Exploring Dublin's creative knowledge economy

The views of high-skilled employees, managers and transnational migrants

ACRE report 8.13

European Commission
CITIZENS AND GOVERNANCE IN A KNOWLEDGE-BASED SOCIETY

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Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union

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ACRE

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EXECUTIVE SUMMARY

This report forms part a broader project examining creative industries in thirteen European Metropolitan regions. More particularly, it forms a synthesis of three previous reports examining three distinct facets of the creative knowledge economy in Dublin. These can be summarised as follows: (1) employees in both creative and knowledge industries; (2) creative knowledge companies; (3) creative knowledge transnational migrant workers. There are two broad aims to this report. The first is to examine the relative importance given to different factors in terms of promoting the creative knowledge economy in the Greater Dublin Area amongst the above mentioned target groups. The second is to evaluate the strength of Dublin in terms of accommodating the creative knowledge sector based on a combination of 'hard' (production orientated) factors and 'soft' (consumption orientated) factors.

As outlined in previous reports, Dublin has undergone a dramatic economic transformation throughout the last two decades. Moreover, this transformation is directly connected to a shift to a knowledge-based economy. However, this report emerges at a time of significant economic turmoil in terms of the Irish economy, with Irish GDP reduced by as much as 10 per cent over the last 12 months. While industries such as the construction sector have been particularly affected by this down-turn, the knock-on effects are significant in terms of their impact on the wider economy, including creative knowledge industries.

There are two core objectives of this report. The first is to examine the core factors influencing the spatial behaviour of the different target groups from each of the previous three work packages. As with each of these previous reports, it analyses both 'hard' and 'soft' factors influencing the spatial preferences of the three different target groups. While the 'hard' factors include, for example, quality of transportation infrastructure, access to employment/labour pool and wage levels, the 'soft' factors, include the less tangible factors such as the atmosphere or 'buzz' of a city and access to amenities. The overall impact of these different factors in relation to each target group is therefore brought together here as a means of gaining an insight into the positive and negative attributes of the Greater Dublin Area for fostering the creative knowledge economy.

The results presented in this work package underline the significance of those presented throughout the previous three reports. Of particular note is the degree to which the 'hard' factors from each target group coincide as being the dominant factors in terms of both the establishment of industry and the attraction and retention of workers. For example, the high cost of living emerged as a significantly negative factor impacting on the attractiveness of the region from the perspective of employees in Dublin’s creative knowledge sector. This is further highlighted by transnational migrant workers, who point to the cost of living as a potential hindrance to remaining in Dublin in the long-term. The managers interviewed as representative of companies in the Greater Dublin Area also perceive the cost of living as a negative factor in terms of the attraction and retention of employees, as well as the indirect impact it has on cost of labour. The high cost of housing in recent years is of particular note in this regard. Furthermore, each of the target groups highlighted the limitations placed by the poor state of Dublin's transport infrastructure in terms of quality of life and the overall promotion of the creative knowledge economy in Dublin.

Another factor to emerge is the importance of personal trajectories in terms of locating in the Dublin area. In the example of employees, this was largely due to family connections, while in the example of transnational workers it was largely related to the locational preferences of a spouse or partner. While this was of particular note in relation to both the employees and transnational migrant workers, it is also emerges more implicitly in relation to the perspectives of creative knowledge companies. While the 'hard' factors emerged as a dominant factor in terms of the three target groups, the 'soft' factors emerged as a secondary factor in terms of the location of both employees and companies in the Dublin region. Overall, there was general satisfaction with leisure facilities (i.e. restaurants, pubs, theatres etc) among the three target groups. However, these factors were not of particular significance to either the employees or the transnational migrant groups. Such factors, are, however, seen to be of relative importance to stakeholders involved with industry groups and the representatives of creative knowledge companies, as well as creative companies themselves. In the case of the latter, creative companies tend to actively seek to provide their employees with numerous perks, while also selecting their relative location in the city based on amenity value.

The foregoing illustrates the degree to which 'hard' factors were perceived as a dominant factor throughout the different target groups. While factors such as transportation infrastructure and cost of living can be identified as being significant weaknesses in terms of promoting the creative knowledge economy in Dublin, there are a number of factors which have emerged illustrating the strength of Dublin as a focal point of creative knowledge industries. First, the critical mass of creative knowledge companies in Dublin ads further impetus to the decision of new companies to set up, while also being seen as a key factor in terms of the spatial behaviour employees. Second and directly related to this, government intervention further fosters the growth of Dublin for creative knowledge industries. The focus on Dublin is illustrative of the desire to maintain the core region’s competitiveness in terms of the wider European economy. A third factor in terms of the promotion of the creative knowledge economy is the location of third level institutions in the Dublin region. The high quality of graduates emerging from such institutions is perceived as an important factor in terms of the promotion of the creative knowledge economy. Finally, as discussed above, the positive perception of the social environment in Dublin further supplements the above factors.

1 INTRODUCTION

1.1 Introduction

The overall aim of the ACRE project is to assess the conditions associated with the creation or stimulation of the creative knowledge economy in 13 European metropolitan regions. As a means of carrying out this investigation, previous reports have utilised both quantitative and qualitative methods. This report is focused on creating a synthesis of previous findings by the ACRE research team in relation to the creative knowledge economy in Dublin. More specifically, triangulation methods are used to connect the wider quantitative results related to the experiences of employees in the creative knowledge economy from Work Package 5.13 (Murphy and Redmond, 2008) to the qualitative analysis of creative knowledge companies in Work Package 6.13 (Murphy et. al., 2008) and transnational migrant workers in Work Package 7.13 (Lawton et. al., 2009). There are two core objectives of this report. The first is to analyse the relative importance of different factors that emerged from the different target groups. The second is to highlight the strengths and weaknesses of Dublin as a destination for creative industries.

As pointed out in previous ACRE reports (*Ibid*), Ireland's economy has gone through remarkable shifts over the last two decades, emerging as one of the leading European economies. However, the last year has witnessed a dramatic decrease in its economic productivity. For example, in 2006, unemployment in Ireland had reached a low of 4.3 per from a high of 15 per cent in the mid-1990s. In January 2008 it stood at 4.8 per cent. However, by July 2009 it had risen to a rate of 12.2 per cent (CSO, 2009). Such a rapid rise in unemployment is indicative of the shift in the fortunes of the Irish economy throughout the last two years. Such a shift is also indicated by the decline of Ireland's GDP over the past year with a drop off of 9.1 per cent recorded in the first quarter of 2009 in comparison to the same period for 2008 (CSO, 2009). Over the last year, the Irish government have introduced a number of measures aimed at recovering revenue lost from the economy in recent years. This includes the introduction of an income levy of 1, 2 and 3 percent throughout various income thresholds in 2008. Under the supplementary budget in April 2009, which was introduced as a means of taking emergency steps to boost falling government income, these levies were subsequently doubled to 2, 4 and 6 percent respectively. The Irish government have also introduced pension levies to members of the public service of between 3 per cent and 10 per cent[1]. Furthermore, the introduction of other measures include the formation of a special group to examine potential cuts to expenditure in November 2008. Their report, which was released in July 2009 entitled *Report of the Special Group on Public Service Numbers and*

[1] The increments are as follows: Up to 15,000 – 3%; 15,000-20,000 – 6%; 20,000 and above – 10%. Department of Finance (2009) *Financial Measures in the Public Interest Act 2009*, Dublin: Government of Ireland

Expenditure Programmes proposed cuts of €5.3 Billion and staff cuts of 17,300 across government departments (*Ibid*, 5).

The most striking aspect of the recent down-turn in the Irish economy is the swift fall-off in the property and construction industries. For example, between July 2008 and July 2009, the GDP of construction industry alone fell by 31.4 per cent (CSO, 2009). This downward spiral, which has left many high-profile property groups over-exposed in terms of lending, has led the Irish Government to propose the setting up of the National Asset Management Agency (NAMA). It is envisioned that NAMA will acquire the 'bad loans' valued at up to €90 Billion from Irish banks, which are primarily connected to the property development sector, as a means of freeing Irish banks to lend again, thus boosting the economy.

When taken together, the above factors highlight the present plight of the Irish economy. It is evident that the rapid rate of growth of recent years will not be reached again in the foreseeable future. Overall, the OECD predict Ireland's GDP to have fallen from 'peak-to-trough' at a rate of 14 per cent before resuming a very slow rate of activity again in 2010 (OECD, 2009). Such factors are central to understanding the creative knowledge economy in the context of broader economic shifts. First, the cutback in government expenditure is likely to have a significant impact on the provision of both 'hard' (road, rail, telecommunications etc.) and 'soft' (place marketing, investment in leisure facilities etc.) infrastructure at both the levels of central and local government. Moreover, key areas of the creative knowledge economy have already been directly impacted by the down-turn, such as the architecture profession (see Lawton et. al., 2009). It is likely that other sectors, such as those associated with marketing and promoting the construction industry, will be similarly affected as that of the architecture profession.

1.2 Objectives

As briefly discussed above, there are two core objectives to this work package. The first is to examine the relative importance of different 'hard' and 'soft' factors among the target groups from Work Packages 5.13, 6.13 and 7.13. Following directly from this, the second objective is to assess the capacity of the Greater Dublin Area to accommodate creative knowledge industries.

Chapter 3 undertakes an evaluation of the Greater Dublin Area by each of the target groups from Work Packages 5.13, 6.13 and 7.13. It begins with an examination and summary of WP 5.13, which involved a quantitative examination of employees in both the creative and knowledge industries. Following from this, the findings from WP 7.13, which looked at the role of transnational migrant workers within the creative knowledge economy are examined. For the purposes of triangulation, these findings are dealt with prior to the 6th Work Package as it was felt that the transnational migrant workers flesh out the perspectives of wider employees raised throughout WP 5.13. This is followed by an overview of the findings from WP 6.13, which looked at the views of management personnel as representative of creative knowledge companies. This examined the role of 'hard' and 'soft' factors in influencing the location of different companies in the Dublin area.

Chapter 4 evaluates the Dublin region based on numerous 'hard' and 'soft' factors. While drawing directly from the analysis of the different target groups discussed in Chapter 3, it also analyses the various 'hard' and 'soft' factors with relevance to officially produced figures and government policy. For example, it illustrates the rise and sudden fall in property prices as reported by the National Economic and Social Council (NESC) (2008), and the Central Statistics Office (CSO). It also draws on recent policy documents which illustrate the manner in which different agencies aim to promote regional economic growth through investment in the city region’s 'soft' factors. This includes the promotion of the 'image of the city' through re-branding and place-marketing (DRA, 2009). This data is used as a means of further highlighting the different aspects of relevant 'hard' and 'soft' factors in terms of both initial decisions to locate to the Dublin region, as well as the everyday experience of the city.

1.3 Outline of the report

The structure of the report follows directly from the objectives outlined above. Chapter 2 summarises the methods used in the previous three work packages and outlines the methods used as a means of creating a synthesis of the broader findings of these reports. This is followed by two findings chapters. The first, Chapter 3, provides an in-depth analysis of the different target groups from the previous work packages. Following directly from this, Chapter 4 examines both the positive and negative factors in terms of fostering the creative knowledge economy in the Greater Dublin Area.

2 METHODS

2.1 Introduction

This report is aimed at creating a synthesis of previous ACRE work packages WP5.13, WP6.13 and WP7.13. The approach is therefore directly related to the methods employed within these work packages. Broadly speaking, Work Package 5.13 involved a quantitative examination of employees in the creative industries, knowledge-intensive industries and higher educated graduates from both these sectors. It set out to undertake a survey of a number of factors related to working and living in Dublin, which can be broken down into 'hard' production orientated factors and 'soft' consumption-based factors. A qualitative approach was undertaken in WP6.13, which examined the location decision making of creative knowledge industries. More particularly, this involved interviews with management personnel from a number of different creative knowledge companies. A qualitative approach was also employed in WP7.13, which was focused on examining the experiences of transnational migrant workers within both knowledge intensive industries and the creative industries. The methods employed in each wok package are summarised below. This is followed by an outline of the methods employed in this work package.

2.2 Creative knowledge workers (WP 5.13)

The objectives of Work Package 5.13 were to investigate the experiences of living in Dublin amongst creative knowledge workers and higher educated graduates from areas related to the creative knowledge economy. More particularly, the approach taken involved examining the relative importance of the consumption orientated 'soft' factors (importance of amenities, atmosphere or 'buzz' of the city etc.) in comparison to the production orientated 'hard' factors (availability of employment, transport, etc.). A questionnaire survey was therefore designed as a means of enquiring into the relative importance of the above-mentioned factors. Broadly speaking, the survey sought to examine the importance placed by the different sub-groups on 'hard' and 'soft' factors in the workplace, the residential environment, as well as the city more generally. The survey was divided into four sub-sections. The first was related to 'satisfaction with the city'. More specifically, this examined the role of 'hard' and 'soft' factors briefly mentioned above, such as general transport infrastructure and access to amenities within the city. The second section examined 'satisfaction with job and work environment'. A key objective of this section was to examine the extent to which 'soft' factors were perceived to play an increasingly important role in terms of overall job satisfaction within creative knowledge industries (Florida, 2002). The third section focused on 'satisfaction with neighbourhood/area and dwelling'. Again, this examined the relative importance of both 'hard' and 'soft' factors in terms of choosing a residential location. For example, it enquired into the importance of housing costs, proximity to place of work along with the 'softer' elements of residential choice, such as access to public open space and other forms of amenities. The final section of the questionnaire survey gathered background information on the respondents. This included, age, gender, education, income and nationality.

