



Strategic Skills Assessment for the Fashion and Textiles Sector in Northern Ireland

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1. Introduction to the Strategic 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 three key elements for Northern Ireland:

1) What Drives Skills Demand?

The report will look at the current and recent performance and competitive position of the sector and key sub-sectors; the economic structure and condition of the sector; the factors driving this performance and 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 differentiate across the full spectrum of skills.

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 Northern Ireland employs 10,000 people within 1,800 workplaces.

Of the sub-sector boards, the apparel and textiles elements of the footprint proportionally account for the largest number of businesses, employment and gross value added.

In terms of demographics, the majority of the workforce work within process, plant and machine operatives and elementary occupations. 48% of the workforce is female, 23% are self-employed, with a further 23% working on a part-time basis. Worryingly, 50% of the sector are aged over 45, many of whom hold key occupations and hard to replace skills.

Looking at qualifications, 52% of the workforce are qualified at below NVQ level 2, whilst 24% are qualified above NVQ level 2. This compares with 26% and 48% respectively for the wider Northern Irish workforce.

Current sector performance

Using ONS data it is possible to see that there were large falls in GVA for the manufacturing side of the sector between 2003 and 2007. However, following 2005 these losses had levelled out with growth occurring before the recession hit. In this period GVA per head in the manufacturing sector had increased from £22,000 to £35,000 per head indicating a movement to higher value manufacturing.

Exports in textiles and apparel have been significantly hit by the decline in manufacturing output as companies have taken the opportunity to outsource production, although the world market outside of the UK and the EU has recently shown signs of growth for Northern Irish produced goods.

Key drivers of current sector performance and skills demand

The structure of the sector has been impacted more than any other sector 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 in order to be competitive in the global market place.

Key drivers of skills demand in this context are:

- the growth of fast fashion and technical markets
- the British 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 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 productivity and employment in the sector have been impacted by the recession with key employment indicators down. However, by the end of 2009, there had been 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 all sector level.

However, both hard-to-fill and skill shortage vacancies were more prevalent in the Northern Ireland fashion and textiles sector than reported at an all sector level. 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 identified as an issue.

Skills gaps, although less prevalent than skills shortages, were above national all sector levels and are highly prevalent within the sector. Again, Skillfast-UK's employer survey found gaps in a range of occupations predominantly in operative and elementary positions but also sizable shortages in design and management roles.

Future skills priorities include improving sales and marketing skills, the recruitment and retention of able young people, and the development of management and leadership skills as the biggest priorities.

Scenario planning

Working Futures III data predicts a period of stability in workforce numbers compared to the large employment losses seen in the past decade. 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.

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.

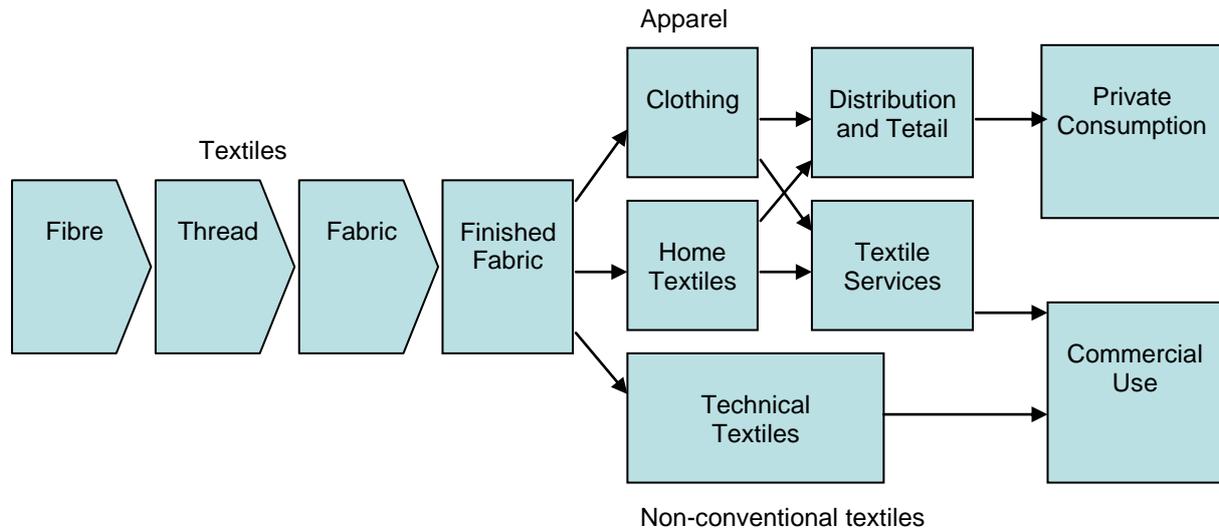
Within Skillfast-UK's remit are companies that undertake the following processes and activities, most of which occur within the UK fashion and textiles supply chain (see Figure 1).

- 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
- productivity within the sector and the assessment of 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 Northern Ireland, the sector can be seen to account for 10,000 jobs and 1,800 workplaces within the Skillfast-UK footprint. (tbr 2008)

This is in comparison with data from the Inter-Departmental Business Register (IDBR 2008) that estimates the figure at 6,000 employees and 600 firms. As the IDBR analysis excludes the self-employed workforce and firms below the threshold for paying VAT, it can be deduced from these figures the high number of micro and niche industries that exist within the Northern Irish fashion and textiles sector.

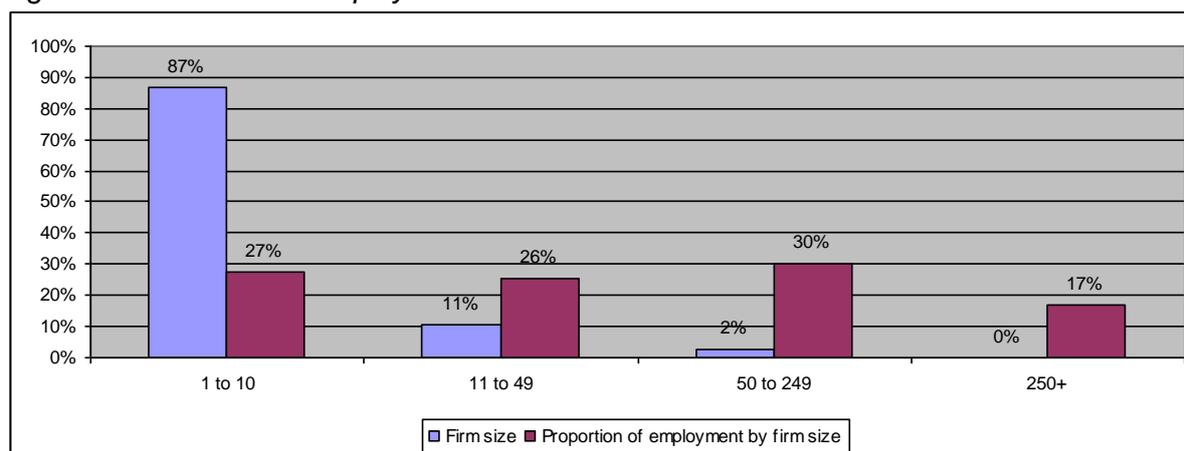
4.2 Business demographics

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

4.3 Size of firms

Reflecting the high number of micro and niche business within the Northern Irish fashion and textiles workforce, it is recorded that 87% of businesses recorded in the IDBR employ between one and ten people. However, in employment terms, the IDBR notes that the majority of employees work in workplaces that employ between 50 and 249 employees. This is important to note as firms with over 50 employees only account for 2% of overall firms (200 or more employees is below a percentage point) in the fashion and textiles sector in Northern Ireland. These figures indicate that whilst there is a high level of small and niche operations that occur within the sector, employment is well distributed among the various size of firms.

Figure 2: Firm size and employment within the sector



Source: IDBR 2008

4.4 Employment within the fashion and textiles sector

Using IDBR data, (again taking into account these figures only include people in employment) it is possible to see the manufacture of made-up textiles is the biggest area of employment. This is followed by washing and dry-cleaning, and the manufacture of carpets and rugs which is an important sector proportionally to the province than seen at a UK level.

Table 1: Employment by fashion and textiles sub-sector in Northern Ireland

Sub-sector	No Employed
Manufacture of Made Up Textile Articles	1,000
Washing & Dry Cleaning	700
Manufacture of Carpets & Rugs	600
Manufacture of Underwear	500
Wholesale of Clothing & Footwear	500
Wholesale of Textiles	400
Manufacture of Other Wearing Apparel NEC	400
Other sub-sectors	1,900

Source: IDBR 2007

Given this composition, using the 2008 Skillfast-UK employer surveys estimates, key occupations within Northern Ireland in order of prevalence include:

- Sewn products operatives
- Laundry and dry-cleaning operatives
- Samplers
- Garment alteration operatives
- Textile process operatives
- Designers

4.5 Employment by fashion and textiles sub-sector board

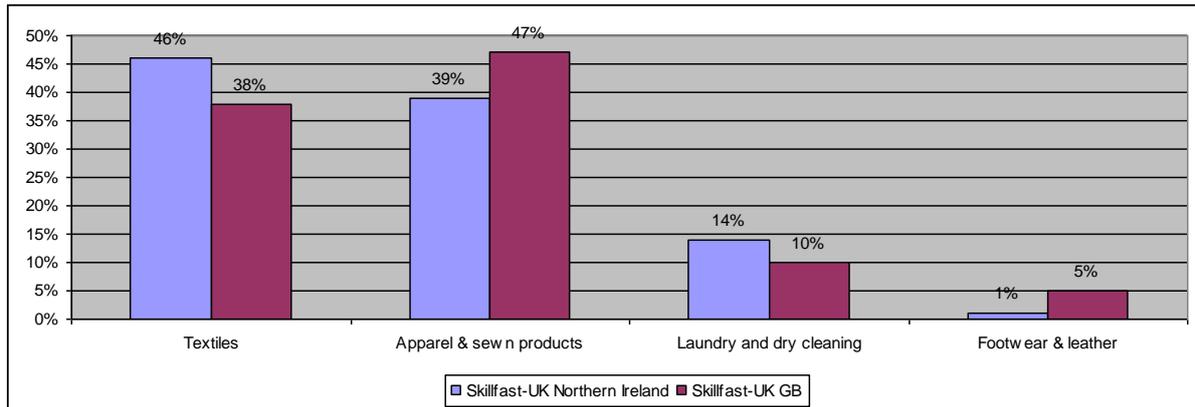
The Skillfast-UK footprint is separated into six distinct sub-sectors. However, national datasets only allow us to look at four of these due to the restrictive nature of Standard Industrial Codes for the fashion and textiles sector. Using the four national data allows us to

identify, that a higher proportion of the Skillfast-UK Northern Ireland footprint is dominated by the textile production sub-sector with 46% of firms within this sub-sector.

