufacture of other outerwear
1823 : Manufacture of underwear
1824 : Manufacture of other wearing apparel and accessories not elsewhere classified
5116 : Agents involved in the sale of textiles, clothing, footwear and leather goods
5142 : Wholesale of clothing and footwear

Textiles

1711 : Preparation and spinning of cotton-type fibres
1712 : Preparation and spinning of woollen-type fibres
1713 : Preparation and spinning of worsted-type fibres
1714 : Preparation and spinning of flax-type fibres
1715 : Throwing and preparation of silk including from noils and throwing and texturing of synthetic or artificial filament yarns
1716 : Manufacture of sewing threads
1717 : Preparation and spinning of other textile fibres
1721 : Cotton-type weaving
1722 : Woollen-type weaving
1723 : Worsted-type weaving
1724 : Silk-type weaving
1725 : Other textile weaving
1730 : Finishing of textiles
1740 : Manufacture of made-up textile articles, except apparel
1751 : Manufacture of carpets and rugs
1752 : Manufacture of cordage, rope, twine and netting
1753 : Manufacture of non-wovens and articles made from non-wovens, except apparel
1754 : Manufacture of other textiles not elsewhere classified
1760 : Manufacture of knitted and crocheted fabrics
1771 : Manufacture of knitted and crocheted hosiery
1772 : Manufacture of knitted and crocheted pullovers, cardigans and similar articles
2470 : Manufacture of manmade fibres
5141 : Wholesale of textiles

Footwear and Leather

1810 : Manufacture of leather clothes
1830 : Dressing and dyeing of fur; manufacture of articles of fur
1910 : Tanning and dressing of leather
1920 : Manufacture of luggage, handbags and the like, saddlery and harness
1930 : Manufacture of footwear
5124 : Wholesale of hides, skins and leather
5271 : Repair of boots, shoes and other articles of leather

Dry-cleaning and laundry

9301: Washing and dry cleaning of textile and fur products

14.2 Annex B Employer SWOT analysis

Employer SWOT analysis specific to Scotland conducted for the Sector Needs Analysis 2007. This is in addition to the UK Sector Needs Analysis headline findings that were found to impact the sector in each of the four home nations.

Strengths	**Weaknesses**
▪ Made in Scotland label and image of British style ▪ Strong company brands e.g. in fully fashioned knitwear industry ▪ Strong presence in high value markets ▪ Strong presence in export markets ▪ Design creativity ▪ Now leaner, nimbler organisations with reduced cost base ▪ Flexibility (quick response, small orders) and delivery performance ▪ High standard of customer service ▪ Many long established companies with good reputation, strong technical skills and loyal, stable workforce ▪ Strong capital base in some companies	▪ Negative image of industry held by potential entrants leading to recruitment difficulties ▪ Lack of skilled labour ▪ Ageing workforce in some parts of the sector ▪ Seasonal nature of market for some goods ▪ Insufficient investment in recent years in some businesses ▪ Cost base of most firms high in global terms
Opportunities	**Threats**
▪ Develop sourcing, branding and marketing operations ▪ Diversification into new markets – specialist and high value ▪ Investment in technology – enhance productivity and product quality ▪ Development of additional channels to market e.g. through e-commerce, own retail function ▪ Further exploit export opportunities – opening up of markets in developing world ▪ Increasingly ethical consumption (and production) ▪ New production, materials and product technologies that have the potential to be commercialised	▪ Premium goods particularly vulnerable to economic downturn ▪ Performance in export markets sensitive to exchange rate fluctuations ▪ Growing expertise of overseas manufacturers in terms of high value products ▪ Impact of slowdown in UK housing market on retail sales of household goods ▪ Downward pressure on retail prices and therefore on UK manufacturers' margins ▪ Continued migration of production to Asia, particularly following withdrawal of quotas ▪ Disruption of access to raw materials (e.g.. cashmere, hides, chemicals) ▪ Impact of regulations (e.g.. environmental) ▪ Increasing concentration of retail sector

Source: SSA interviews and literature review 2005

14.3 Annex C: Technical textiles end user markets

Sector	Products	Key Drivers
Automotive and Aerospace	• Airbags and seat belts • Upholstery yarns and fabrics • Needle-punched headliners, carpets, boot-liners, sound-proofing and insulation • Lightweight non-wovens used in filters • Tyre cord fabrics • Clothing for space suits – lightweight and highly flexible • Mechanical rubber goods (MRGs) ie hoses and belts • Various composites	• European 'space race' and potential commercial flights • Continuous reviewing of safety standards • New materials producing improved performances • Improved flexibility raising new standards creating new markets
Composite Textiles	• Aerospace components (tails, wings, fuselages propellers) • Boat and scull hulls • Bicycle frames and racing car bodies • Fishing rods, storage tanks, and baseball bats • The new Boeing 787 structure, including the wings and fuselage is composed largely of composites.	• Develop product development and service capabilities to assist users with individual design • Application and technical troubleshooting issues • Provide QR manufacturing and distribution capabilities to cope with a wide variety of individual customer specifications and supply requirements • Supply and service increasingly global markets
Industrial Biotechnology	• Medical textiles, including all those textile materials used in health and hygiene applications • Incontinence pads, and diapers • Artificial veins • Prosthesis etc • Breathable, temperature-regulating materials • Lightweight shock-proof materials • Water and dirt repellent materials	• High crude oil prices • End consumer 'pull' for green biotech products • Bio-based based materials v crude oil based materials • Concerns about greenhouse gas emissions • Scientific progress, ie advancements in synthetic biology
Nanotechnology	• Nano-sized whiskers protrude from the fabrics, allowing any spill to be easily wisped away without damage to the fabric. • Antimicrobial and anti-mosquito protection into a vast array of products. • Leather degreasing • Textile dewatering • Applications of nanotechnology in textile production • Electronic textiles • Fibre modification • Textile pressure and strain sensors, used in clothing that can measure heart rate and respiratory rates, and to detect movement in buildings and structures • Electrically conductive textile materials, used in health monitoring garments, utilised by the military for inconspicuous communication tools, and for fashion items i.e. Ipod jackets or mp3 players integrated into snowboarding gear	• Less-invasive procedures and pressures for medical conditions, all point to nanotechnology as offering a new approach in healthcare materials • World textile and clothing overview • Macro and micro value chain of the textiles industry • Overview of the market potential for nanotechnology in textiles • Nanotechnology in the textile-related categories of; technical/non-woven/industrial textiles, high-performance textiles, multifunctional textiles and Smart/intelligent textiles
Others, eg cross cutting performance clothing, work-wear and technical textiles	• High visibility clothing (for joggers etc) that incorporates reflective materials • Protective clothing is another related area that includes garments which offer a higher level of protection than offered by standard work wear garments	• Growth of sporting and outdoor pursuits demanding performance apparel

Source: Adopted from UK Technical Textiles: A Strategy for Growth (2004-2009)