The target number of interviews was 200. That was broken down as follows: 75 from both creative and knowledge industries and 50 graduates. The creative and knowledge workers were selected based on three criteria. First, respondents had to be working in a creative or knowledge industry according to predefined NACE codes. Table 2.2 provides a breakdown of company responses by sector and their corresponding NACE code. Second, respondents had to be living within the Greater Dublin Area (GDA). Third, those working within administrative positions were not selected due to the commonality of this role across all industries. As well as graduates fulfilling the above requirements, they were also selected based on having graduated five or more years. This was based on the perception that those with five or more years experience are more likely to be more settled in their career and were therefore working in their respective field for reasons of choice rather than necessity.

As a means of administrating the survey, a total of 961 companies related to each of the three selected sectors were contacted. Of this total, 47 companies participated (5.0%). This included 22 in the creative sector, and 25 in the knowledge sector. The graduate surveys were carried out both by means of an on-line survey along with being approached through the formal alumni networks of a number of local universities and third-level institutions. The on-line survey method was also used for the creative and knowledge companies, and formed a significant aspect of the overall approach (Table 2.1). However, paper-based methods of delivery also formed a significant aspect of the distribution of the surveys.

Table 2.1 - Summary of methods used in Work Package 5.13

Distribution Method	Responses
Face to face	2
Paper based (Hand delivered)	70
Paper based (postal)	27
On-line	135

Efforts were made to select both small and large companies within both sub-sectors. Furthermore, companies were selected throughout different areas of the city so as to achieve a geographical break-down between different employees. As indicated by Table 2.2, the number of respondents from inner and outer areas working in creative industries was 41 and 54 respectively, while the break-down of those working knowledge industries was 45 and 40 respectively. Therefore, the geographic distribution of respondents is relatively evenly divided between both inner and outer areas of the city (see Murphy and Redmond, 2008).

The analysis of results included the use of statistical methods such as the t-test and the chi-square test as a means of examining the soundness of the sample size. The results were initially examined independently, with bi-variate analysis later used as a means of examining the relationship between the different factors. These results will be discussed in more detail throughout chapters 3 and 4.

Table 2.2 - Breakdown of responses by sector, size of enterprise and geographic location from WP5.13

NACE	Sector Name		Inner city	Outer/Suburban	Responses
Creative Industry					
722	Computer games, software, electronic publishing, software consultancy	Small	6	8	**29**
		Large	13	2	
921	Motion picture and video	Small		5	**8**
		Large	3		
922	Radio & TV	Small	1	1	**8**
		Large	1	5	
742	Architecture	Small	3	18	**43**
		Large	9	13	
	Other	Small	3	1	**7**
		Large	2	1	
Totals			**41**	**54**	**95**
Knowledge Industry					
741	Law	Small			**1**
		Large	1		
741	Accounting, Book-keeping, Auditing, Tax	Small		1	**22**
		Large	21		
741	Market Research, Public Opinion Polling	Small	9	8	**24**
		Large		7	
741	Business & Management Consultancy, Holdings	Small	2		**4**
		Large	1	1	
65	Financial Intermediation	Small	2	6	**13**
		Large	5		
73	R&D	Small			**1**
		Large		1	
803	Education	Small			**20**
		Large	4	16	
Total			**45**	**40**	**85**

Source: Murphy and Redmond, 2008

2.3 Creative knowledge managers & companies (WP 6.13)

Work Package 6.13 involved an examination of the relative importance of both 'hard' and 'soft' factors in the location decision making of creative knowledge companies. As a means of carrying out this enquiry, a qualitative approach was undertaken. This involved semi-structured interviews with management personnel from different creative knowledge companies. The interviews sought to examine a number of central thematic areas, including the development of the company, the reasons for locating in Dublin, labour processes and networks.

Following from Work Package 5.13, companies were selected on the basis of the following criteria: (1) geographical location; (2) size of company by number of employees; (3) NACE codes. For the purposes of Work Package 6.13, companies were selected from three distinct sub-sectors. These are broken down as follows:

- Knowledge Industry: NACE 74.14 (Business and management consultancy services)
- Creative Industry: NACE 921 and 922 (Motion picture and video; radio and television activities)
- Creative Industry: NACE 722 (Computer games and electronic publishing)

Interviews were sought with at least one company in each category outlined in Table 2.3. While it was not possible to find a suitable respondent for the category examining freelance Business and Management Consultancy Activities in an outer city area, more than one respondent could be found in two of the other categories. This brought the total number of interviews to 19.

Table 2.3 - Breakdown of interview responses by company size and geographic location

NACE 74.14: Business and Management Consultancy Activities		
	Inner City	**Outer City**
Freelance	Company 1	N/A
2-5 Employees	Company 2	Company 3
6-200 Employees	Company 4	Company 5
NACE 921 & 922: Motion Picture and Video; Radio and Television Activities		
	Inner City	**Outer City**
Freelance	Company 6	Company 7
2-5 Employees	Company 8	Company 9
6-200 Employees	Company 10 &11	Company 12
NACE 722: Computer Games and Electronic Publishing		
	Inner City	**Outer City**
Freelance	Company 13	Company 14
2-5 Employees	Company 15 & 16	Company 17
6-200 Employees	Company 18	Company 19

In addition, a total of four 'stakeholder' interviews were carried out for Work Package 6.13. These were as follows: local government official from Dublin City Council, official from the Industrial Development Authority (IDA), senior official from Enterprise Ireland, and a policy advisor from the National Competitiveness Council.

Potential interviewees were initially contacted by e-mail. If they were available to take part, respondents were subsequently contacted by phone in order to arrange a suitable time and location. All interviews were conducted in person by a member of the ACRE team in Dublin. A number of topics were covered in the interviews. First, the original reasons for companies locating in Dublin were examined. This included 'hard' factors such as the availability of labour, rental costs, tax climate and 'soft' factors, such as quality of life, access to leisure activities, and 'buzz' of the city. The importance of more abstract concepts such as 'tolerance' – openness to minority ethnic groups and religions in the wider city area – was also examined (Florida, 2002). Furthermore, the interviews enquired into the role and importance of networks, including ties with universities, business organisations and customers. Finally, the interviews probed issues related to future trajectories, including factors related to the retention of companies in Dublin.

2.4 Transnational migrants (WP 7.13)

Work package 7.13 enquired into the role of transnational migrants working in the creative knowledge economy in Dublin. More particularly, it enquired into the role of 'hard' and 'soft' factors in terms of attracting and retaining migrant workers. As with Work Package 6.13, this was carried out through the employment of semi-structured interviews. A total of 24 respondents were interviewed. Following from WP 6.13, the respondents were selected based on three criteria: (1) geographical location of company within the Greater Dublin Area (GDA); (2) size of company based on number of employees; (3) The NACE code of the each sector. For the purpose of consistency, the sub-sectors analysed were them same as those used in work package 6.13.

Table 2.4 - Breakdown of Interview responses by company size and geographical location

NACE 74.14: Business and Management Consultancy Activities					
Business Location	**Inner City**		**Outer City**		
	Small	Large	Small	Large	**Totals**
Employees	3	3	1	1	8
NACE 921 and 922: Motion Picture and Video: Radio and Television Activities					
	Small	Large	Small	Large	**Totals**
Employees	2	1	3	2	8
NACE 722: Computer Games and Electronic Publishing					
	Small	Large	Small	Large	**Totals**
Employees	2	4	2		8
Total respondents					24

The target number of interviews was 24. This was broken down to 8 interviews in each sector. While it was desired for these to be distributed further among the large and small companies in both inner and outer areas, it was not possible to select a suitable respondent in a large computer games or electronic publishing company in an outer area of the city. However, at least one respondent from each of the other sub-categories was interviewed. Moreover, the originally intended target of 24 interviews was achieved (Table 2.4).

The interviewees were contacted in a similar way to Work Package 6.13, such as through email and follow-on phone-calls. Furthermore, potential interviewees were contacted through contacts established throughout earlier work packages. The interviews were conducted in a face-to-face manner by the Dublin ACRE team. In keeping with the overall objectives of the ACRE project, the questions covered 'hard' and 'soft' factors related to selecting and remaining in a location. In terms of selecting Dublin, the questions covered topics in terms of the original decision to come to Dublin. The response to this question dictated the course of the following questions on the selection of Dublin. This depended on whether selection was based on 'hard' factors such as employment or other factors, including personal trajectories, such as a partner or spouse moving to Dublin. The questions then examined the selection of a particular neighbourhood, including the role of 'hard factors' such as access to transport and 'soft factors', such as overall atmosphere, or 'buzz'. Following from factors related to initial selection, the interviews covered topics related to the experience of the city. This included an analysis of the experience of both the work-place and everyday life in the city. Finally, the interviews examined future trajectories. More specifically, this enquired into the factors that might retain or repel transnational migrant workers in the future.

2.5 Methods employed in the current work package (WP 8.13)

In contrast to the previous work packages where a combination of quantitative and qualitative research methods were used in an attempt to gain insights into the attitudes of individual target groups, the current work package aims to synthesise the central findings that have already been extracted from the various target groups. In particular, the core objective is to identify the core location factors attracting and retaining the creative knowledge sector in Dublin, as well as the strengths and weaknesses of the region as identified by the target groups during the course of the research previously undertaken. The aim of this report is therefore to coordinate the findings of the previous three work packages in order to draw generalisations with regard to Dublin's creative knowledge sector.

Given the adoption of differing research methods in the previous work packages, the implementation of triangulation techniques is necessary in order to bridge the gap between quantitative and qualitative material. For instance, work package 5.13 quantitatively analysed the spatial orientations and behaviour of creative knowledge employees and graduates, whilst work packages 6.13 and 7.13 used qualitative methods in the research undertaken with creative knowledge managers and transnational migrants respectively, as well as the relevant stakeholders (Table 2.5).

Table 2.5 - Research methods employed

Work Package	Target Group Analysed	Research Method Employed
WP 5.13	Employees	Quantitative
WP 6.13	Managers (representing firms)	Qualitative
WP 7.13	Transnational Migrants	Qualitative
WP 8.13 (Current)	Employees, Transnational Migrants, Managers & Stakeholders	Triangulation of qualitative and quantitative results.

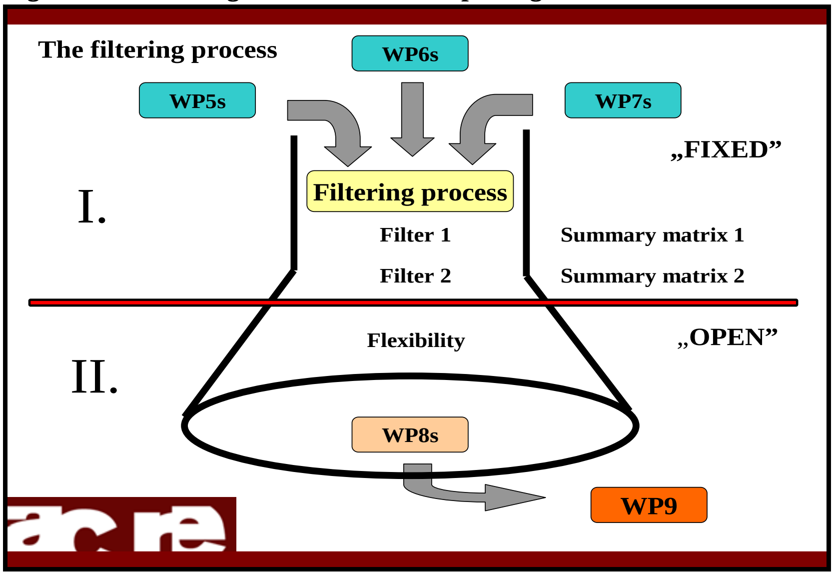
2.5.1 Triangulation

The application of triangulation in a general sense involves combining different levels of analysis with the aim of discovering complementarity, congruency or divergence (Erzberger 1998:182). Essentially, it facilitates the generalisation of results and helps position such findings in relation to theories and theses. Having regard to the implementation of triangulation in the current work package in particular, this method seeks to generalise central findings from the previous work packages by analysing the three data sets in relation to one another. In doing so, commonalities and divergences can be identified amongst the target groups which may support or challenge the main theories explored under this research project (i.e. that 'soft' factors are increasing important in the development of the 'new economy'), or perhaps even warrant the development of modified or alternative theories.

2.5.2 Filtering process and resulting analysis

In an attempt to extract significant commonalities (or indeed divergences) from the central findings of the research carried out previously, a two-tier filtering process was adopted in order to effectively synthesise the previous three work packages The first stage of the filtering process was utilised as a tool to assist in the formulation of chapter three, which focuses on the core factors motivating creative knowledge employees, firms and transnational migrants to locate in Dublin. Essentially, this stage of the process involved identifying the core factors influencing the location decisions of each of the target groups respectively and the subsequent production of a summary matrix to reflect such findings. The second stage of the filtering process was used in the formulation of chapter four and essentially involves the identification of the core strengths and weakness of the Dublin region based on the empirical research findings. This also involved the development of a summary matrix to provide a quick reference point to assist in identifying the core strength and weaknesses of the region from the perspectives of the various target groups.