Proportionally this is 13% greater than the picture in Great Britain. However, apparel and sewn products have less employment presence in Northern Ireland although still accounts for 39% of employment.

Laundry and dry cleaning businesses make up a greater proportion of employment in Northern Ireland, yet footwear and leather related activities account for only 1% of total employment.

Figure 3: Employment by fashion and textiles sub-sector



Source: Northern Ireland produced using IDBR data, for GB ABI 2007

4.6 Employment Demographics

The Northern Irish fashion and textiles footprint can be seen to have a number of characteristics that distinguish itself from the wider Northern Irish economy. As we will see, these facets will be important factors in determining the future skills needs in the sector.

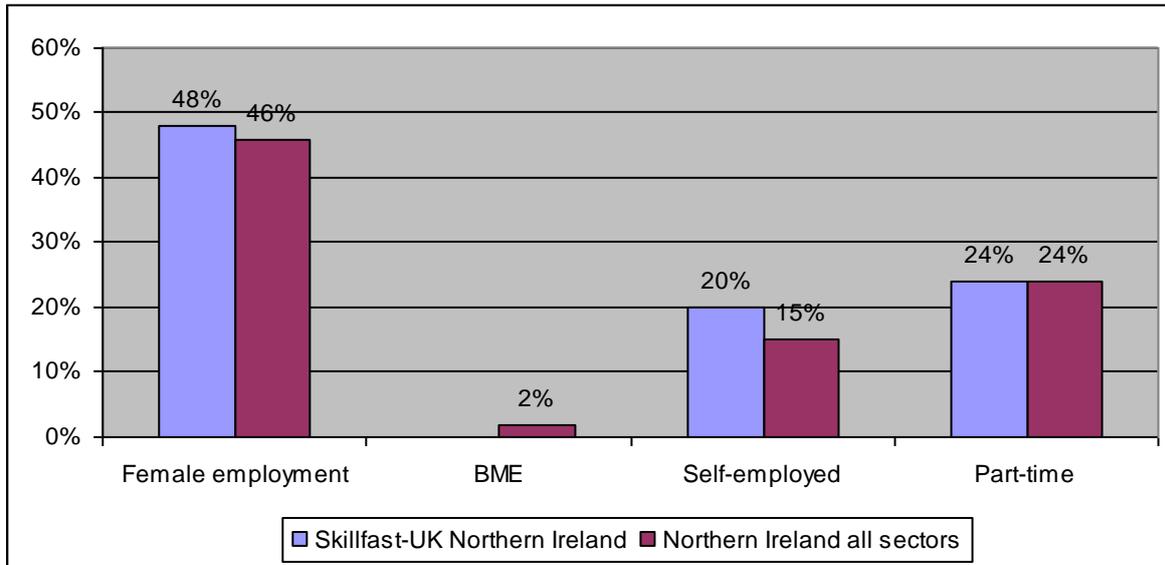
Sector demographics¹

At 48%, the Northern Irish fashion and textiles sector employs a similar proportion of females at an all sector Northern Ireland level. This may reflect the large proportional number of textile 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 Northern Ireland with a fifth of the workforce representing this status, and something not picked up by the ABI data. This proportion indicates the sizable amount of small and micro businesses that exist within the fashion and textiles sector. Part-time working is roughly similar to the pattern exhibited at a Northern Ireland all sector level with a quarter working part-time.

¹ Caution. Please be advised that figures based on APS 2008 data for Northern Ireland are based on small sample numbers and therefore must be treated as indicative only. However, analysis by Skillfast-UK confirms that these figures are broadly similar to the UK data held.

Figure 4: Northern Ireland fashion and textiles sector demographics



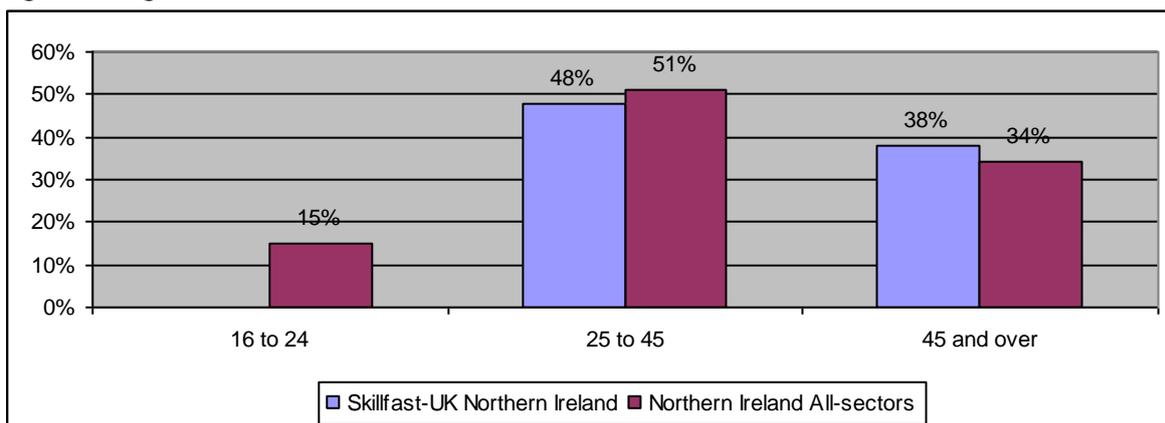
Source: APS 2008 n.b: BME sample size too small to disclose for fashion and textiles.

4.7 Age-bands of the sectors workforce

The sector in Northern Ireland has an ageing workforce that has implications for the future direction of the sector although there is a comparable amount of younger workers as exhibited in all sectors. In all, nearly 40% of the sectors workforce is over 45 and above the picture exhibited nationally.

This is a key issue for the Northern Irish fashion and textiles sector as many older workers are known to hold key management and technical positions. As they retire their replacements will require extensive training and development over a prolonged period.

Figure 5: Age bands



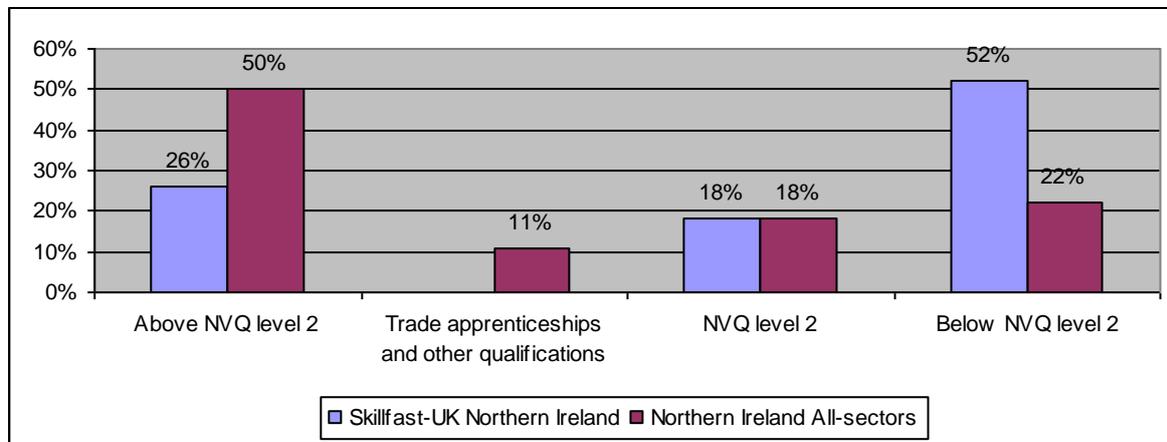
Source: APS 2008 n.b 16-24 years old age banding undisclosable for fashion and textiles

4.8 Qualification levels

Qualification levels in the Northern Irish fashion and textiles sector shows large differences in certified qualifications compared to the sector at large. A large 52% of the workforce is qualified at below NVQ level 2. This is in relation to the wider Northern Irish workforce where 26% are without NVQ level 2 qualifications.

In terms of higher level qualifications, less than a quarter of the workforce are educated above NVQ level 2 standard. This is in comparison to the all sector picture which shows a third have this status which is almost double the fashion and textiles sector.