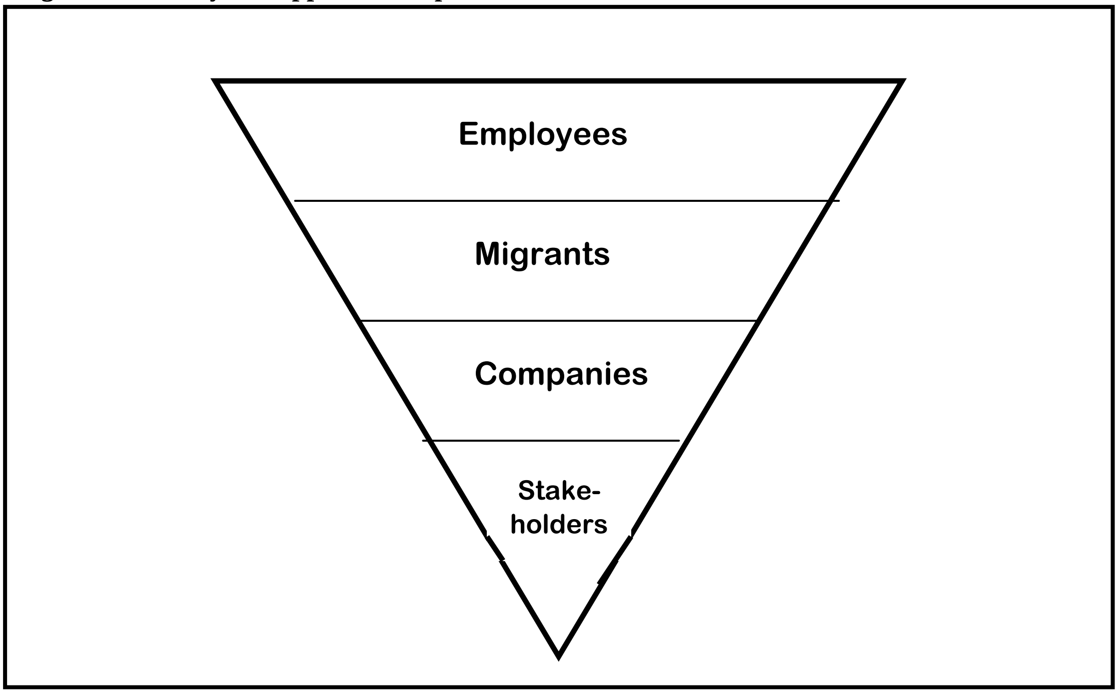
Figure 2.1 - Filtering tool used for work package 8.13



Source: ACRE WP8 proposal

In presenting the analysis of chapter three and four, a consistent approach has been adopted in order to present the analysis in what is considered to be the most meaningful and effective format. Rather than following the exact sequence of the work packages (i.e. employees [WP5.13], managers [WP6.13] and migrants [WP7.13]), a format was devised to reflect the logical transition of the analysis from one target group to another based on their respective dominance in the creative knowledge sector and their relations to one another. As such, the focus begins with the largest of the target groups, namely employees, the results of which are quantitative based. Then the analysis shifts to the central findings to emerge from research undertaken with the transnational migrant target group. This is considered the best approach as although migrants were analysed independently of creative knowledge employees during the course of the research, they nonetheless constitute part of the creative knowledge labour pool and are therefore likely to bear similarities to the analysis based on employees. Moreover, the qualitative based data obtained relating to migrants can be tentatively used to supplement the more restrictive quantitative results obtained relating to employees. Following the presentation of the core factors influencing employees and migrants respectively, an analysis of creative knowledge managers and stakeholders is carried out. As such, the focus begins broadly with employees and narrows downs as the analysis progresses in order to partially reflect the respective dominance of the target groups within Dublin's creative knowledge sector (See figure 2.2 below). However, it is worth highlighting that although the factors influencing the location decisions of the target groups are analysed separately, their respective analyses are not dealt with in isolation as commonalities and divergences both between and within the groups are highlighted throughout the report where considered appropriate to do so.

Figure 2.2 - Analytical approach adopted in WP8



2.5.3 Difficulties encountered

The biggest problems encountered in the formulation of the synthesis report are associated with the inherent difficulties in comparing and contrasting the quantitative based results of work package 5.13 with the qualitative contextual analysis provided in work packages 6.13 and 7.13. More importantly however, is the issue surrounding the fact that the results being synthesised under the current work package are specific to the three sectors being analysed (i.e. business and management consultancy activities; motion picture and video, radio and television activities; computer games and electronic publishing activities). As such, it is difficult to determine with any degree of certainty whether or not the results are representative of the creative knowledge industry as a whole, which undermines the strength of the observations and arguments made throughout the course of this report in relation to Dublin's creative knowledge economy at large.

3 EVALUATION OF THE CITY REGION BY TARGET GROUP

3.1 Introduction

This section provides a comparative analysis of the spatial orientations and behaviour of different target groups according the relative weight they attribute to various location factors at play throughout the Dublin region. The objective is to identify the main location factors influencing the decision-making process of employees, migrant workers and firms in both the knowledge intensive and creative industries in Dublin. This is considered crucial in understanding the key drivers behind the decision-making process of different groups locating in the Dublin region. The following analysis is also considered effective in terms of distinguishing the relative importance of ‘hard’ (production related) and ‘soft’ (consumption related) factors to creative knowledge workers and firms when deciding to locate in Dublin. It is worth noting that the following analysis attempts to simplify what is considered to be an extremely complex and dynamic decision-making process for each target group. A more comprehensive analysis of the multiple factors considered by the various target groups is provided in the previous three publications relating the research (i.e. Murphy and Redmond, 2008; Murphy et. al., 2008; Lawton et. al., 2009).

It is considered warranted that a brief analysis also be provided regarding the organisation of labour and the labour process in Dublin’s creative knowledge sector given that much of the literature on the ‘new economy’ deals with issues relating to employee mobility, the role of networking and collaborative links, as well as the organisation of labour more specifically (see Scott, 2006). This closing section of the analysis attempts to determine whether the labour process in Dublin’s creative knowledge sector conforms to the characteristics of the ‘new economy’. The role of formal and informal business networks to creative knowledge companies and workers shall also be addressed.

3.2 Main ‘hard’ and ‘soft’ factors influencing the decision-making process

The increasing prominence of ‘soft’ location factors is assumed to coincide with the emergence of the creative industries and the supposed rise of the ‘creative class’ (Landry, 2000; Florida, 2002; Roberts 2006). However, the conclusions drawn from each of the previous three work packages reveals that although the role of ‘hard’ and ‘soft’ factors vary depending on the sectors and target groups under analysis, ‘hard’ factors are of ‘core’ importance in the decision-making process of all target groups, with the ‘soft’ factors playing a largely secondary role (see Murphy and Redmond, 2008; Murphy et. al., 2008; Lawton et. al., 2009). Nonetheless, it would appear that in terms of retaining factors, the respective roles of ‘hard’ and ‘soft’ factors are reversed somewhat, with many placing emphasis on the ‘softer’ consumption related aspects of the city.

Despite the complexity of the diverse range of factors considered throughout the previous three work packages, the following analysis attempts to identify the core factors at play for each target group respectively. Attention will be drawn to the emergence of any significant divergences or similarities between and within the target groups where considered appropriate to do so. A summary matrix is provided at the end of this chapter which clearly identifies the key factors influencing the spatial behaviour of all target groups within Dublin's creative knowledge sector.

3.2.1 'Hard' factors

'Hard' location factors can typically be described as being the classic and tangible aspects of a city's environment that are largely related to the sphere of production (Scott, 2006). Such factors include employment opportunities, the quantity and skill level of the labour pool, transport infrastructure, as well as the overall cost of living among many others. The role of personal trajectories is also considered here as a classic 'hard' location factor given its extended influence on the decision-making process of individuals over a long period of time.

3.2.2 'Soft' factors

By way of contrast to the 'hard' factors aforementioned, 'soft' factors largely relate to the intangible conditions of a city. Such factors are often linked to the field of consumption but can include a diverse range of elements including the 'buzz' of the city, the presence of bars, café's, museums, galleries, the city's cultural scene, as well as the levels of diversity or tolerance in a place. Murphy and Redmond (2009) highlight the difficulty in determining precisely what constitutes a 'soft' factor given their largely intangible nature. Florida (2002) focuses on physical aspects such as bars, restaurants, cafés and other semi-public spaces that are considered to create attractive 'people climates', while others feel that 'soft' conditions broadly relate to the 'overall living environment' of a place such as the 'cultural and leisure facilities, the city environment and the level of tolerance and openness within cities' (Murphy and Redmond, 2009, 74). The 'soft' conditions focused upon in the following analysis broadly relate to the social and cultural environment of the city, paying particular attention to the provision of leisure and cultural facilities in the Dublin region given the emphasis placed on such conditions by the target groups.

3.3 Employees

Having regard to the core factors influencing the decision-making process of employees within the creative knowledge sector, there appears to be considerable similarity in the factors motivating both creative and knowledge workers to locate in Dublin in the first instance. For creative workers, the three most important factors to emerge from the research relate to their job, their family, and jointly because they were born in the city and because of employment opportunities. Similarly, in the case of knowledge workers, the most pertinent factors cited relate to their job and because they were born in Dublin or their family lives in the city (see

Table 3.1). The foregoing suggests that classic ‘hard’ location factors are the most important considerations motivating creative knowledge workers to live in the city region. By way of contrast, less than 5 per cent of respondents cited ‘soft’ consumption related factors as the main reason for living in Dublin, thus raising serious doubts regarding Florida’s (2002) notion that ‘soft’ factors are becoming increasingly important in the location decisions of the ‘creative class’. In addition to the aforementioned factors that are attracting creative knowledge employees to the region, a range of other issues emerged during the course of the research which are perceived negatively by the various target groups (i.e. transport, cost of living etc). The core factors, both positive and negative, influencing the spatial behaviour of Dublin’s creative knowledge employees shall be discussed in the following sub-sections.

Table 3.1 - The main reason for living in Dublin by sample group

	Creative	Knowledge	Total sample
Born here	15.6%	26.6%	18.4%
Family lives here	20.8%	17.7%	19.4%
Studied in Dublin	9.1%	10.1%	12.6%
Proximity to friends	6.5%	8.9%	7.8%
Moved here because of job	23.4%	24.1%	23.8%
Moved here because of partner's job	1.3%	5.1%	2.4%
Good employment opportunities	15.6%	7.6%	11.2%
Higher wages	2.6%	0.0%	1.0%
Size of city	1.3%	0.0%	0.5%
Housing availability	0.0%	0.0%	0.5%
Diversity of leisure and entertainment facilities	1.3%	0.0%	1.0%
Presence of good universities	0.0%	0.0%	0.5%
Other	2.6%	0.0%	1.0%

Source: Murphy and Redmond, 2008, 54

‘Hard’ factors

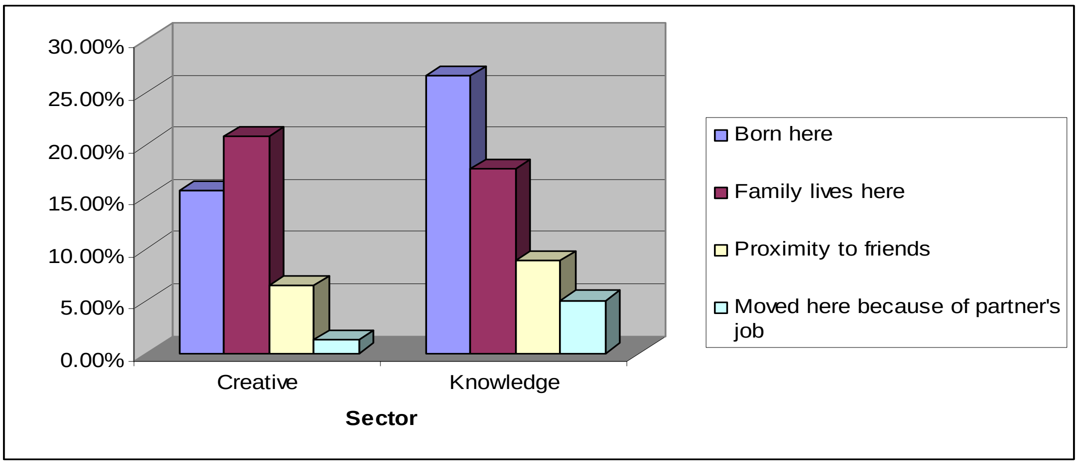
3.3.1 Personal trajectories

In terms of attracting workers to the Dublin region in the first instance, the most frequently cited location factor amongst both creative and knowledge workers alike related to the issue of ‘personal trajectories’ (see Table 3.1). The factor classified here as ‘personal trajectories’ encompasses a range of personal factors which serve to attract and retain people in a place (i.e. born here, family lives here, proximity to friends, partner moved here etc). Such considerations are representative of classic ‘hard’ location factors which have governed the location decision making process of individuals for a long time. Although, significant emphasis was placed on the issue of personal trajectories by both creative and knowledge workers alike, the relative weight attributed to this factor was slightly greater in the case of knowledge intensive employees, than seen in the case of creative workers.

For those employees within the creative sector, the issue of personal trajectories was the most frequently citied location factor influencing their decision to reside in the Dublin region, with 42.9 per cent of respondents referring to such considerations. More specifically, 15.6 per cent of creative respondents stated that a key motivation to reside in Dublin was because they were born in Dublin, whilst 20.8 per cent and 6.5 per cent referred to the presence of their family and friends in Dublin respectively.