Figure 6: Qualification levels



Source: APS 2008 n.b Trade apprenticeships and other qualifications undisclosable for Fashion and Textiles

4.9 Northern Irish manufacturing employment within a European context

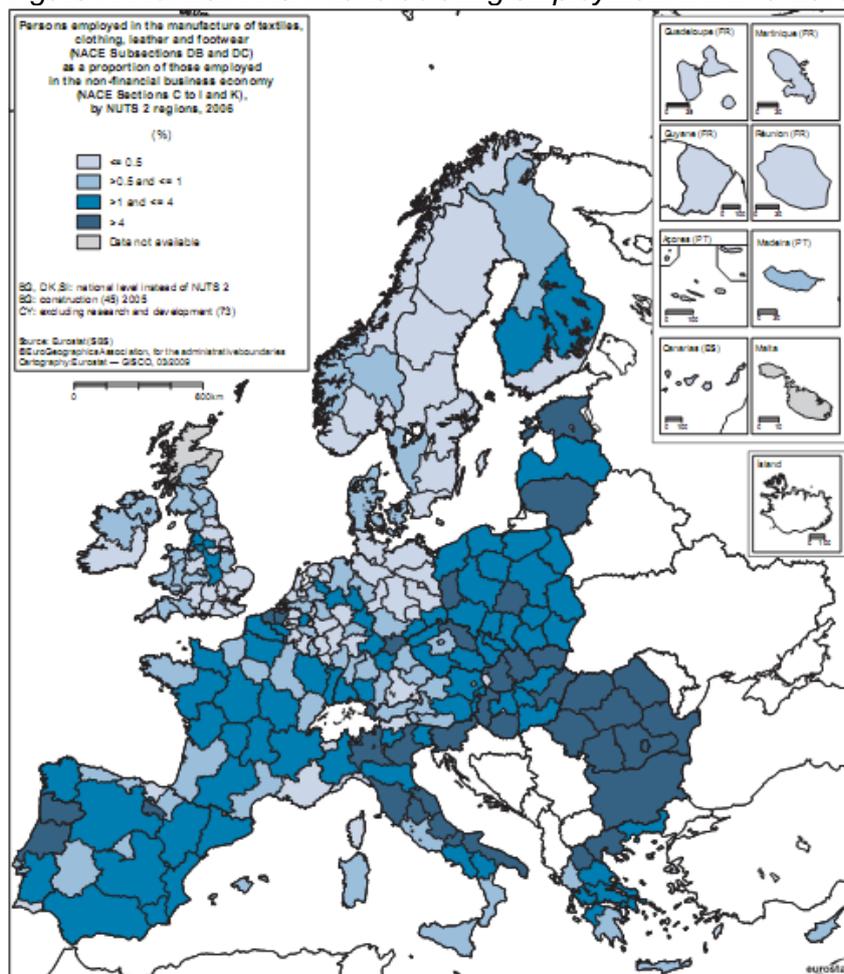
Information from Eurostat clearly shows employment within the manufacture of textiles, clothing, leather and footwear within a European context is lower in Northern Ireland than in many other countries.

The map in Figure 7 demonstrates that Northern Ireland is still a significant employer for the sector proportionate to the nations size with between 0.5% and 1% of the population employed in the manufacture of fashion and textiles which is a higher rate than many parts of the United Kingdom.

What the map clearly shows is the extent to which textiles, clothing, leather and footwear manufacturing is 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 the 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 high employer within fashion and textile manufacture.

Figure 7: Northern Irish manufacturing employment within a European context



Source: Eurostat Business Review 2009

4.10 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.

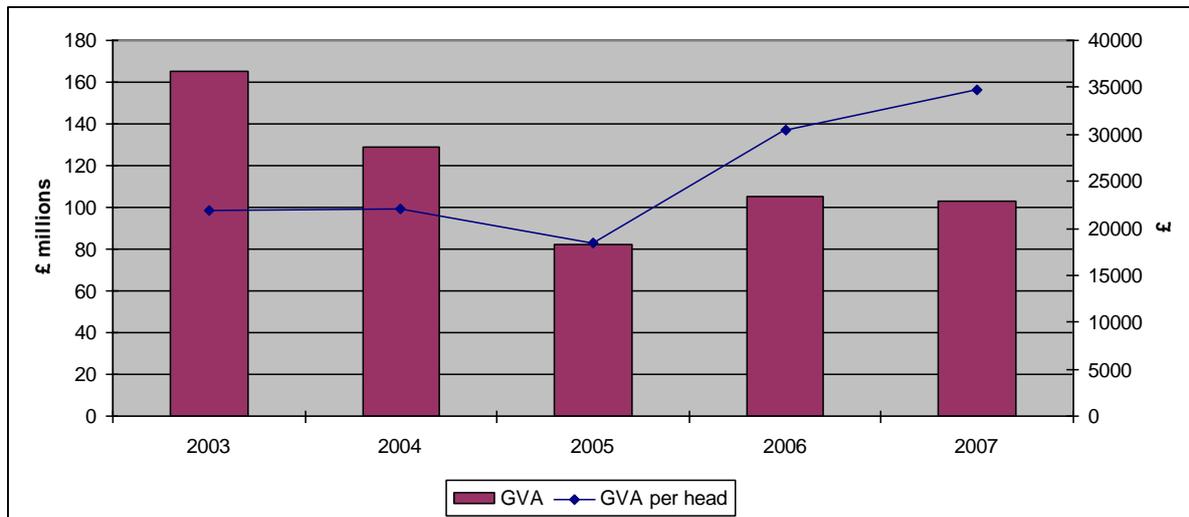
4.11 GVA vs GVA per head in the textile, leather and clothing manufacturing sector

Reflecting the rapid structural changes to the Northern Irish fashion and textiles manufacturing base, the latest available figures show how GVA has declined significantly since 2003, although there was an upturn in productivity in 2006 followed by flat performance in 2007 showing a certain amount of stability. This is an indicator that the sector had begun to find a level for its manufacturing base within the global economy before the recession began.

The move to higher value production can be seen in the GVA per head indicators which show how the Northern Irish fashion and textiles manufacturing GVA per head has almost

doubled to £35,000 in the space of two years from 2005. As with the productivity figures, the period between 2006 and 2007 saw a particularly high upturn.

Figure 8: Northern Ireland textile and clothing GVA & GVA per head 2003-2007



Source: Northern Ireland ABI 2003-2007 based on SIC group DB (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.)

4.12 Northern Ireland fashion and textiles manufacturing sales

A key indicator of current performance can be seen in Table 2 and the fashion and textiles manufacturing data. Firstly, the table shows how the fashion and textiles sector in Northern Ireland is set up towards export sales with only 18% of sales directed towards the internal Northern Irish market and the market continuing to decline at a fast pace, as low cost imports continue to penetrate the domestic market.

The index shows how significantly the value of exports has fallen at constant prices, to less than a quarter of the value a decade ago, declining at an annual rate of -7.7%. However, it must be noted that much of the decline in export sales had occurred by 2005/6 and since this period whilst sales have continuing to decline, the rate has not been at the pace seen before this period.

This decline in sales has been driven most significantly by declining sales to Great British markets; the largest market for Northern Irish produced fashion and textiles goods.

However, what is of significance within this data is that sales to the rest of the world have stabilised over the last four years reported. These figures, whilst small in comparison to trade with both Great Britain and the Republic of Ireland, signifies a potential market for high value fashion and textile goods produced in Northern Ireland.

Table 2: Northern Ireland fashion and textiles manufacturing sales

Sales Type	Year reported										Annual % change	
	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008 - 2009	99-00 to 08/09	06/07 to 08/09
Total £m	1,058	973	764	691	595	493	400	359	301	264	-7.5%	-6.6%
Northern Ireland	106	94	80	89	72	57	59	70	61	48	-5.5%	-7.9%
Great Britain	697	627	500	390	319	262	212	157	141	128	-8.2%	-4.6%
Rep of Ireland	88	79	58	55	52	58	58	79	53	42	-5.2%	-11.7%
Rest of EU	84	84	62	58	62	52	38	21	16	13	-8.5%	-9.5%
Rest of World	83	88	65	99	90	64	33	32	30	33	-6.0%	0.8%
External Sales	951	879	684	602	523	436	341	289	240	216	-7.7%	-6.3%
Exports	255	251	184	212	204	174	129	133	99	88	-6.5%	-8.5%

Source: DETI: Constant prices 2008/9 = 100 Based on SIC 17-19

5. The Role of Globalisation in Shaping the Sector

To fully understand the dynamics that have shaped the structural change within the Northern Irish 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 Northern Irish, 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 fashion and textile 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 in the past 60 years. 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 a global context. The significance of this Table is that it offers a clear steer of high cost European producers such as the UK and Northern Ireland towards

high value, innovative and niche production areas and reinforces the findings of the Skillfast-UK SWOT analysis conducted with employers in Northern Ireland (Skillfast-UK 2005) which highlighted strengths and opportunities within the areas highlighted as positives for high cost producers within this analysis.

Table 3: Competitive analysis of Northern Ireland as a high cost producer in global TLC networks

Competitive factors	EU High Cost (inc NI)	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.

5.1 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 4: 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.”

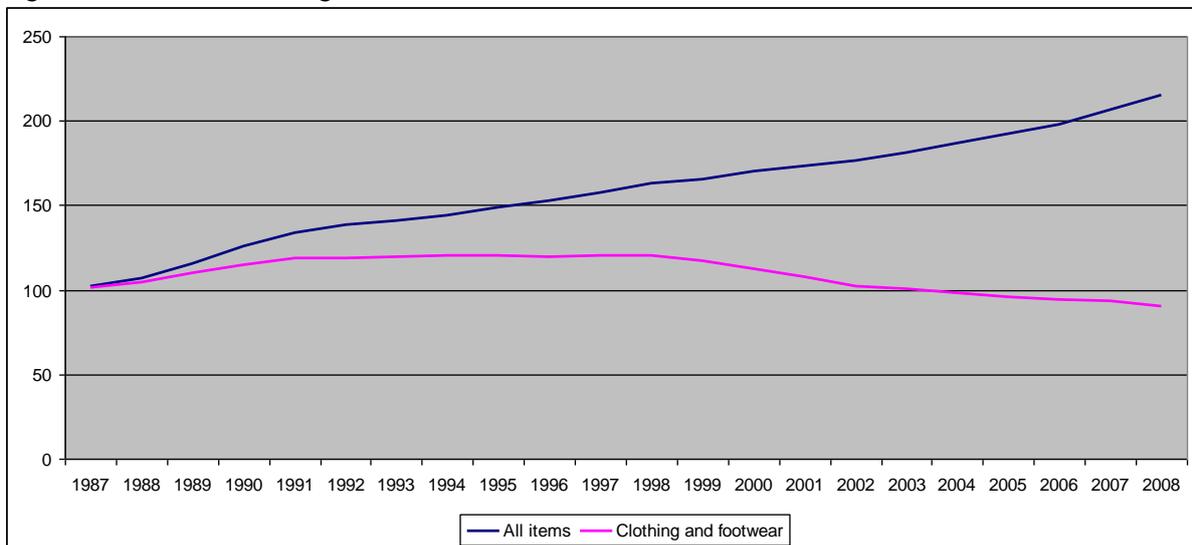
5.2 Consumer Price Index for Clothing

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 9 demonstrates, whilst the price of goods within the wider economy have more than doubled since 1987, clothing and footwear have remained at roughly the same level.

Figure 9: CPI for clothing and footwear

1987=100



Source: ONS Monthly digest of statistics

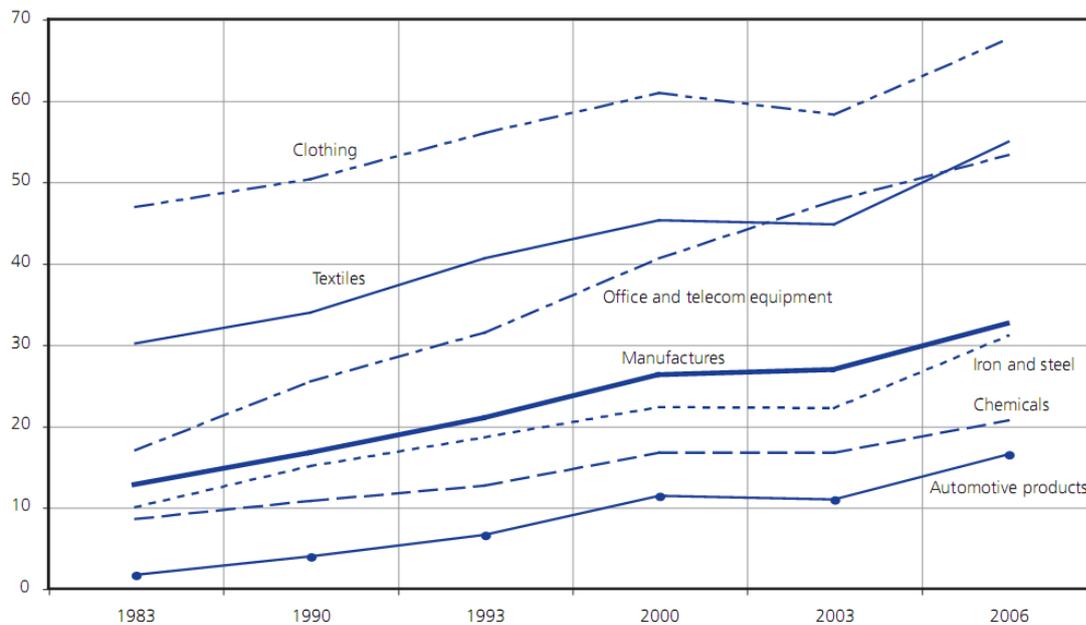
5.3 Developing countries percentage share of manufacturing of clothing and textiles

The impact of outsourcing is indicated by figures from the World Trade Organisation (WTO, 2008) and illustrated in Figure 10. 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 though 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.

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 10: Developing countries percentage share of manufacturing of clothing and textiles



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

5.4 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 within bespoke product development pre-recession had not been impacted as much as predicted, the Table below has largely offered a correct assessment of the previous five years as borne out by both the business registration/de-registration and GVA per head figures.

This analysis is especially pertinent for Northern Ireland, given the large drops experienced in GVA in recent times and the heavy influence of employment within made-up textiles and carpets, both of which are under particularly high pressure from global competition.

Table 5: 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		<ul style="list-style-type: none"> • Branded outdoor performance clothing • Technical textiles, finished products 	
	Average	<ul style="list-style-type: none"> • Carpets • Wool system fabrics • Fabrics - Linen, silk, etc • Apparel lace • Merchant converting • Knitted fabrics • Wool/early processing 	<ul style="list-style-type: none"> • Branded fashion; bespoke products • Home furnishings • Technical textiles fabrics • Speciality leathers • Importing and wholesaling • Corporate wear • Work wear and protective clothing • Leather-goods 	<ul style="list-style-type: none"> • Designer apparel • Speciality MMF • Smart garments
	Poor	<ul style="list-style-type: none"> • 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

5.5 Movement towards a new typography

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

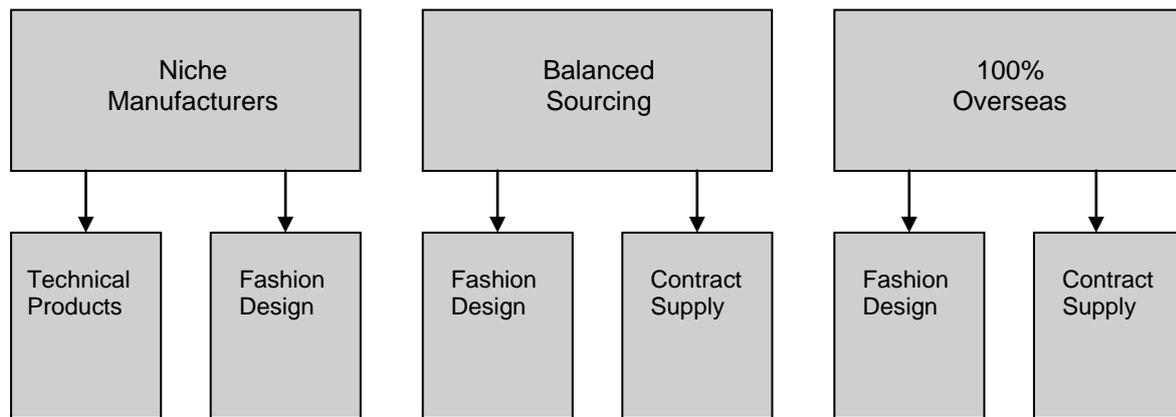
Tyler recognises there are three different strategies firms are currently following to maximise their competitive position within the fashion and textiles sector. These are:

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 11: The new manufacturing typology



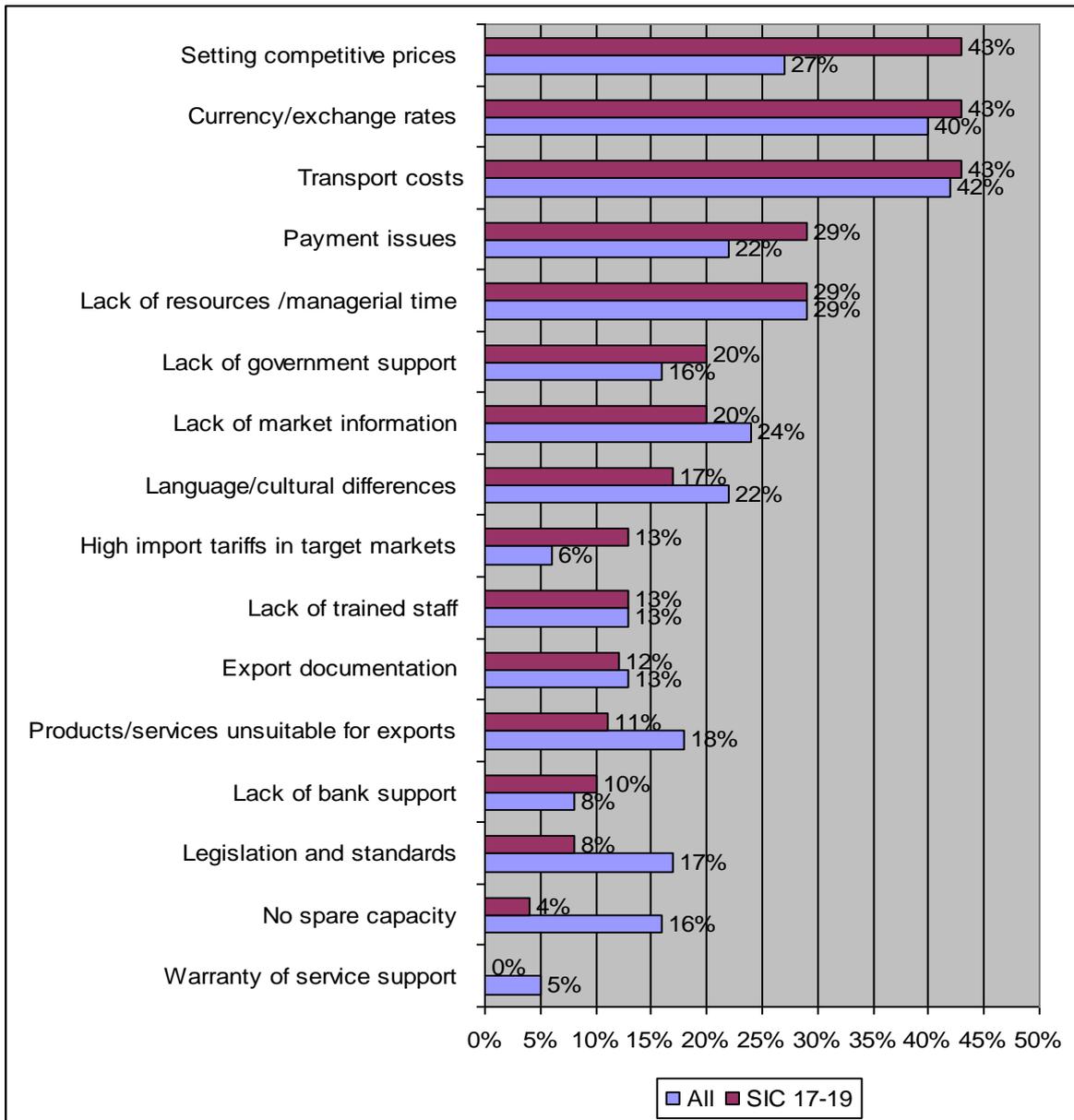
Source: Tyler 2003

Within such a climate, it is possible to see how these three strategies have been influencing fashion and textiles firms' behaviour in recent years.