Despite the pertinence of this factor for creative workers, it emerged even more prominently amongst knowledge intensive employees with 53.2 per cent of respondents citing personal trajectories as a fundamental factor in their initial decision to reside in Dublin. The specific reasons relating to the issue of personal trajectories are similar to those observed in the case of creative workers above, with 17 per cent and 8.9 percent referring to the presence of their family and friends in Dublin respectively. However, considerably more knowledge workers (26.6 per cent) than creative workers (15.6 per cent) stated that a key motivation to reside in Dublin was because they were born in Dublin.

Figure 3.1 - The role of personal trajectories in attracting employees to Dublin



Data Source: Murphy and Redmond, 2008:54

Having regard to the role of personal trajectories as a retaining factor for creative and knowledge employees alike, the relative weight attributed to this factor by the respective groups in terms of its ability to retain workers was far less apparent than its importance as an attracting factor. This ambiguity is in part a result of the inherent constraints associated with a quantitative questionnaire in comparison to the in-depth qualitative interviews carried out in later work packages (WP 6.13, WP7.13). However, it is suggested that the role of personal trajectories as a retaining factor can be related to the past mobility of employees. For instance, it is logical to suggest that employees who have never moved from Dublin have deep personal and family ties which are likely to retain them here in the future. By way of contrast, for more mobile employees who have resided in another city in the country, outside the country and those who have lived outside Europe for more than a year, the issue of personal trajectories is likely to be less important as a retaining factor (Murphy and Redmond, 2008). Rather unsurprisingly, the research reveals that younger workers are more likely to relocate in the near future than older more established employees within the region, although this is likely to be related to their relatively young age, their reduced responsibilities and their ability to avail of new opportunities elsewhere, rather than the issue of personal trajectories per se.

3.3.2 Employment

The quantitative research based on the spatial orientations and behaviour of creative knowledge employees reveals that the availability of employment is a primary motivating factor to live in the Dublin region, with 36 per cent of creative and knowledge employees citing its importance (see Table 3.1). Such findings are indicative of the continued dominance of ‘hard’ (production related) factors in the decision-making process of creative knowledge workers in Dublin.

Having regard first to creative workers, 39 per cent of the total sample referred to the employment related factors as being of core importance in their initial decision to live in Dublin. In particular, the issue of employment availability (23.4 per cent) and job opportunities (15.6 per cent) were identified as being key motivating factors attracting them to Dublin in the first instance. It is worth noting that relatively little emphasis was attributed to the issue of higher wages, with only 2.6 per cent of respondents referring to same. Nonetheless, this figure is noteworthy given than no respondent in the knowledge sector referred to higher wages as a ‘pull’ factor in their decision to live in Dublin, indicating tentatively that salaries in the creative field may be more enticing than those in the knowledge sector.

Similar overall trends emerged in the case of knowledge intensive employees (albeit to a lesser degree) with 31.7 per cent of knowledge workers citing that their decision to live in Dublin was governed by employment related factors. The lower weight attributed to employment by knowledge workers can be directly accounted for by the considerably lower emphasis being placed on employment opportunities in particular, with only 7.6 per cent citing it as an attracting factor, as opposed to 15.6 per cent within the creative sector. The foregoing suggests guardedly that employment opportunities within the knowledge intensive sector may not be as appealing as those within the creative sector.

Although the availability of employment was a pertinent factor in the decision-making process of both creative and knowledge workers (albeit to varying degrees), there appears to be a divergence in the relative weight attributed to the importance of employment as an attracting factor when respondents past mobility is considered. Essentially, the relative weight attributed to the availability of employment varied between those employees who have never lived outside of Dublin, in comparison to individuals who have lived in another city in the country, outside the country and those who have lived outside Europe for more than a year[1] (see Table 3.2). For instance, for those respondents who have lived in another city in Ireland, the results reveal that the reason they now live in Dublin is due to their employment, followed closely by the fact that they studied in the city. Similarly, for those living outside Ireland but within Europe, the main reason they are now in Dublin is because of good employment opportunities. As suggested previously, the issue of personal trajectories such as family ties featured far more prominently amongst respondents who have always resided in the Dublin region, thus placing less emphasis on the issue of employment availability as an attracting factor for employees who have been relatively immobile in the past.

[1] Of the total respondents 57.8 per cent have lived outside of Dublin with 25.2 per cent living in another country.

Table 3.2 - Relationship between past mobility and reasons for living in Dublin

	Never moved	In city but other neighbour hood	Another city in region/ province/ country	Another city in country	Outside country	Outside Europe
Born here	61.5%	31.2%	9.7%	2.9%	5.9%	
Family lives here	38.5%	26.0%	6.5%	8.6%	11.8%	30.8%
Studied in Dublin	0.0%	6.5%	22.6%	28.6%	8.8%	7.7%
Proximity to friends	0.0%	10.4%	0.0%	11.4%	11.8%	0.0%
Moved here because of job	0.0%	15.6%	45.2%	34.3%	17.6%	30.8%
Moved here because of partner's job	0.0%	0.0%	0.0%	2.9%	11.8%	0.0%
Good employment opportunities	0.0%	9.1%	9.7%	11.4%	23.5%	7.7%
Higher wages	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%
Size of city	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%
Housing availability	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%
Diversity of leisure and entertainment facilities	0.0%	0.0%	3.2%	0.0%	0.0%	7.7%
Presence of good universities	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%

Source: Murphy and Redmond, 2008, 69

Having regard to the issue of employment availability as a retaining factor, it appears that the more specific issue of income level, rather than the direct availability of employment is a pertinent consideration by many employees within the creative and knowledge intensive sectors alike. The bi-variate analysis conducted by Murphy and Redmond (2008) suggests that there is a link between the income range of creative knowledge workers and the likelihood of them leaving the city within the next three years. The results demonstrate that the respondents who are almost definitely (60.6 per cent) or very likely (55.3 per cent) to leave Dublin in the next three years are predominantly in the €2000-2999 monthly income range while those who are somewhat likely (54.8 per cent) are also in that range (Murphy and Redmond, 2008). By way of contrast, the 14.9 per cent of respondents in the €4000-4999 income range and 17.0 per cent in the €5000-5999 income range consider it not at all likely that they will move in the next three years despite these income groups making up only 7.2 per cent and 6.3 per cent of overall respondents. The foregoing indicates tentatively that an income threshold exists which entices individuals to stay in their job and the region.

The foregoing demonstrates that whilst issues relating to employment availability and job opportunities are important factors in attracting creative and knowledge employees to the Dublin region in the first instance, it is the directly related issue of income levels that must be regarded as an important retaining factor into the future. Although the availability of jobs is a vital ‘hard’ factor necessary to attract creative and knowledge intensive employees to the Dublin region, favourable income levels must be also be achieved to retain such mobile employees in the medium to long term.

3.3.3 *Cost of living in Dublin*

The cost of living in Dublin emerged as an important issue that is negatively influencing the attractiveness of the Dublin Region from the perspective of both creative and knowledge workers in Dublin. Table 3.3 displays respondent's perceptions of how expensive they feel basic facilities and services are in Dublin by sample group. It is evident from the table that little deviation exists between creative and knowledge workers in relation to this factor and as such, separate analysis by target group in considered unwarranted in this instance. Rather, it appears that there is a general consensus reached amongst creative and knowledge intensive workers that Dublin is either an 'expensive' or a 'very expensive city'. Perhaps the most notable statistic to emerge from the results is that 83.7 per cent of respondents feel that the cost of housing in the city is very expensive. In fact, not a single respondent felt that housing costs were average or less in terms of expense. Creative knowledge employees also feel that the cost of basic utilities are highly expensive indicating that housing affordability, in terms of capital as well as running costs, are a cause of concern for workers in the creative knowledge sector. The findings of the research undertaken by Murphy and Redmond (2008) also reveals that respondents consider the cost of 'softer' consumption related services (i.e. leisure facilities, bars, restaurants etc.) as being highly expensive, while the vast majority consider

Table 3.3 - Perceptions of the expense of basic facilities in Dublin by sample group

	Very expensive	Expensive	Average	Cheap	Very Cheap
Housing Cost					
Creative	84.0%	14.9%	0.0%	0.0%	0.0%
Knowledge	85.9%	14.1%	0.0%	0.0%	0.0%
Total Sample	83.7%	15.9%	0.0%	0.0%	0.0%
Basic Services related to housing					
Creative	43.2%	38.9%	16.8%	0.0%	0.0%
Knowledge	38.8%	43.5%	17.6%	0.0%	0.0%
Total Sample	40.2%	40.2%	18.4%	0.0%	0.0%
Cost of leisure activities					
Creative	36.8%	47.4%	14.7%	1.1%	0.0%
Knowledge	32.9%	45.9%	21.2%	0.0%	0.0%
Total Sample	36.3%	44.4%	18.8%	0.4%	0.0%
Cost of transportation					
Creative	22.3%	39.4%	36.2%	2.1%	0.0%
Knowledge	20.2%	36.9%	40.5%	2.4%	0.0%
Total Sample	20.7%	37.1%	39.7%	2.6%	20.7%
Cost of food and beverage					
Creative	47.4%	36.8%	15.8%	0.0%	0.0%
Knowledge	40.0%	42.4%	16.5%	1.2%	0.0%
Total Sample	41.9%	41.0%	16.7%	0.4%	0.0%
General cost of living					
Creative	61.1%	33.7%	4.2%	0.0%	0.0%
Knowledge	54.1%	40.0%	5.9%	0.0%	0.0%
Total Sample	56.0%	38.5%	5.1%	0.0%	0.0%

Source: Murphy et. al., 2008a, 62

the general cost of living to be either ‘expensive’ or ‘very expensive’ (94.5 per cent). This implies that one of the difficulties that Dublin has in attracting and retaining creative knowledge workers in the future is the level of expense in the city, particularly in relation to the cost and quality of housing. Furthermore, the levels of expense in the city, particularly with regard to the city’s leisure and cultural facilities suggests that Dublin’s social and cultural environment is becoming increasingly orientated towards what those on higher incomes are perceived to want, rather than the needs of the city’s residents at large (Malanga, 2004). This raises serious concerns regarding overall levels of social inclusion, accessibility and equity in the region.

3.3.4 Transport infrastructure

In analysing the factors influencing the spatial behaviour of creative and knowledge workers, attention must be attributed to the provision of transport infrastructure within the city region as an impeding factor. Throughout the quantitative research carried out amongst creative and knowledge workers, high levels of dissatisfaction were repeatedly expressed in relation to the region’s transport network. This is perhaps unsurprising given the general acknowledgement that Dublin has a serious under provision of public transport facilities when compared with other similar-sized EU cities (Redmond et. al., 2007). Such problems are largely attributable to the chronic under funding of public transport in the past, coupled with the region’s sprawling pattern of urban development (see section 4.3.1). However, the dissatisfaction expressed in relation to the region’s transport during the course of the research was not confined to the public transport system per se, but to the entire transport network more generally.

Before the core problems associated with the region’s transport network are explored, it is worth noting that the majority of creative knowledge workers (54.4 per cent) travel between 15 and 44 minutes to work with 67 per cent commuting 44 minutes or less. To place these results in context, the results from the latest Census of Population (2006) show that the 75.2 per cent of County Dublin’s residents travel less than 45 minutes to work. Within the creative knowledge sector itself, considerably more creative workers (75.9 per cent) commute 44 minutes or less compared to knowledge workers (54.1 per cent). Thus, creative knowledge workers tend to live closer to their place of employment than the average city employee which suggests that, in terms of distance to work, they have more efficient commuting patterns. In general, creative employees also use more sustainable modes of transport than knowledge workers as they demonstrate below average motorised work trips. It is suggested that such trends are largely attributable to the higher levels of owner-occupation amongst knowledge workers, many of whom are likely to have purchased cheaper accommodation at the outskirts of the city (Murphy and Redmond, 2008).

Despite the varying commuting distances of creative and knowledge workers (albeit they both below average), high levels of concern were expressed equally amongst creative and knowledge intensive workers with regard to traffic congestion and the availability of public transportation, with 88.3 per cent and 53.8 per cent of the total sample being ‘somewhat worried’ or ‘very worried’ respectively. Similarly, high levels of dissatisfaction with regard to the region's overall transport system, as well as the levels of accessibility throughout Dublin were also expressed by creative and knowledge workers alike.