Reflecting how these issues are especially pertinent to Northern Irish manufacturers, the Department of Enterprise, Trade and Industry, in their annual exporter survey (DETNI 2009), highlights how manufacturers within the Northern Irish fashion and textiles sector have the biggest issue with setting competitive prices of all the manufacturers within the province.

This issue is also coupled with other pressures that directly impact on the health of the business, such as exchange rates and transport costs. Supporting issues surrounding skills gaps, (such as the lack of trained staff) is an issue for a sizable 13% of employers who participated in the survey and shows the extent to which fashion and textile exporters are finding the current climate a challenging one to operate in.

Figure 12: Barriers to trade for Northern Irish manufacturers with countries outside the UK



Source: DETI, Manufacturing Sales & Exports Survey, Barriers to Trade 2008 Sample: 75 companies within SIC 17-19, 1871 overall.

6. 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 Northern Ireland are²:

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 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

Northern Ireland is well placed to take advantage of this movement to technical textiles and was highlighted by employers as a potential market for their goods in 2007. (SNA 2007) More recently, Bombardier Aerospace has recently invested in the province for the manufacture of aeroplane wings (Belfast Telegraph 13th July 2008) which has implications for technical textile job creation.

Along with this, the University of Ulster has completed a number of research projects for various companies into three dimensional (3D) woven textiles such as Rolls Royce, Bombardier, BAE systems, Sigmatex, Advanced Composites Group, DeepSea Engineering, and Dowty Propellers and is leading research into this emerging sector.⁴

There are also examples of companies manufacturing items such as high-tech protective and fire-retardant clothing, some of whom have been long established and some who are new players to the sector capitalising on the role technical textiles are playing on sector performance.

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

² This analysis draws mainly on Skillfast-UK (2005), *Skills Needs Assessment for apparel, footwear, textiles and related businesses*, Skillfast-UK (2007), *Northern Ireland SNA*, relating to Annex B including more recent sectoral developments

³ Please see Annex C for a full table of Technical textile uses

⁴ <http://ecre.ulster.ac.uk>

products are suited to the fashions developed that season. This is especially pertinent for Northern Ireland given that distribution and sourcing have been identified as key problems within the province by employers. This is a particular problem given the lack of land border with the rest of the UK which is Northern Ireland's largest export market, and highlights the issues regarding transport costs that is an issue for Northern Irish employers.

3: The British style

There is a distinctive "British style" or in Northern Ireland's case identified through the SNA process, a branding of traditional Irish goods which is recognised in key markets.

An example of this continued success and branding of Northern Irish goods is linen fabric which is woven outside Ireland then brought to Ireland to be bleached/dyed and finished, and which cannot carry the Irish Linen Guild logo to signify genuine Irish Linen.⁵

Looking at the importance of design to the health of the sector, Northern Ireland in this context has been successfully promoting and running a Belfast fashion week that has provided a platform to showcase Northern Irish designers in the sector.

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

Employers who participated in interviews for the SNA saw these technologies as offering a great opportunity to their businesses to commercialise these technologies and offer a potential new market for their products. Increasingly e-commerce has been cited as a technology that offers great opportunities for firms to sell their goods directly from source. However, the responses from employers for the 2007 SNA saw a threat due to the lack of inherent skills to sustain these changes.

⁵ <http://www.irishlinen.co.uk/>

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 Northern Ireland is limited, a number of issues are raised. Whilst sectors that enjoy either a high profile or visible career routes such as media, health and retail were the top ranking sectors, the fashion and textiles sector is an attractive one to work in with females more likely to want to work within the sector.

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 the roles of 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 that are areas that are not well understood.

Coupled with the findings from the SNA 2007 from Northern Irish employers that showed a high level of concern regarding an ageing workforce and the loss of key skills that will be difficult to replace. The Skillfast-UK employer survey 2008 also highlighted how employers in Northern Ireland cited the recruitment and retention of young people as a major concern to them at present.

6: The sustainability agenda

The one major skills driver that has increased in prominence since the publication of the Skillfast-UK SSA in 2005 has been the increasing importance of the sustainability agenda on company behaviour.

Recent research conducted by Skillfast-UK (2009b) has highlighted 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 adopted 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 business, and stimulate consumer demand for sustainable products. Indeed, membership of organisations that differentiate their products as being sustainably produced were key drivers of behaviour.

This is in collaboration with 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.

In September 2009, the Department for Environment, Food and Rural Affairs (DEFRA) published a Sustainable Clothing Action Plan (DEFRA, 2009) which has attracted a large number of retailers and manufacturers, and encouraged companies such as Marks and Spencer to publish a 100 step sustainability plan for its textiles and clothing business.

7. 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 for Northern Irish employers.

7.1 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.

7.2 Branding and marketing

Successful fashion and textile 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.

Comparative research (Owen, 2003) looking at parts of the UK and Italian sectors at a micro level also 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.

7.3 New product development and commercialisation of new technologies

To develop the products needed to compete in technical markets identified in Annex B, 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 upskilling at technician and operator level to facilitate these changes.

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

Firms 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 such as tailoring and shoemaking. 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.

7.5 New business start-ups

As seen in the increasing rate of businesses in the sector registering for VAT, 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.

7.6 Overseas sourcing

UK 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.

7.7 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.

7.8 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.

7.9 Ageing workforce

As noted in the sector demographics, over a fifth of the workforce are aged over 55 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.

8. Impact of the Recession

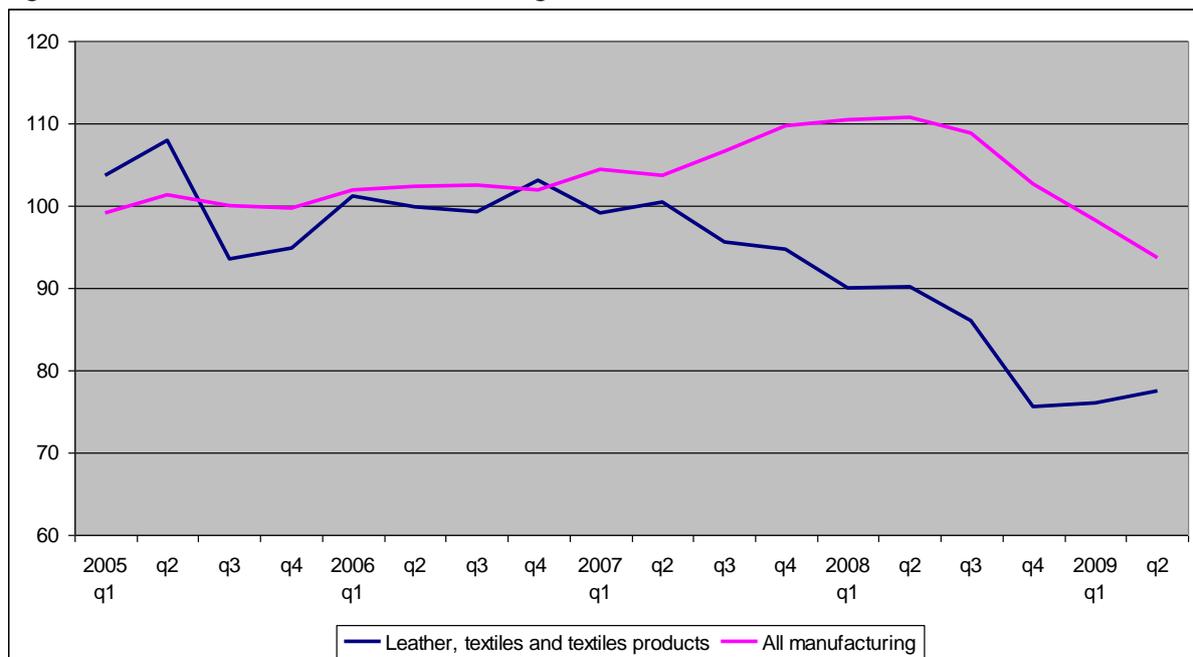
The impact of the recession has been especially hard on the Northern Irish economy and the fashion and textiles sector in general, and the assessment in general must be read in these terms.

A number of key measures can be used to understand the impacts that have occurred on the fashion and textiles sector in Northern Ireland are as follows:

8.1 Index of Production

The Index of Production has shown a steep decline in production within the Northern Irish fashion and textiles sector in the past two years. This has occurred at a far greater rate than the all manufacturing figure, declining in value by 20% since quarter two 2007. However, it must be noted that in quarter one 2009, production increased slightly whilst all manufacturing continued its sharp decline.

Figure 13: Northern Ireland manufacturing Index of Production 2005=100



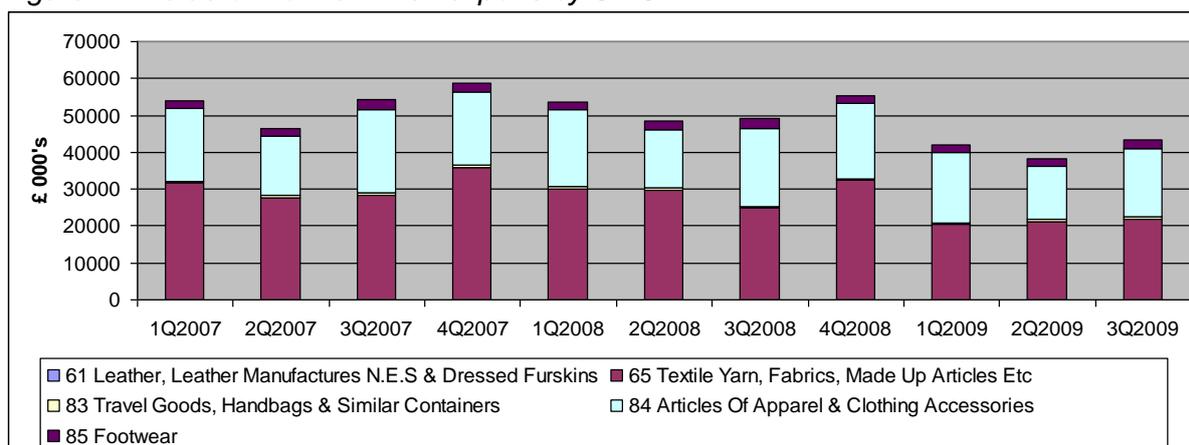
Source: DETINI (2009b)

8.2 Value of Northern Irish exports

Due to this data only recently being collected by Her Majesty's Revenues and Customs, (HMRC) the value of exports from the Northern Ireland fashion and textiles market are showing a slight upward trend on a quarterly basis. The value of quarter three exports of 2009 stood at a higher rate than in any quarter with the exception of one since 2007.

The main contributory factor to this can be seen to be within textile yarn, fabrics and made-up articles underlying the importance of the made-up textiles sub-sector to overall sector performance.

Figure 14: Value of Northern Irish exports by SITC

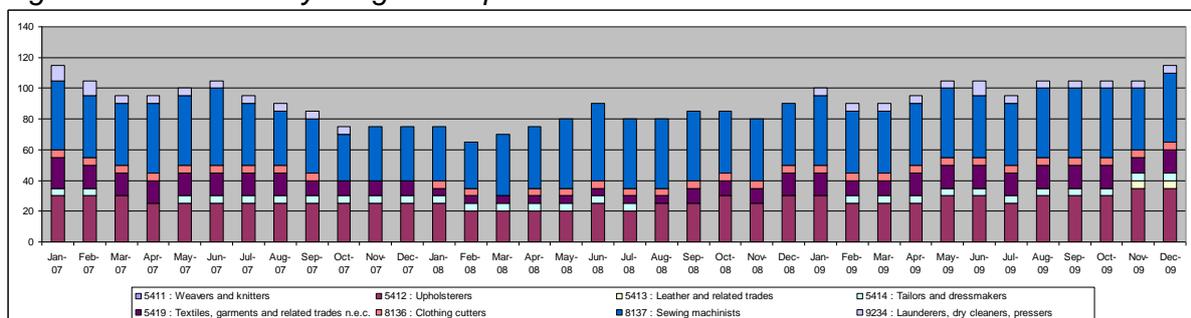


Source: HMRC

8.3 Claimants by sought occupation in Northern Ireland

The claimant count by sought occupation is particularly of interest. This count shows how the end of 2008 and the beginning of 2009 saw a sharp increase in people looking for textiles and fashion related occupations within Northern Ireland. Again though, and in comparison with the export figures, claimant sought occupations peaked in early 2009 and has remaining persistently high to the end of 2009.

Figure 15: Claimants by sought occupation in Northern Ireland



Source: DWP via NOMIS

9. 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.

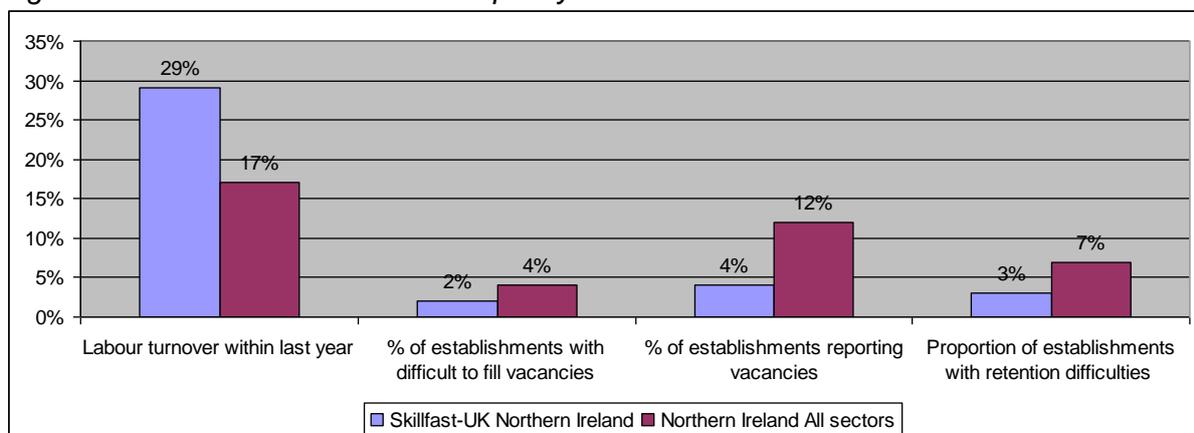
This section, therefore, explores in detail the following specific topics:

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

9.1 Labour turnover

Labour turnover within the Northern Ireland fashion and textiles sector was far greater than experienced than in all sectors. Indeed, of the 25 SSCs the data reported on, the fashion and textiles sector ranked second. However, despite this large level of turnover, the percentage of establishments with difficult to fill vacancies, establishments reporting skills gaps and the proportion of establishments with retention difficulties were all lower than reported at a national level. Indeed the vacancy rate was lower than any other sector within the province.

Figure 16: Labour turnover within the past year



Source: NISMS 2008

To understand these apparently conflicting messages, these figures must be contextualised within the following vacancy and skill gap information.

9.2 Vacancies

Vacancies as a proportion of employees were slightly lower for the sector than reported for Northern Ireland at an all sector level. The vacancy rate was also slightly lower than was being reported for the fashion and textiles sector in the other home nations.

In terms of hard-to-fill vacancies as a proportion of employees, again the Northern Irish fashion and textiles rate was in line with what was being reported at a Northern Ireland all sector level and the other countries within the fashion and textiles sector.

However, hard-to-fill vacancies as a proportion of all vacancies was far greater than being reported at an all Northern Ireland level being double the rate and also significantly higher than being reported with the other home nations.

These figures give a definite indication as to whilst vacancy rates are low, employers in the Northern Ireland fashion and textiles sector have difficulties in filling them with suitable candidates. This alone may account for the high staff turnover experienced in the province.

Table 6: Vacancy issues

Vacancy Type	Skillfast-UK Northern Ireland	Northern Ireland All Sectors	Skillfast-UK Wales	Skillfast-UK Scotland	Skillfast-UK England
Vacancies as % of employees	1.3%	2.4%	2.5%	2%	2%
Hard to fill vacancies as proportion of employees	0.9%	0.7%	1.4%	1%	0.7%
Hard-to-fill vacancies as a % of all vacancies	61%	29%	57%	51%	35%

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

9.3 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.

National survey data indicate that the incidence (proportion of establishments reporting shortages) and density (shortages expressed as a proportion of the workforce) of skills shortage vacancies are both high in absolute terms within Northern Ireland, although both are on a par with the average for the wider economy.

In Northern Ireland, skill shortages make up almost 0.4% of total employment. This is in line with both the national picture and also the other Skillfast-UK nations. However, when considering skills shortages as a proportion of all vacancies, the Northern Ireland's fashion and textiles rate is almost double what has been recognised in all sectors within the province.

This figure in itself is rather illuminating as it represents the specialist nature of jobs within the Northern Irish fashion and textiles sector and how employers are unable to find the correct skills to fill these positions when they come up.

Table 7: Skill shortage vacancies as a percentage of employees and all vacancies

	Skillfast-UK Northern Ireland	Northern Ireland All Sector	Skillfast-UK England	Skillfast-UK Wales	Skillfast-UK Scotland
Skills shortages as % of employees	0.4%	0.4%	0.5%	1%	0.2%
Skills shortages as % of all vacancies	47%	18%	25%	39%	*

Source: NISMS 2008, NESS 2007, SESS 2006, FSW 2005 * indicates data not available

9.3.1 Skill shortages by occupation

The Skillfast-UK 2008 survey of employers, asked about the specific technical areas for which skilled candidates are in short supply.

A worryingly high 71% of respondents to the survey reported skills shortages when looking to recruit in comparison to the UK figure of 59%. This strengthens the figures reported on in the NISMS.

This study identified a number of shortages in a variety of job roles as analysed in table 8.

Table 8: Absolute numbers of skills shortages in Northern Ireland

Level of skills	Occupation
Operative level	Sewn products operations
	Laundry and dry-cleaning operations
Skills trades	Garment alteration and repair
	Pattern cutting and grading
	Sampling
Higher level technical skills	Designers
	Product management
	Supply chain management

Source: Skillfast-UK employer survey 2008

Each of these areas has a significant level of employment coupled with a significant incidence of reported shortages. However, there are also niche areas which, although they employ relatively few people, are characterised by a very high incidence of shortages.

For instance, albeit on a limited base, hand-craft garment making and shoe repair have large skills shortages.

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, further retirements forecast and an increasing demand for replacement staff, employers within the sector will be in need of skilled staff as a matter of urgency.

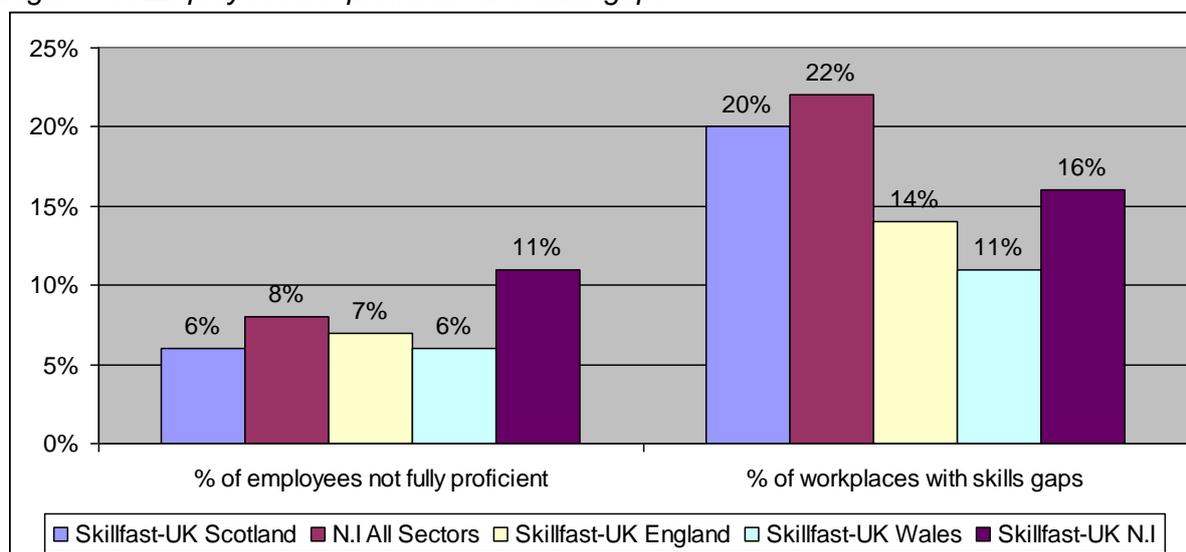
9.4 Skills gaps

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 Northern Ireland fashion and textiles sector report similar proportions of employees that are not fully proficient than at

all sector level. However, this is also significantly higher than seen within the other home nations fashion and textiles sectors.