Table 3.4 - Satisfaction with transport infrastructure in Dublin by sample group

	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
Quality of Dublin's public transport system					
Creative	4.3%	17.0%	6.4%	33.0%	38.3%
Knowledge	0.0%	16.9%	10.8%	45.8%	26.5%
Total Sample	2.2%	17.3%	8.2%	39.0%	32.9%
Transport within the city					
Creative	2.2%	21.5%	14.0%	29.0%	33.3%
Knowledge	0.0%	15.5%	8.3%	50.0%	26.2%
Total Sample	1.7%	17.3%	13.0%	37.2%	30.7%
Connectivity between the city and the periphery					
Creative	1.1%	12.9%	16.1%	32.3%	34.4%
Knowledge	0.0%	14.3%	8.3%	42.9%	29.8%
Total Sample	0.4%	13.0%	12.1%	37.7%	32.5%
Safety on the streets					
Creative	1.1%	20.2%	34.0%	27.7%	17.0%
Knowledge	1.2%	23.8%	25.0%	36.9%	13.1%
Total Sample	1.7%	23.3%	28.0%	34.5%	12.5%
Number of bicycle lanes					
Creative	3.2%	15.1%	19.4%	25.8%	22.6%
Knowledge	0.0%	8.4%	41.0%	24.1%	16.9%
Total Sample	1.3%	12.2%	28.7%	27.8%	19.1%

Source: Reworked from Murphy and Redmond., 2008, 57

The problems associated with the region's transport network become even more evident in light of the bi-variate analysis conducted by Murphy and Redmond (2008). The aim of the statistical analysis was to explore the relationship between commuting levels and satisfaction with the city, job, and neighbourhood. Essentially, a strong positive correlation emerged between commuting levels and expressed levels of satisfaction with one's job, neighbourhood, as well as the city more generally (see Table 3.5). The statistical analysis reveals that the greatest proportion of respondents who are dissatisfied with the city, their neighbourhood or job are those with the longest commuting times or distances. The opposite is also true. As such, policies aimed at reducing commuting times are likely to increase creative knowledge workers levels of satisfaction with their respective jobs, neighbourhoods and the city, thus assisting in the retention of a skilled and diverse labour pool in the Dublin region moving forward.

The foregoing analysis indicates that the commuting patterns of creative and knowledge workers are considerably more sustainable than those of Dublin's labour pool in general. It seems that creative knowledge employees tend to negotiate around Dublin's inherent public and private transport problems by living in areas that are closer to the city centre. As such, policies aimed at attracting more creative and knowledge workers would not only beneficial in economic terms but may also contribute to enhancing regional sustainability via their more sustainable commuting patterns (Murphy and Redmond, 2008). The above analysis also demonstrates that policies aimed at reducing the burden of commuting via the provision of a more efficient public transport system would significantly enhance the attractiveness of the city for creative knowledge workers. However, such action would not only assist in the retention of a skilled and diverse creative knowledge labour pool, but also improve the quality of life for the city's residents at large.

'Soft' factors

3.3.5 Social environment: Leisure and cultural facilities

Although 'hard' location factors were of primary importance to employees within the creative knowledge sector in terms of their initial decision to live in Dublin, an evaluation of the region's 'soft' (consumption related) factors is considered warranted having regard to the retention of creative knowledge workers in the region. As mentioned previously, defining and categorising 'soft' factors is a troublesome task given the largely intangible nature of such factors (Murphy and Redmond, 2009). However, it is suggested here that the most appropriate categorisation by which to analyse the core 'soft' factors emerging from the research carried out by Murphy and Redmond (2008) is the city's 'social and cultural environment'. This factor pays particular attention to the provision of cultural and leisure facilities throughout the Dublin region given the emphasis placed on such conditions by the employees researched. It is important to point out from the outset that this factor is addressed here in terms of its potential as a retaining factor, rather than an initial attracting factor. This distinction is necessary given that less than five per cent of the total sample cited 'soft' factors as being of core importance in their initial decision to live in Dublin. As mentioned previously, such findings undermine the growing assumption that the presence of diverse cultural and leisure facilities is an important initial attracting factor for the 'creative class' (Florida, 2002).

By way of contrast to the high levels of dissatisfaction with some of the cities 'hard' conditions as seen in sections 3.3.3 and 3.3.4 above, relatively high levels of satisfaction emerged in relation to the city's 'softer' attributes. High degrees of satisfaction with regard to the region's leisure and cultural facilities were observed, particularly pubs (81.5 per cent), restaurants (83.7 per cent), shopping (81.5 per cent) and cinema facilities (82.9 per cent). However, it is important to highlight that very few respondents initially located in Dublin due to such factors and as such, respondents' satisfaction with the range of cultural and leisure facilities is merely highlighted here in terms of its importance as a retaining factor.

Table 3.7 - Satisfaction with a range of leisure and cultural facilities by sample group

	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Dissatisfied
Quality of public open spaces					
Creative	8.4%	52.6%	14.7%	18.9%	4.2%
Knowledge	8.2%	58.8%	11.8%	21.2%	0.0%
Total Sample	8.5%	55.6%	14.1%	18.8%	2.6%
Quality of sports facilities					
Creative	4.3%	25.5%	26.6%	26.6%	5.3%
Knowledge	6.0%	42.2%	16.9%	26.5%	2.4%
Total Sample	4.8%	36.4%	20.8%	24.2%	6.1%
Quality and range of festival and cultural facilities					
Creative	12.8%	58.5%	16.0%	7.4%	0.0%
Knowledge	8.3%	54.8%	20.2%	16.7%	0.0%
Total Sample	10.0%	58.0%	17.7%	11.7%	0.4%
Quality and range of art galleries and museums					
Creative	8.4%	61.1%	16.8%	7.4%	0.0%
Knowledge	6.0%	63.1%	22.6%	3.6%	0.0%
Total Sample	8.6%	60.5%	20.2%	6.0%	0.0%
Quality and range of restaurants					
Creative	16.8%	66.3%	13.7%	1.1%	1.1%
Knowledge	23.8%	57.1%	8.3%	7.1%	2.4%
Total Sample	21.0%	62.7%	9.0%	4.3%	2.1%
Quality of pubs					
Creative	20.0%	57.9%	16.8%	2.1%	2.1%
Knowledge	27.4%	54.8%	11.9%	1.2%	0.0%
Total Sample	24.5%	57.5%	11.6%	2.6%	1.7%
Quality of cinemas					
Creative	20.0%	61.1%	12.6%	4.2%	1.1%
Knowledge	27.1%	52.9%	14.1%	4.7%	0.0%
Total Sample	25.6%	57.3%	11.1%	4.3%	0.4%
Quality of shopping areas					
Creative	18.1%	58.5%	14.9%	6.4%	1.1%
Knowledge	35.7%	45.2%	9.5%	7.1%	2.4%
Total Sample	26.3%	55.2%	10.8%	6.0%	1.3%
Architecture of city/relevant monuments					
Creative	8.5%	27.7%	35.1%	19.1%	8.5%
Knowledge	12.0%	42.2%	21.7%	14.5%	6.0%
Total Sample	10.0%	36.4%	27.3%	18.6%	6.1%
Number of associations/organisations for social activities					
Creative	5.3%	28.7%	36.2%	16.0%	1.1%
Knowledge	6.0%	36.1%	32.5%	15.7%	3.6%
Total Sample	5.2%	32.5%	34.2%	16.5%	2.6%

Source: Murphy and Redmond, 2008, 56

Despite the high levels of satisfaction expressed with regard to the city's leisure facilities, it is important to highlight that creative knowledge respondents consider the costs associated with such facilities as being 'expensive' (44.4%) or 'very expensive' (36.3%). This may be linked with the statistical bi-variate analysis previously discussed under section 3.3.2, where a link was made between the income levels of creative knowledge employees and their overall levels of satisfaction with the city. In light of such findings, it is suggested that policy makers should be aware of this relationship in order to avoid the amplification of inequalities and further social disparities throughout the city region in the pursuit of a creative knowledge regional economy.

3.4 Transnational migrants

In terms of the main factors influencing the decision-making process of transnational migrants within the creative knowledge sector, many similarities can be drawn from the case of employees presented above. Essentially, 'hard' production based factors again emerged as the most dominant consideration for transnational migrants. Having regard first to the factors attracting transnational migrants to move to Dublin in the first instance, two 'hard' factors featured particularly dominantly; employment and family connections. These two factors were also cited as being of core importance to employees in the creative knowledge sector, demonstrating that classic 'pull' factors are the most important considerations motivating creative knowledge workers regardless of their nationality or place of origin. In many respects, robust similarities between creative knowledge transnational migrants and employees generally can be identified. This is perhaps rather unsurprising given the fact that migrants constitute part of the larger creative knowledge labour pool.

As seen in the case of employees, other factors that are influencing the location preferences of transnational migrants in a more negative manner include the cost of living and the provision of transport infrastructure in Dublin. Secondary factors such as the English language ('hard') and the perception of the city ('soft') also influenced the decision-making process of some migrants. However such factors played much more of a limited role and as such; do not warrant inclusion in the following analysis as core factors are of primary concern. The following section attempts to analyse the primary factors influencing the spatial behaviour of transnational migrants and in doing so, the relative weight attributed to such factors by creative and knowledge based migrants respectively shall be demonstrated, highlighting divergences and similarities where appropriate.

'Hard' factors

3.4.1 Employment

As seen in the case of creative knowledge workers above, the importance of employment availability emerged as being of crucial importance to transnational migrants in terms of their initial decision to move to Dublin. This is perhaps rather unsurprising given the rate of job creation and economic expansion in Ireland that occurred from the mid 1990s to 2006. From Lawton's et. al. (2009) research, it is implicit that it is not only the availability of jobs, but rather the availability of well paid jobs, that is fundamental in attracting transnational migrants to Dublin in the first instance. Similar observations emerged in the case of employees above, whereby a tentative link was made between the future mobility of employees and their respective income levels. In light of such findings, it is suggested here that the 'hard' factor of income must be considered in tandem with the availability of employment more generally in any attempts being made to attract and retain creative knowledge workers in the Dublin region in the future.

Having regard first to those migrants working within the creative sector, the qualitative research carried out *(Ibid)* revealed that the critical mass of creative jobs in Dublin was an important 'hard' location factor in their initial decision to move to the region. The clustering of 'creative' job opportunities in Dublin is particularly evident in the television and film sector given that the industry is predominantly located in the area surrounding the national broadcaster to the south of the city. In fact, all of the respondents interviewed as part of this research were predominantly working within this geographical area, with only one working further out in a suburban industrial estate. Despite the gaming and electronic publishing sector being relatively less clustered (with the exception of the Digital Hub), the critical mass of jobs within Dublin remains a key 'pull' factor to the region as one interviewee succinctly outlined:

> *'Well if you're talking about working in Ireland, Dublin is Ireland so there was no doubt.'*
>
> (Lawton et. al., 2009, 71)

It appears that transnational migrants generally consider Dublin to be the only realistic location given the specific nature of the creative industry, thus demonstrating the importance of employment (with the appropriate level of expertise) as an attracting and retaining factor of transnational migrants within the region:

> *'There's a million places in Ireland I would love to live. I would love to get out of Dublin but I can't because the work is in Dublin and its not possible with what I do not live in Dublin at the moment so I don't really have a choice for the level of work that I'm interested in doing what I want to do.'*
>
> (Lawton et. al., 2009, 68)

Turning our attention to the case of knowledge intensive migrants, the critical mass of knowledge intensive jobs within Dublin was also considered to be an important 'hard' location factor in their initial decision to move to Dublin. This is rather unsurprising given that approximately 2/3 of all banking and financial services activity in the country is located within the Dublin region (Redmond et. al., 2007). As a result, Dublin is considered by many to be the only realistic location to settle within Ireland:

> *'It was always going to be Dublin…Dublin seemed to be the place to be for the simple reason that there were a large number of jobs here on the services side.'*
>
> (Lawton et. al., 2009, 45)

In terms of employment availability as a retaining factor for creative knowledge employees, it appears that such considerations are more important for those involved in the creative sector when compared to those working in knowledge based industries. The research (*Ibid*) indicates that the future of many creative firms, particularly those in the TV and Film sector is relatively uncertain at present given the ambivalent current economic climate, with several respondents referring to the importance of job security in terms of their ability to remain in Dublin. Conversely, little to no emphasis was placed on such issues by migrants within the knowledge intensive sector. Rather, there appeared to be an implicit certainty and sense of stability surrounding the future availability of employment opportunities in the knowledge sector. This suggests that the creative sector may be more vulnerable than knowledge intensive industries during times of economic contraction. Overall, the foregoing demonstrates that the retention and creation of jobs in the creative knowledge sector will be an important factor to Dublin's future ability to attract and retain creative workers.

3.4.2 Personal trajectories

As observed in the case of creative and knowledge intensive employees above, the issue of personal trajectories emerged as a core factor in the initial decision-making process of transnational migrants to live in Dublin. As previously stated, this is a classic 'hard' location factor which has influenced the spatial behaviour of individuals for centuries. However, it is rather surprising that personal trajectories are of core importance in the initial decision of transnational migrants to move to the region given that they are not of Irish origin in the first instance.

For migrants working within the creative sector, the role of family in particular and personal trajectories more generally played a significant role in terms of their initial decision to locate in Dublin. The most dominant reason referred to was that family members were living in Ireland or because family of a spouse or partner was from Ireland. However, in terms of this factor's role in the retention of creative migrants, there appears to be a deviation between those involved in gaming and electronic publishing on the one hand, and those in the TV and film sector on the other. Having regard to the latter, many expressed that they intend to remain in Dublin for the foreseeable future. Conversely however, many migrants working in the gaming and electronic publishing sector intend moving elsewhere in the future. However, it is important to note that this deviation is likely to be attributed to the varying age profile of respondents, with those in the TV and film sector tending to be in a later stage in the 'life path', with all but one being over 30 years old (Lawton et. al., 2009).