In terms of workplaces reporting skills gaps, Northern Ireland's fashion and textiles sector report less workplaces than at an all sector level, although 16% of workplaces are reporting this. This figure is in line with the fashion and textiles sector in the other home nations.

Figure 17: Employees not proficient and skills gaps



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

9.5 Occupational skills gaps from the Skillfast-UK employer survey

Skillfast-UK's own 2008 survey found a similar level of skills gaps with 17% of firms in Northern Ireland reporting one. This compares to 16% for the whole of the UK. What is telling from the Northern Ireland sample is that whilst operative level skills gaps were prevalent in sewn product operations, there were few operative level skills gaps reported. Tellingly and given the geographical location of Northern Ireland, higher level technical skills were of large concern to employers in the province.

Table 9: Absolute numbers of skills gaps in Northern Ireland by occupation

Level of skills	Occupation
Operative level	Sewn products operations
Skills trades	Pattern cutting and grading Hand-craft garment making
Higher level technical skills	Designers Product management Supply chain management

Source: Skillfast-UK employer survey 2008

9.6 Skills priorities by sub-sector

Turning to “generic” skills, the key areas identified by businesses in the sector from the Skillfast-UK employer survey as requiring improvement are sales and marketing, identified by 53% as important or very important (making it the most widespread need of any facing the sector).

Representing the environment in which the Northern Irish fashion and textiles sector operates in and confirming the patterns picked up from the economic and demographic data, employers in Northern Ireland also see recruiting and retaining able young people and improving management leadership and supervisory skills as the key priorities.

A key issue also identified by employers within Northern Ireland and of larger concern than reported by fashion and textiles employers in the UK was the need to improve the skills of their staff, either through improving the quality of in-house training or finding colleges that could help provide relevant training. Half of respondents found this an issue.

What is striking within the results of the Northern Ireland sample is how attracting science and technology graduates to the sector is a bigger priority than the all UK level response with a quarter of all employers citing this as something they needed support with. This collaborates with the SNA 2007 findings that confirmed businesses in Northern Ireland viewed technical advances and possible their possible commercialisation as a big opportunity for the province and through the survey as something for specific educational support.

Table 10: Skills priorities based on the support of the education system (percentage saying important or very important)

Skills priorities based on the support of the education system	NI	UK
Improving sales and marketing skills including the skills needed for international trading	53%	48%
Recruiting and retaining able young people to replace workers who are nearing retirement	53%	48%
Improving management leadership and supervisory skills	52%	47%
Improving the quality of our in-house training, e.g. through development of in house coaches	51%	42%
Improving numeracy literacy and other basic skills	49%	48%
Finding colleges and/or training providers that can deliver relevant training in technical skills	48%	39%
Implementing new productivity techniques such as lean manufacturing approaches	28%	24%
Finding graduates with the right practical and commercial skills and knowledge	27%	27%
Attracting science and technology graduates who can help to develop new products and processes	23%	16%
Bringing in and training migrant workers from Eastern Europe and elsewhere	12%	11%

Source: Skillfast-UK employer survey 2008

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

Responses from employers within the different sector boards of the Northern Ireland fashion and textiles sector show there are a number of key variations that act as useful indicators for current and future skills needs within each of these different working areas.

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 the apparel and sewn products, design and the textiles sub-sectors all place a great emphasis on improving sales and marketing skills including the need for the international trading.

In contrast, the domestic facing laundry and dry cleaning sub-sector report the biggest priorities around improving numeracy, literacy and other basic skills.

A common theme reported by all five sub-sectors was that there was a need for increasing the supply of skills available to them with all citing either improving the quality of in-house training or finding suitable provision as a priority, signifying the skills shortage issues discussed.

Table 11: Skills priorities from the education system by sub-sector in Northern Ireland

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

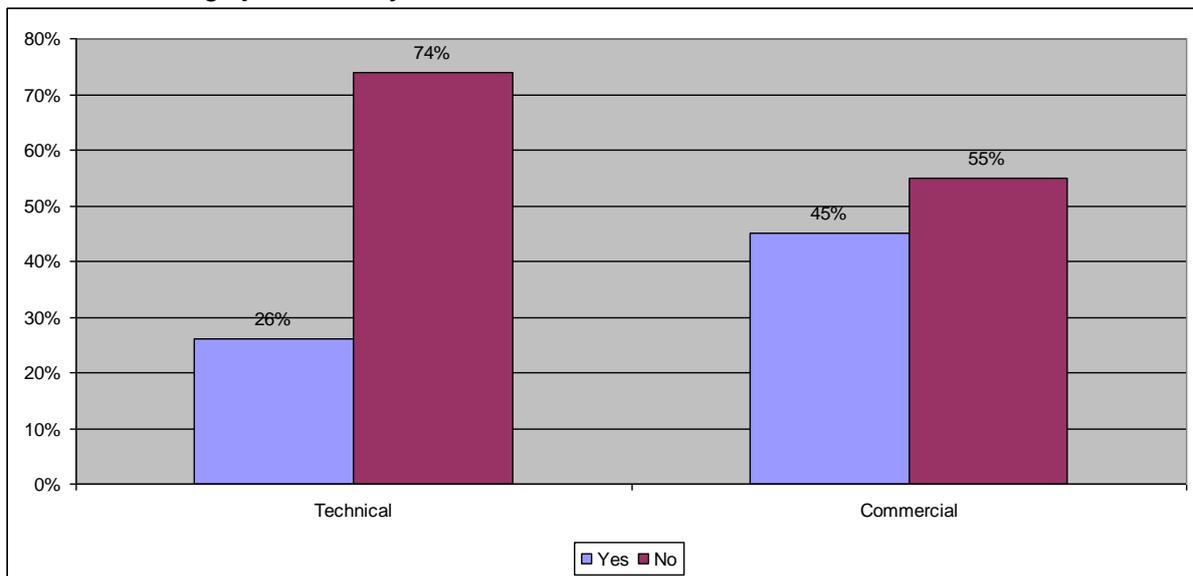
Source: Skillfast-UK employer survey 2008

9.8 Higher educational skills in the design sector

With design being an important facet of the sector and a key area vital to the well being of the Northern Irish fashion and textiles sector, employers within the fashion sector were asked whether design graduates had the expected skills.

29% of the firms surveyed as part of the Skillfast-UK employer survey employed a designer. Among these businesses, 74% say that recent design graduates lack the necessary technical skills for a job in the sector, whilst 55% lack the required commercial awareness. This indicates that the sector is unable to bring in the quality of candidate employers require to compete within the global marketplace.

Figure 18: 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 (based on employing designers and excludes don't knows)

10. Scenario planning

As noted, there are a wide number of forces and drivers at play on the UK 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. This is especially true for the UK and Northern Ireland fashion and textiles sector as it has exhibited such sensitivity and structural change in the recent past to globalisation.

With the recent slowing down of loss of employment numbers within manufacturing after the patterns of the mid 2000's, and the growing sustainability issues, 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 UK fashion and textiles sector:

- Working Futures III (2007)
- Skillfast-UK's bespoke scenario planning to 2015 (2005)
- Economix's European 3 scenario plan (2009)

10.1 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.

Whilst data for Northern Ireland is based on a small population frame, the latest Working Futures III study for the Northern Irish fashion and textiles sector highlights the following broad level data as outlined in table below:

Table 12: Employment estimates for the Northern Ireland fashion and textiles sub-sector

Employment Levels (000s)	2007 - 2017							
	1987	1997	2007	2012 ⁶	2017	Net Change	Replacement Demand	Total Required
Northern Ireland Skillfast-UK Footprint	31	27	6	5	5	-1	2	1
UK Skillfast-UK Footprint	770	543	272	246	228	-44	94	50
Northern Ireland All Sector Employment	603	698	836	864	888	52	308	360

Source: Working Futures III

⁶ The projections in this study were forecast before the recession impacted on 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 Northern Ireland are:

Overall sector picture

Working Futures III forecasts the numbers working within the Skillfast-UK footprint in Northern Ireland will have begun to stabilise by 2017 following dramatic falls in recent times as the erosion in the Northern Irish fashion and textiles manufacturing base saw the collapse in employment at operative level.

Despite the continued modest decline in the gross number employed, the sector is forecast to experience modest 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, over a third of the workforce will require replacement by 2017.

Compared to the sector at a UK level, the Northern Irish fashion and textiles sector is forecast to see a slightly greater drop in net workforce numbers. This indicates the Northern Irish fashion and textile sector still has a number of structural issues that are still to be worked through before the sector finds its optimum employment levels.

In contrast to the pattern forecast to be exhibited in the fashion and textiles sector, Northern Ireland at an all sector level is expected to increase its gross employment needs to 2017. This highlights how, whilst overall employment in Northern Ireland will continue to rise, there will be little additional domestic demand for Skillfast-UK sectors products stemming from this extra working population. This trend demonstrates the continued reliance on the export markets.

Structural changes

Whilst figures for Northern Ireland 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

Projections for Northern Ireland at this level are undisclosable due to data reliability issues at such small levels. However, the data indicates a similar trend as experienced within the UK with continual shedding of operative and elementary level jobs. Due to replacement demand requirements, total requirements will remain broadly flat.

The sum of these changes in occupation, suggests a continued movement of manufacturing and process 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 Northern Irish fashion and textiles sector will have found its specialism in the global marketplace.

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

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 NVQ level 2) and more with higher level skills (NVQ level 3 and above) to enable the sector in Northern Ireland 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 NVQ 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 relative to counterparts in developed countries.

Demographics

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 Northern Ireland rising to a fifth of the workforce by 2017.

Conversely, part-time working in the Skillfast-UK footprint in Northern Ireland will not be as prominent and will decline; in contrast to the high proportions all-sectors in Northern Ireland currently enjoy and is predicted to remain stable.

The share of female employment is forecast to decline, albeit at a rate slower than other nations for the Skillfast-UK footprint, with the proportion reducing significantly. 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 Northern Ireland all sector figure that will see stable employment numbers for females.

10.2 Skillfast-UK's bespoke scenario planning⁷

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. What was reported formed the scenario planning for the 2005 Sector Skills Agreement. Reviewing the evidence from Section One, what DRA reported has largely been occurring 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.

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

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 13.

Table 13: Sector futures to 2015

Predicted Sector Influences	Key Activities	Competitiveness of the Sector
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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: Skillfast-UK SNA 2005

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:

Table 14: 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
<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • No further technology, reducing the need for professional aftercare • Smart dressing increases • Strong UK economy • High employment and consumer confidence 	<ul style="list-style-type: none"> • Some new disruptive fabric and clothing technologies and aftercare products • Slow growing UK economy • Higher unemployment. • More fragile consumer confidence 	<ul style="list-style-type: none"> • Many disruptive technologies • Weak UK economy • Increased unemployment • Low consumer confidence

Source: DRA 2006

Scenarios for the textile, clothing and leather-goods 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.

Building on the premise of the DRA scenario study

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

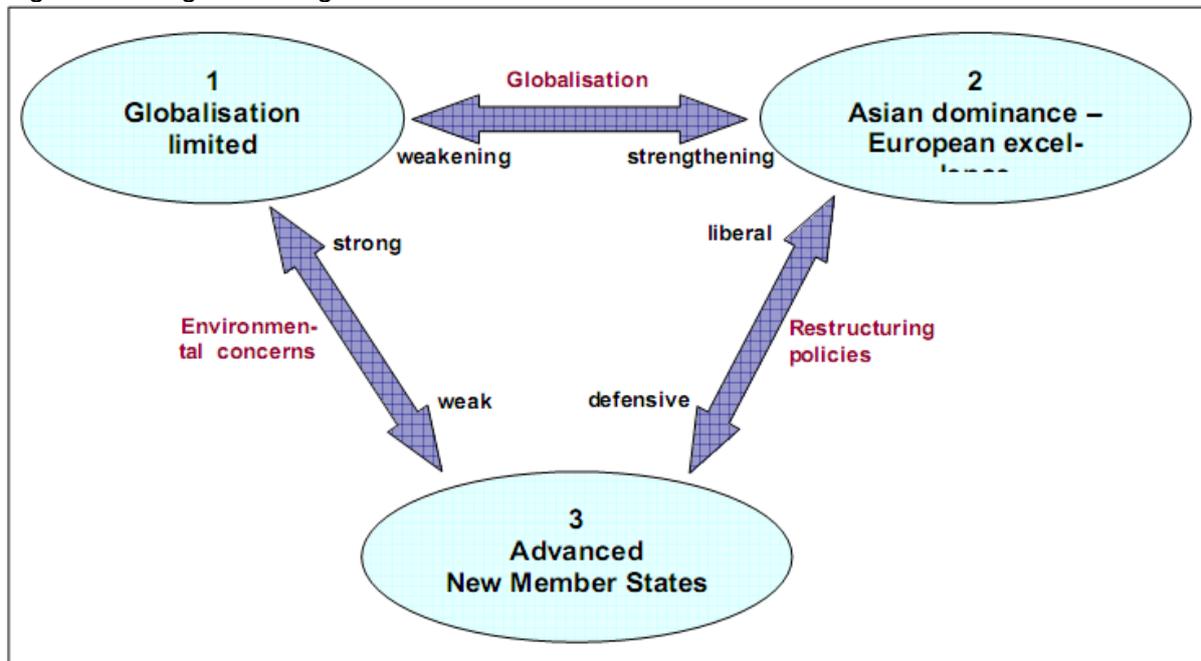
However, what needs updating since the publication of the report in 2005 is the way differing drivers such as sustainability and environmental issues, the demands of fast fashion and in itself the uncertain global economy, have begun to impact the sector and how this could lead to a variety of interesting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

Setting the UK fashion and textiles sector in the global environment using Economix’s scenario planning on a European level

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

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 19: Vogler-Ludwig K and Valente A C three scenarios



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

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 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.

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 will 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 great loss of trade workers with far greater emphasis on administration and the management of 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.

Each of the key drivers at play and how that will influence each scenario is highlighted in Table 15 below:

Table 15: 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 Northern Ireland level, is presented in the table below:

Each scenario whilst reported on a European level can be seen to relate to the UK and Northern Irish fashion and textiles sector. The key skills competencies identified for the sector are presented in Table 16 below.

Table 16: 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 on the UK and Northern Ireland will be that the demand for UK produced goods driven by the sustainability agenda (and to an extent increasingly less 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. Textiles and clothing firms continue to move production away from the UK as the dual 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 management of supply chain activities become an even more

premium required function and vital to the on-going success of UK businesses to manage global supply chains closer to home.

Scenario 3: Advanced New Member States

UK 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.

Recapping these competencies, Vogler-Ludwig K and Valente A C (2008) offers their thoughts on how these will impact the sectors skills needs of people within various occupations and is presented in Table 17.

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. Whilst this has the greatest issues 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 will drive forward the sector.

However, pre-recession, given the slowing down of the rate of decline in employment and businesses within the UK fashion and textiles sector, monitoring of the situation is something that must be taken into account.

Table 17: Critical competences

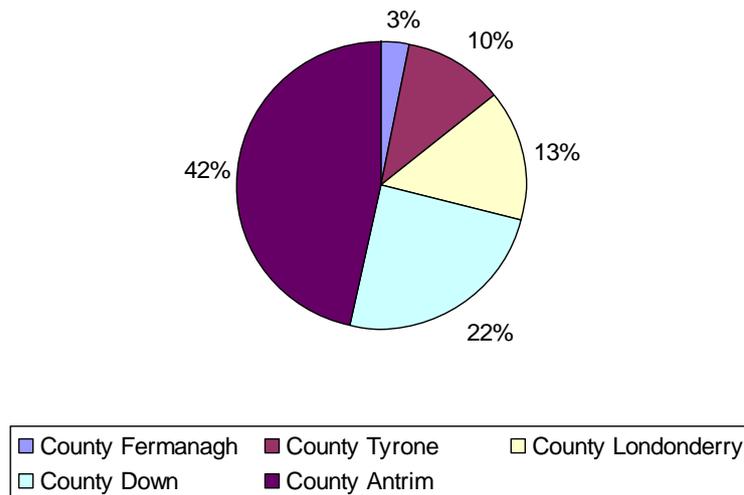
	Scenario 1 Globalisation Limited	Scenario 2 Asian Dominance- European Excellence	Scenario 3 Advanced New Member states
General Management	Change management Network management	Strategic, visionary, intercultural	Quality management, market orientated
Marketing and Sales	Consumer-orientated, socially and 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)

11. Geography

Geographical information is limited for Northern Ireland. However, using data from the Experian database as an indicator, it is possible to see that County Antrim accounts for the greatest number of Northern Irish fashion and textiles businesses. This is followed by County Down.

Figure 20: Geographical spread of businesses



Source: Experian (based on 1,026 companies)

A further analysis of the data demonstrates that this pattern is similar for each of the sector boards, with no evidence of clustering away from this pattern. County Antrim and County Down remain the largest employing counties within each of the sector boards.

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13. Appendices

13.1 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
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13.2 Annex B: Employer SWOT analysis

Employer SWOT analysis specific to Northern Ireland 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.

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Quality of product and service ▪ Technical capability and specialist skills ▪ Flexibility (quick response, small orders) and delivery performance ▪ Efficiency ▪ Long established firms with knowledge of marketplace ▪ Customer service ▪ Branding, particular in traditional areas (e.g. Irish linen, Irish poplin) ▪ Design creativity 	<p>Weaknesses</p> <ul style="list-style-type: none"> ▪ Location – sourcing and distribution is more expensive from NI than from England ▪ Difficulty of attracting skilled labour; affects ability to enter new markets ▪ Communication problems, ie migrant labour ▪ Lack of investment in new technology ▪ Lack of technical development expertise ▪ Ageing workforce and emerging technical skills deficit ▪ Lack of branding / marketing skills of some companies ▪ Difficulty of maintaining quality of outsourced manufacturing
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Overseas sourcing, from China, Turkey etc ▪ New markets ▪ Higher value products ▪ Development of additional channels to market eg through e-commerce, own retail function ▪ Increased productivity ▪ New production, materials and product technologies that have the potential to be commercialised 	<p>Threats</p> <ul style="list-style-type: none"> ▪ Competition from low cost imports forcing down margins ▪ Move towards direct sourcing from factory by customers ▪ Cost of raw materials, energy, insurance and regulatory compliance ▪ Disruption of access to manufacturing inputs due to fragmentation of supply chain ▪ Uncertainty regarding quotas disrupts investment and sourcing

Source: SSA interviews and literature review

13.3 Annex C: Technical textiles end user markets

Sector	Products	Key Drivers
Automotive and Aerospace	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Nano-sized whiskers protrude from the fabrics, allowing any spill to be easily wiped 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 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Growth of sporting and outdoor pursuits demanding performance apparel

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