In a similar manner to the case of migrants working within the creative sector, the issue of personal trajectories also emerged as a dominant factor in the location decision-making process of knowledge intensive migrants. Particularly evident is the role played by family in many migrants' decision to move to Dublin, with many settling in the region because of a partner or spouse, or to live with a relative. The importance of family ties was clearly demonstrated by a man who had moved to Ireland from Scotland with his Irish wife:

> *'… The strength of my wife's family was a major factor in electing to come to Dublin and it was an either or. It wasn't a case of 'oh lets go move somewhere else', it was if we want to have a family do we want to have it in Scotland or do we want to have it in Ireland where there's a family, a strong family network that you know would be of help. My family is too small, too scattered to serve that function in Scotland.'*
>
> (Lawton et. al., 2009, 45)

Having regard to the role of personal trajectories as a retaining factor, transnational migrants in the knowledge sector placed considerable emphasis on the importance of family ties. As seen in the case of creative migrants, the majority of respondents in the knowledge sector consider personal trajectories as a strong retaining factor, particularly those who are at the stage in the life path where they have a family or intend having a family in the near future.

Despite the general importance of personal trajectories to creative knowledge migrants, it appears that for young single transnational migrants, the issue of personal trajectories is not a particularly important retaining factor, indicating that unsurprisingly; younger workers are more likely to relocate in the near future than older more established employees within the region. Nonetheless, the foregoing indicates that the issue of personal trajectories is equally important as both an attracting and retaining factor in the decision-making process of transnational migrants working in the creative knowledge sector throughout the Dublin region.

3.4.3 Cost of living

Having regard to the retention of transnational migrants in the creative knowledge sector, considerable regard must be attributed to the overall cost of living throughout the Dublin region. As seen in the case of creative and knowledge employees above, the overall cost of living in Dublin is considered to be a key drawback in terms of retaining transnational creative knowledge migrant workers. In particular, both rental and housing costs are considered to be highly restrictive in terms of remaining in Dublin for the majority of younger and more mobile respondents, with some indications that accommodation costs could potentially force individual migrants to relocate.

The issue surrounding the high cost of living is of considerable concern to transnational migrant workers in the creative sector, particularly those working in the area of gaming and electronic publishing. It is perhaps unsurprising that the cost of housing is particularly dominant for those who are at a point in their life where they are considering settling down given the high price of housing in Dublin in recent years. The following quote is abstracted from the research previously carried out to illustrate the foregoing observations:

> *"…if I was to settle down, it wouldn't be here because everything is just so so so expensive. I mean talking about a house, talking about food and everything. I mean, I'm okay on my own, but if I was to have a child or something, that would be totally different.'*
>
> (Lawton et. al., 2009, 82)

For migrants working within the knowledge sector, the region's accommodation costs were again viewed in a negative light. Transnational migrants working within the knowledge sector placed additional emphasis on the cost of cultural and leisure facilities in the region:

> *'At night time – I live in city centre – so I try to avoid temple bar area because it's just a bit too crowded over there. But otherwise I do think... the pubs, the restaurants and everything else are good... I do think that spending money going out is quite expensive because at night time restaurants and pubs they [are], you know, too expensive.'*
>
> (Lawton et. al., 2009, 51)

As seen in the case of creative knowledge employees, the relatively high cost of living in Dublin is considered a significant impeding factor by both creative and knowledge migrants alike. As such, maintaining a competitively priced housing market, as well as a reasonable cost of living more generally, would not only have the benefit of retaining more creative knowledge migrants in the region, but would also serve to enhance the social environment for the city's residents at large.

3.4.4 Transport infrastructure

The quality of Dublin's transport infrastructure emerged as an important impeding factor in the Dublin region from the research undertaken with transnational migrants across the creative knowledge sector (Lawton et. al., 2009). Although levels of regional accessibility were attributed little to no emphasis by transnational migrants in their initial decision to move to Dublin, it appears to be a key issue of concern now that they are established in the region. As such, attention to this issue is considered warranted should a comprehensive understanding of the issues influencing the spatial orientations of Dublin's creative knowledge transnational migrants be obtained.

Levels of accessibility to centres of employment and residential areas were given virtually no consideration by transnational migrants working in the creative sector in terms of their initial decision to move to Dublin. Rather, Lawton (et. al., 2009) found that the relative location of employment is generally assumed to be centrally located and highly accessible given that creative industries tend to cluster in the city centre. Although the central and accessible location of employment is largely assumed by creative migrants and thus cannot be considered to be an initial attracting location factor, it would appear that respondents do acknowledge the importance of accessibility to the city centre as a retaining factor:

> *'It did actually help a lot, it being a central place, because you know I didn't have to look for ways to travel to work.'*
>
> (Lawton et. al., 2009, 71)

Similar findings emerged in the case of transnational migrants working within the knowledge intensive sector whereby levels of accessibility to locations of employment were not explicitly recognised as being important in the initial decision-making process. However, this is not to say that such a factor is unimportant. Rather, there appears to be an implicit acknowledgement of the importance of centrally located and highly accessible jobs, but as seen in the case of creative migrants above, there is a general assumption that jobs in this sector are centrally located and thus accessibility need not even be consciously considered:

> *'…they could have been anywhere. I suppose it helped that they were city centre; our initial accommodation was city centre… Obviously I think maybe if they had been in an industrial estate on the outskirts of nowhere than you would have thought twice but then luckily the creative industry tends to gravitate to the centre of town thankfully…'*
>
> (Lawton et. al., 2009, 47)

Transnational migrants working within the knowledge sector tend to view rail based transport such as DART and LUAS in a largely positive light. However, there is a general consensus that the public transport network in the city region is too radial and city-centre focused thus problematising cross-city trip making:

> *'I like the Dart, I like that there is a Dart. I like that there is a Luas and I like that there are buses obviously. But within that, I suppose its more which bit of the city they serve. Unless you're on one of them I find you [are] a bit screwed for, I suppose, crossing town. It's all about getting into the middle as far as I know.'*
>
> (Lawton et. al., 2009, 50)

As seen in the case of creative knowledge employees (section 3.3.3), the issue of accessibility emerges as an important consideration in the residential decision-making process of transnational migrants in the creative and knowledge sector alike, with many opting for city centre locations or suburbs with above average transport links depending on their respective stage in the 'life path' in an attempt to avoid the problems associated with the city's transport infrastructure:

> *'I live in Rathmines. It's about twenty minutes walk if I want or I take a bus in five minutes. That did affect my choice.'*
>
> (Lawton et. al., 2009, 47)

The foregoing demonstrates that the issue of accessibility is not consciously considered by many transnational migrants in their initial decision to locate in the Dublin region (i.e. the macro-level). However, it would appear (although not explicitly expressed), that the central and accessible location of employment is an important retaining factor once they are established in Dublin, with several respondents expressing their desire for their respective jobs to remain centrally located. By way of contrast, it seems that levels of accessibility are more consciously considered at the more micro-level (i.e. the residential decision-making stage) given the tendency for respondents to negotiate around the city's poor transport network by carefully selecting relatively accessible locations. Overall however, it seems that the city's poor transport infrastructure limits the attractiveness of the city for migrants within the creative knowledge sector and is a common cause of concern throughout this target group.

3.5 Creative knowledge firms

A key result to emerge from the research undertaken by Murphy et. al. (2008) under work package 6.13 is that the role of ‘hard’ and ‘soft’ factors vary in the location decisions of creative knowledge companies depending on the sectors under analysis. ‘Hard’ factors appear to be dominant throughout the knowledge sector, with ‘soft’ factors playing a very minor role in company location choice. On the other hand, ‘soft’ factors play a more central element of the location decision-making process of companies within the creative sector. Broadly speaking however, ‘hard’ location factors remain of core importance to creative knowledge firms, with ‘softer’ factors playing a largely secondary role. As such a strong correlation is identifiable between the motivations of creative knowledge firms on the one hand, and the factors influencing the spatial behaviour and orientations of employees and transitional migrants on the other.

While on a general level the previous research (*Ibid*) highlights the variable role of ‘hard’ and ‘soft’ factors for different sectors in the creative knowledge economy, it also demonstrates that that the relative role of ‘hard’ and ‘soft’ factors varies depending on company size (i.e. large or small in terms of numbers of employees) and origin (i.e. indigenous or foreign). Broadly speaking, the research demonstrated that ‘soft’ factors play a more important role in the location decisions of foreign companies. Indeed, most foreign companies consider ‘soft’ conditions as important in the attraction of ‘key’ personnel to the city where they are considering locating. Murphy et. al. (2008) have highlighted that in the case of foreign companies, it seems that the role of ‘soft’ factors become important once the ‘hard’ factors are deemed to be adequate in more than one competing city. In such a case, the evidence suggests that foreign companies look towards ‘soft’ conditions within cities when making a final decision on where to locate. By way of contrast, ‘hard’ factors are considerably more dominant in the location decisions of indigenous companies *(Ibid).*

Geography also appears to be an important factor when deciding on the relative role of ‘hard’ and ‘soft’ factors for company location choice. Companies located in the central area appear to take greater consideration of ‘soft’ factors than companies located at the outskirts and this trend holds for companies both within the specific sectors and also between the sectors analysed. The reason for this is unclear but relates, to some extent at least, to the wider availability of social and cultural facilities which are provided by the enhanced accessibility of the central area (Murphy et. al., 2008).

The results for company location are largely similar to those for workers and transnational migrants presented above. The following analysis seeks to demonstrate the core factors affecting the attractiveness of the city for creative and knowledge based companies respectively.

3.5.1 Access to skilled labour

The most attractive feature of Dublin from the perspective of creative knowledge companies is undoubtedly the availability of a highly skilled and diverse labour pool. Although the importance attributed this factor by the creative knowledge firms researched appears to add some weight to Florida's (2002) notion that creative companies are following the location patterns of talented labour, one must remember that the availability of suitable skilled labour pool has been a prominent factor in company location theory for some time and as such, this observation is nothing new (Murphy and Redmond, 2009). In any case, Florida's perception of 'talent' deviates somewhat from what is referred to here as a 'skilled and diverse labour pool' in the sense that the former relates specifically to creative individuals that are drawn to areas on the basis of 'soft' (consumption based) conditions. For the purposes of the following analysis, the skilled and diverse labour pool referred to relates more specifically to the education and skill levels of the workforce in the Dublin region. Overall, the importance placed on the availability of a skilled and diverse labour pool demonstrates that classic 'hard' location factors continue to play a core role in the decision-making process of creative knowledge firms.

Having regard first to firms in the creative sector, the availability of a skilled and diverse labour pool emerged as a core motivating factor for companies locating in the Dublin region regardless of their respective origin or size. Indeed, indigenous and foreign companies appear to consider locations outside the Dublin region as being severely restrictive in terms of their potential to access sufficient levels of skilled labour (Murphy et. al., 2008). This is rather unsurprising given that a critical mass of skilled employment and labour exists within the Dublin region. However, despite the majority of the country's skilled labour being located in the capital city, there is a general view that there still remains a shortage in terms of the volumes of skilled labour necessary to sustain the future growth of creative companies:

> *'If they [companies] are locating on the basis of talent then we are in deep shit…because we don't have sufficient volumes. We have very talented people here but we don't have sufficient volumes…there are a lot of IT or tech companies here. It [Ireland] has infrastructure; there is a programming environment; it has a good taxation regime, all those things. So the only things you need to do is get talent in. And for myself, it's all about talent. It is the biggest contributing factor to our success. If we don't get good people then we don't succeed. It is very simple.*
>
> (Murphy et. al., 2008, 53)

Having regard to the influence of labour on the specific location of firms within Dublin, many creative companies consider city centre locations as a necessary prerequisite for attracting and retaining employees, many of whom are of a young demographic and living within the vicinity of the city centre:

> *'Well the reason we are in the city centre and not at the East Point or Sandyford or one of the other places outside Dublin is because of the young population, a young workforce and a lot of them cycle. We only have a couple of car parking spots and they are not really used that much. We have a pretty young demographic...I think we were even looking as far as Blanchardstown at one stage. There was a bit of a revolt. At the end of the day that was what we were up against.'*
>
> (Murphy et. al., 2008, 57)

The research (*Ibid*) reveals that many other measures are adopted by creative firms in order to attract and retain creative workers. One company in particular demonstrated the extraordinary lengths that firms can go to for the purposes of staff retention, with one office accommodating a games room, a balcony for barbeques and even the payment of employees travel costs to and from work. Such examples demonstrate the attention placed on ‘soft factors’ by creative firms in the retention of staff, which is largely indicative of the importance attributed to attracting and retaining suitable skilled labour within the creative sector. The importance placed on staff attraction and retention therefore ultimately affects the choice of location of creative firms at both the macro and micro level.

Having regard to firms within the knowledge sector, access to a skilled labour pool is also a core consideration. Such considerations influence the spatial behaviour of such firms at a regional level, with locations offering high levels of accessibility being favoured. As seen in the case of creative firms above, knowledge intensive firms, particularly those of indigenous origin, highlighted the importance of a central location in terms of attracting and retaining employees.

The foregoing demonstrates that the high levels of importance placed on the availability of a skilled and diverse labour pool by creative knowledge firms does not only serve to attract creative knowledge firms to a region, but also influences their spatial orientations at a sub-regional level. The lengths that some creative firms go to in order to retain such employees is not only reflective of the importance placed on attaining a suitable skilled labour but is also indicative of the mobile nature of the creative workforce (Scott, 2006) (See section 3.7). Overall, the above indicates that the continued availability and retention of a skilled and diverse labour pool at sufficient volumes is a necessary prerequisite should Dublin seek to develop as a creative knowledge regional economy.

3.5.2 Access to clients and supporting services

Both creative and knowledge based companies appear to favour Dublin as a location on the basis of its accessibility to clients, supporting services and its expansive market, indicating the importance of clusters and agglomeration effects within the creative knowledge sector. Such considerations appear to be of relatively equal importance to both creative and knowledge based industries alike, although there appears to be slightly more emphasis placed on the benefits that can accrue from agglomeration effects in the case of creative relative to the knowledge sector. The following seeks to demonstrate the relative weight attributed to the issue of accessibility to clients and supporting services in the decision-making process of companies within the creative and knowledge sectors respectively.

The importance of agglomeration affects in terms of accessibility to supporting services and clients is considered an important attracting factor in the decision of creative companies to locate in Dublin. This is epitomised by the clear clustering of television and related activities in the general vicinity of the national broadcaster[2] to the south of the inner city and

[2] A large cluster of television and related activities exists in the south inner city around the Baggot Street-Ballsbridge-Donnybrook in close proximity to the national broadcaster which is located in Donnybrook.

demonstrates that within the sector, there appears to be a strong desire to locate in close proximity to RTE given its dominance. Evidence of a similar trend can be seen in the inner city in the case of gaming and electronic publishing, where a number of small creative firms are located in the ‘Digital Hub’. However, it is worth acknowledging that in the case of the latter, government intervention has been highly influential in the emergence of Dublin’s Digital Hub (see Bayliss, 2007), whereas the television and film cluster in the south of the city was more gradual and organic in its evolution. Despite the apparent clustering of creative firms in close proximity to the national broadcaster, little explicit reference was made to the importance of such agglomeration effects in the interviews conducted.

Having regard to the knowledge intensive industries, the most dominant factor influencing such firms to locate in Dublin is the high levels of accessibility to clients and employees. In terms of the former, proximity to clients was considered by many firms as being the ‘single most important thing’ for the industry in general, with many companies locating in the city centre where a clustering of financial services and service sector jobs can be clearly identified:

> *‘For the industry in general, the single most important thing is to be located close to the clients; so where you have large clusters of companies. If you look at management consultancy in Ireland, it’s a bit simplistic but the big consumers are government or financial services. So if government or financial services are in the centre as they used to be, then it tends to cause the management consultancies to be there as well.’*
>
> (Murphy et. al., 2008, 20)

For those companies located beyond the central area, proximity to clients still remain a core consideration alongside other hard factors such as rent levels, parking availability and personal trajectories:

> *‘It’s central enough for our clients to reach us on the M50 motorway. Forty per cent of our clients are within a five mile radius from us. Essentially, it’s a convenient location. We did look at other locations such as the city centre, Dublin 4 etc. but we live here and it’s convenient.’*
>
> (Murphy et. al., 2008, 21)

The above demonstrates that the benefits that can accrue from the clustering of similar economic activities are considered to be an important attracting factor for creative knowledge firms. Once again this is a classic ‘hard’ location factor that has frequently been used to explain the factors at play in the location decisions of a wide range of firms. As such it is unlikely that the importance placed on such conditions is exclusive to the creative knowledge sector. However, the importance attributed to Dublin’s economic dominance in the location decisions of creative knowledge firms lends supports to Scott’s (2006) characterisation of the ‘new economy’ whereby collaborative networks and agglomerations are considered necessary in the development of specialised outputs. Issues regarding the collaborative nature of the creative knowledge sector are discussed further in section 3.7 below.

3.5.3 Communications infrastructure

As seen in the case of employees and transnational migrants alike, the communications infrastructure is a considerable concern for many of the creative knowledge companies analysed. In particular, there is a high degree of dissatisfaction with the quality of the transport system in the Dublin region. The quality of the broadband system is a further source of concern for many of companies within the creative knowledge sector, although this appears to be more of an issue for small and medium sized companies who do not have high-end broadband specifications with their internet services providers (Murphy et. al., 2009). Many of the companies interviewed consider that the lack of quality communications infrastructure has impacted negatively on productivity and as such, this factor shall be analysed below in terms of its potential to influence the spatial behaviour and orientations of creative knowledge firms in Dublin.

Having regard first to companies within the creative sector, the cities poor transport infrastructure is negatively influencing their attitudes towards doing business in Dublin, with particular reference made to the impact it has on the quality of life of individuals. Particular reference was also made to the high levels of congestion, the lack of parking and the overall dominance of the car in the city. Once again, issues such as cross city connectivity and the increasingly complex commuting patterns in the region were raised by companies in the creative sector. Having regard to such concerns in terms of maintaining the attractiveness and competitiveness of Dublin, many identified that such infrastructural problems are reducing the city's competitiveness in terms of attracting, as well as retaining business and labour:

> *'We still have a relatively well educated workforce; our competitiveness has fallen because our labour costs have gone up because our infrastructure sucks…'*
>
> (Murphy et. al., 2008, 56)

Knowledge intensive firms also raised concern regarding the city's infrastructural provisions, with transport once again being identified as a core drawback. High levels of dissatisfaction were expressed with regard to levels of connectivity between the centre and the periphery and the problems associated with the decentralisation of employment without the simultaneous provision of the necessary transport infrastructure to support it. One interviewee, in arguing that a central location was necessary to their business argued that greater efforts should be made to encourage business to locate centrally in order to improve the transport situation:

> *'I think people like the banks and the civil service and insurance companies and everything should be actively encouraged to stay in the middle where the transport can serve them, because they are moving out to places where there will never be adequate transport. I have seen this happen in London, it's a well organised place but they made a mistake in allowing so many businesses to move from the city out to the ring...'*
>
> (Murphy et. al., 2008, 24)

The foregoing demonstrates that Dublin's communications infrastructure, particularly the region's transport system, are of core importance in terms of maintaining the attractiveness of the city region from the perspective of creative knowledge firms in the future. Investment into the region's public and private transport system is a vital prerequisite in order to attract and retain creative knowledge firms in the region in what has become an increasingly competitive global environment. Once again, this demonstrates that considerable attention must be attributed by policy makers to the 'hard' elements of the city's environment in the pursuit of a robust creative knowledge sector in Dublin.

3.5.4 Cost of living

As seen in the case of employees and transnational migrants alike, the overall cost of living in Dublin emerged as an important factor impacting negatively on the spatial orientations of creative knowledge firms. Essentially, the levels of expense in the city are reducing the attractiveness of the city from the perspective of employees, which as we have seen previously in section 3.3.2, constitute a vital prerequisite in the attraction and retention of firms in the region

The high cost of living emerged as a key issue for firms in the creative sector in terms of their ability to attract and retain employees. Considerable emphasis was placed on the costs incurred by key personnel when relocating to Dublin, particularly given the high cost of housing in the region. The following quotation illustrates the difficulty of attracting skilled labour and skilled managers from outside Ireland when house prices are so high.

> *'The cost of living is so expensive. If I was a young person coming to Dublin, and we are trying to attract people from the UK now, from the north of England and they are working for a games company in the north of England and they are coming to Dublin, and when they see house prices! And we are trying to attract a senior manager from the north of England and she is looking at house prices. If I was her I would be asking the question, how on earth could they afford five or six or seven hundred thousand euro for a house in Dublin. So the cost of living in Dublin is a drawback.'*
>
> (Murphy et. al., 2008, 57)

The cost of living was also an issue of concern amongst knowledge intensive firms, although not to the same extent as creative companies. Once again, reference was made to the difficulty in attracting migrant workers to Dublin as they find it particularly difficult to adapt to the levels of expense in the city:

> *'We had some of the Czech guys working here and they found it very expensive…. compared to Prague. In fact, the guys that came to Ireland and worked as employees here, when they went back to Prague… but then we left them on the Irish salary in Prague so they are probably making it well…'*
>
> (Murphy et. al., 2008, 25)

Another interviewee confirmed the issue of cost of living and the impact it has on the labour costs incurred by the business due to the high wage demands of employees:

> *'So there are two issues in terms of what we can afford to pay them, one is the cost of living, people want to buy houses and want cars, and two is relative pay rises in the public sector, which is the one that constantly amazes me.'*
>
> (Murphy et. al., 2008, 25)

The foregoing supports the findings previously presented in the case of employees and migrants alike, with the cost of living being identified as having the potential to negatively influence the spatial behaviour and orientations of creative knowledge firms.

3.5.5 Personal trajectories

In the case of creative and knowledge intensive industries alike, the relative weight attributed to the issue of personal trajectories as an attracting factor to the Dublin region was considerably lower than seen in the case of employees and transnational migrants. However, the lack of emphasis placed on this issue is likely to be attributed to the fact that many of the managers, particularly those of indigenous firms, subconsciously factor personal trajectories into the decision-making process. As such, managers failed to explicitly state this factor’s importance in terms of its influence in governing the location of the firm. At a sub-regional level however, personal trajectories were mentioned as a factor in determining the specific location of the firm within Dublin itself:

> *‘…I have certainly factored in that that there are two directors in the company. I am in Drumcrondra so it appealed to me as well and also for our other staff.’*
>
> (Murphy et. al., 2008, 39)

Having regard to the role of personal trajectories as a retaining factor, it would appear that many of the firms, particularly smaller indigenous companies, explicitly acknowledge that close family ties would prevent them from considering relocating the business in the future. As such, personal trajectories play an important role in retaining and attracting creative and knowledge intensive firms to Dublin, although for many interviewed there appeared to be tendency to assume the primary importance of such factors in the initial decision-making process.

‘Soft’ factors

3.5.6 Social and cultural environment

Although ‘hard’ production related factors were of core importance to creative knowledge firms, considerable attention was also attributed to the role of ‘soft’ factors in the location decisions of firms when locating in Dublin. Such factors not only had a role in attracting some of the firms Dublin in the first instance, but also influenced their choice of location within Dublin itself. The ‘soft’ factor to emerge as an important consideration relates broadly to the ‘buzz’ or social atmosphere of the city, with a particular focus of the office itself and the surrounding office environment. It is worth highlighting that unlike the previous factors discussed above, considerable variation exists regarding the relative weight attributed to ‘soft’ (consumption related) factors by firms in the creative and knowledge sectors respectively.

In the case of creative firms, ‘soft’ factors appear to have a prominent influence on the location decision-making process of creative industries relative to the knowledge intensive sector. In particular, 'soft' factors relating to the office environment itself, as well as the surrounding city environment more generally emerged as an important consideration in the selection of a location for the establishment of firms within the creative sector. At a city level, there was a clearly identifiable preference for many firms to locate in the city centre in order to attract and retain employees, many of whom are a young demographic who enjoy the accessibility of the central area. Indeed, there is an acknowledgement that Dublin is perceived by prospective employees as being a predominantly young city (and demographically this is indeed the case) which is exciting to work and live in, thus serving to attract creative workers (Murphy, et. al., 2008). As such the influence of the surrounding social environment played a significant role in the motivations of certain companies to locate in a particular area. One company in particular highlighted that the cultural attributes and leisure facilities of the area played a significant part in the location decision:

> *'…the area of Smithfield is a very up and coming area. The Lighthouse cinema is moving in behind us and an ad agency done the road and some great pubs and bars and stuff like that, and it's only getting better. So we just felt it had a cultural vibe to it. We just felt that this area here is very creative, the cobblestone square is beautiful and it's still central. You can still walk into town for meetings or hob on the Luas [light rail system], so it ticked a lot of boxes for us.'*
>
> (Murphy et. al., 2008, 39)

Furthermore, the quality of the office space itself played a significant part in the location and relocation decisions of the more established companies in the creative sector as exemplified by the following quotes:

> *'I like the fact that the offices have a lot of natural light as I had been working in a couple of places that had artificial light and I don't like putting employees into that situation; it makes them feel like they are in a battery chicken farm.'*
>
> (Murphy et. al., 2008, 39)

> *'We were sick of the Enterprise Centre. I don't know if you have ever been there but it's very dull, so it's like being in school'*
>
> (Murphy et. al., 2008, 39)

The explicit recognition of the need to keep employees happy supports the assumption that creative workers have become increasingly mobile (Scott, 2006) and the foregoing demonstrates the manner in which this trend is directly influencing the location decisions of creative companies. This reiterates the importance placed on the availability of a skilled and diverse labour pool as previously discussed, with many going to extraordinary lengths to attract and retain suitably skilled employees.

Having regard to the role of 'soft' location factors in the decision-making process of firms in the knowledge sector, it is evident that the city's 'softer' attributes play little role in their respective location decisions. However, as suggested by Murphy et. al. (2008), this observation may be attributed to the fact that all of the firms interviewed within the knowledge sector were indigenous and as such, it is unlikely to be the case that they are attracted to the Dublin region on the basis of 'soft' factors. While 'soft' factors do not appear to be a consideration in the location of knowledge firms per se, there is some evidence to suggest that intangible ‘soft’ factors can play an important role in the work environment itself, particularly in creating a positive atmosphere within the work environment:

> *‘I have noticed in companies from my own experience, if you have a lot of people in their twenties you can make an atmosphere, particularly if there a lot of men and women socialising. I have been in companies like that where the employer is clever; he would pay for the pizzas and the beer, you encourage that sort of thing, particularly in low paid industries. I used to work in the call centre business. We would have almost one hundred percent of our employees leave every year. Classically, they would be just out of college, going to Australia. But the thing that kept them there was that there was a huge social buzz around that group of people.’*
>
> (Murphy et. al., 2008, 45)

The foregoing demonstrates that while ‘hard’ location factors are of primary importance for creative knowledge firms locating in this sector; ‘soft’ factors clearly play a considerably more important role in the overall location decision-making process of creative firms when compared with knowledge intensive industries. The ‘buzz’ or social atmosphere of Dublin as a city in which to live is considered highly important for staff attraction and retention within the creative sector in particular. Thus, the role of Dublin as a liveable city is perceived to be a significant factor in attracting and retaining specialised labour, which in its turn is a vital component for the development of companies. The foregoing deviates somewhat from the findings of the research on creative knowledge workers and migrants, none of whom considered the ‘soft’ conditions of the city to be of core importance in their initial decision to reside in the Dublin region.

3.6 Stakeholders

Various stakeholders were interviewed in relation to the location preferences of foreign and indigenous companies, as well as creative knowledge workers (including transnational migrants) more generally. Many of the issues raised by the relevant stakeholders broadly relate to those identified by the other target groups with a combination of ‘hard’ and ‘soft’ location factors being considered. From the research previously undertaken, Murphy et. al. (2008) deduce that stakeholders seem to consider ‘hard’ factors as the building blocks upon which location decisions are made for both companies and employees alike, with ‘softer’ factors becoming important if the ‘hard’ factors are adequate in more than one competing city. The ‘hard’ factors referred to are similar to those discussed in the case of the other target groups above and include the importance of a skilled and diverse labour pool, the provision of adequate infrastructure and the cost of living in the region. A brief analysis of the core factors influencing the spatial behaviour and orientations of the target groups as perceived by the stakeholders are presented in the following sub-sections.

‘Hard’ factors

3.6.1 Transport infrastructure

As seen in the case of all target groups, the poor provision of transport infrastructure was considered to be limiting the competitiveness of the city region by the stakeholders researched. In particular, the city’s congestion problems and sprawling pattern of urban development was viewed as an obstacle that is impacting negatively on access to labour market. By way of contrast, the telecoms and communications infrastructure more generally was not considered to be below standard.

3.6.2 Skilled and diverse labour pool

As seen in the case of creative knowledge firms above, the stakeholders attributed considerable emphasis to the availability of a highly skilled and diverse labour pool, as well as the high standards of education achieved in the Dublin region. As one might expect, such factors were highlighted with regard to the location decision of creative knowledge companies rather than the spatial orientations and behaviour of transnational migrants. This once again indicates the continued importance of classical ‘hard’ location factors in the decision-making process of creative firms.

3.6.3 Cost of living

The relevant stakeholders also identified that the cost of living in Dublin has the potential to undermine the attractiveness of the city in terms of attracting and retaining creative knowledge workers, which in turn is impacting negatively on the future competitiveness of the region more broadly speaking. As seen throughout all of the various target groups, particular attention was attributed to the cost of housing by stakeholders in this regard:

> *'...We have to stress before they come you know, give them an idea of the expense of an apartment. Particularly if they wanted to be on their own because, say somebody coming from Bavaria or Southern Spain they wouldn’t, they may not know that it is quite expensive for an apartment. So while Dublin is a great city in that they do, they are surprised about how expensive it is...’*
>
> (Lawton et. al., 2009, 85)

Despite the identification of some problems with the ‘hard’ elements of the city, there appears to be a general assumption amongst the stakeholders interviewed that most of the necessary ‘hard’ factors exist in Dublin, and that ‘softer’ factors are now playing an increasingly important role (Murphy et. al., 2008). For instance, despite the stakeholders acknowledging the high cost of living in the region, some indicated that the cost of housing is not a significant deterrent to migrant workers locating in Dublin as they negotiate the problems of affordability via flat/house sharing arrangements.

‘Soft’ factors

3.6.4 Social and cultural environment

Having regard to the location decisions of creative knowledge firms, it seems that particular reference is made to the importance of ‘soft’ factors in a situation where ‘hard’ factors are adequate in more than one competing city (Murphy et. al., 2008). The core reason for the emphasis placed on the city’s softer conditions by the stakeholders is that the city’s ‘soft’ attributes are perceived to be of increasing importance in ‘selling’ the city to senior personnel who are vital in the initial development of a branch plant. Put another way, foreign companies are perceived by the stakeholders as being interested in selling the ‘soft’ factors of a city to their senior executives in order to entice them to relocate. As succinctly put by a senior manager in the IDA:

> *‘…if they are satisfied that from a ‘hard’ infrastructure perspective Dublin is adequate, the issue for them is the ‘soft’ infrastructure. So they are asking us for more information on anything that will give them a sense of the quality of life in Dublin. So they want to know is there an international school. So who would have thought that when geographers were writing about the traditional location factors that the presence of an international school would be significant or not?...they are even asking us about proximity to leisure and recreation facilities, golfing, sailing etc because what is driving them to make this project work is that they are going to have to transfer key members of staff in an existing European operation. They are very senior, they are very experienced and they have the skill set that the company needs to actually bring the Irish operation here to begin with.’*
>
> (Murphy et. al., 2008, 67)

In terms of attracting and retaining creative knowledge workers to the Dublin region, the stakeholders highlighted the importance of the city’s social and cultural environment. In particular, emphasis was placed on the importance of being in close proximity to leisure and cultural facilities in attracting creative knowledge workers to locate in the region. However, as seen in the case of employees and migrants above, despite high levels of satisfaction being expressed with regard to the city’s ‘softer’ conditions, such factors did not play a core role in enticing them to live in Dublin in the first instance. Other stakeholders highlighted that Dublin is becoming more attractive to the creative knowledge sector as it becomes increasingly diverse and cosmopolitan. Such a mindset is akin to Florida’s (2002) hypothesises; whereby ‘tolerance’ is considered to be a core attracting factor for creative knowledge workers. However, it is important to note that once again a deviation exists between the perceptions of the stakeholders and the actual findings to emerge from the research, with issues relating to the tolerance of Dublin being given minimal attention by the creative knowledge workers researched.

The importance of maintaining Dublin’s image and promoting it as a creative economy to attract prospective business and employees was also stressed by the relevant stakeholders. This raises serious concerns over the future direction of policy in the region, as despite widespread dissatisfaction being expressed towards the city’s ‘harder’ elements (i.e. transport, cost of living, housing affordability) by Dublin’s creative knowledge workers and firms, the stakeholders identified the importance of ‘soft’ investments in increasing the competiveness of the region in the future. The disjoint of policy measures being promoted in the region relative to the findings to emerge during the course of the research are discussed further in the following chapters.

3.7 Labour and labour processes

Although the location factors influencing the target groups respective spatial orientations and behaviour is the focus of this chapter, attention to the organisation of labour and labour processes, as well as the role of formal and informal networking in Dublin’s creative knowledge sector is considered warranted.

Scott (2006) and Grabher (2004) have suggested that workers in the ‘new economy’ (i.e. creative knowledge workers) are increasingly involved in project-oriented labour processes characterised broadly by the formation of team based work. The underlying idea here is that harnessing the collaborative creative abilities of individuals in the form of teams may lead to increased productivity and product innovation, ultimately leading to comparative advantages within the marketplace. Moreover, Scott (2006, 7) suggests that part-time, temporary and freelance work is also characteristic of the ‘new economy’ whereby many of the ‘new economy’ industries are heavily involved in the outsourcing of work and favour the use of flexible and temporary working contracts. The following section attempts to describe the manner in which the labour process and role of networks operate in Dublin’s creative and knowledge sector from the perspective of firms and employees alike, with respects to Scott’s (2006) description of the ‘new economy’ labour process.

3.7.1 Labour organisation

As discussed above, Scott (2006) makes several assertions regarding the organisation of labour within the ‘new economy. The following provides a brief analysis of the organisation of labour within Dublin’s creative knowledge sector based on the research carried out by Murphy and Redmond (2008), Murphy et. al. (2008), Lawton et. al. (2009). Following the structure adopted throughout this chapter, any significant divergences or similarities to emerge between or within target groups shall be highlighted.

Having regard first to the organisation of labour within the creative sector, a key feature to emerge during the course of the research was the manner in which work tasks are organised, regardless of company size. In Dublin’s creative sector, there is a clear tendency for workers to be organised around the concept of teams. In accordance with Scott’s (2006) depiction, these teams tend to work on specific projects in order to produce collectively more synergistic outcomes in terms of the products and services offered by the company. Within Dublin’s creative sector, such structures appear to facilitate the coming together of individuals with specific areas of expertise to form teams working on a diverse range of projects. Such organisational arrangements again conform to Scott’s (2006) assertion that labour is organised in team based structures in ‘new economy’ industry in order to harness the collaborative creative abilities of individuals, and ultimately to increase productivity and product innovation. Such horizontal structures of labour organisation were perceived in a largely positive light with migrant workers and employees indicating that such work arrangements facilitate diversity in the nature of the work being undertaken, as well as empowerment and ownership of their respective tasks within the work environment (Lawton et. al., 2009).

Scott (2006) also contends that the creative economy is increasingly characterised by workers on short-term and flexible employment contracts. However, this does not appear to be the case throughout the creative knowledge sector in Dublin, with the majority of workers and migrants researched having full-time permanent contracts. Conversely however, there does appear to be considerable evidence of employees on short-term and fixed employment contracts in the motion picture, video, radio and television sector in particular. Such trends can be largely attributed to the cyclical nature of employment in the TV and film sector which is subject to periods of dramatic expansion and contraction given the nature of the industry in general. However, it is important to note that the use of short-term contracts is merely a practical consideration on the part of creative firms, rather than any conscious preference for more flexible forms of contract on the part of employees as Scott (2006) would otherwise suggest.

Having regard to the labour process within the creative sector, there appears to be considerable emphasis placed on the role of creativity in the workplace. The potential for employees to have creative input in their employment is considered to foster a certain amount of loyalty to the company (Lawton et. al., 2009). This was particularly evident in the gaming and electronic publishing sector. Furthermore, the quality of the social and physical work environment emerged as an important aspect in the creative sector in terms of attracting and retaining a relatively young, skilled and mobile workforce (see section 3.5.4).

Having regard now to the knowledge sector, a pertinent consideration to emerge from the research previously carried out is the need for people in the knowledge sector to have a certain amount of variety and accountability in their job. Jobs that are intellectually stimulating and offer a certain amount of self-responsibility and innovation are considered by managers of knowledge firms to be important in the sector. However, many feel that such job characteristics are lacking in big organisations where the type of work being offered is perceived as being more mundane (Murphy et. al. 2008). To facilitate more innovative and diverse working environments, labour in the knowledge sector is also increasingly organised around project-based teams. As stated above, such structures foster collaboration and synergistic outcomes in terms of the products and services offered by companies in the knowledge sector.

As seen in the case of the creative sector above, the research found no evidence of the presence of short-terms and fixed-term contracts in the knowledge sector. However, it did emerge that the number of people employed at any one time in the sector does tend to fluctuate depending on global and local conditions.

3.7.2 Networks

Scott (2006) argues that high levels of instability and risk prevail the ‘new economy’ and in response to this, dense networks of specialised and complementary firms develop to produce product differentiation (without the usually inefficiencies), thus creating competitive advantages. The following section briefly analyses the roles of formal and informal networks for creative knowledge firms and workers within Dublin’s creative knowledge sector.

The importance of networking within the creative sector can be clearly identified by the clustering of similar services in a small geographical area (i.e. in the area surrounding the national broadcaster and the Digital Hub). Bearing in mind Scott’s (2006) arguments regarding networking, formal collaborative links appear to be important within the creative sector with respect to the exchange of ideas and product improvements through an amalgamation of different specialisms. Formal collaborative links within Dublin’s creative sector often extend to being international in scope regardless of firm size (Murphy et. al., 2008).

Informal links are also considered essential to creative employees in terms of career development, particularly within the TV and film sector given its freelance element. This adds some weight to Scott’s (2006:7) notion that careers in the creative sector are ‘typically focused on the building up of personal reputation and the acquisition of multiple useful contacts’. However, it is worth noting that employees interviewed who had full-time contracts also engaged in additional freelance work and as such, they cannot be considered as merely using contacts as a means to ‘job-hop’ as Scott (2006) would suggest (Murphy et. al., 2008). Although migrants in Dublin’s knowledge sector find it difficult to extend informal links into personal relationships, it emerged that many creative workers (particularly gaming and electronic publishing) find that their social lives are a natural extension of their working lives with their wider social network being inseparable from their work environment.

In a similar manner to the creative sector, formal and informal networks also feature prominently throughout Dublin’s knowledge sector. Networking via face to face contact within geographical clusters appears to remain important in the sector, despite advancements in communications technology. Formal collaborative links are also commonly established within the sector in order to combine different areas of expertise to produce highly individualised products, thus creating a competitive advantage. There is also evidence I support of Scott’s (2006:7) observation that ‘workers tend to be inveterate joiners of professional organisations and other work-related associations, mostly to gain knowledge about fluctuating job opportunities but also to a keep abreast of new developments in their field. Ursell (2000 as cited in Scott, 2006) refers to such practices as ‘an economy of favours’.

It is worth noting that these collaborative links tend to be localised in geographical clusters, however, they can also extend to a national scale regardless of company size. Unlike the creative sector above, such links rarely extend to being international in scope. More informal links at business conferences etc. are also a forum where friendships and conversational exchange of ideas take place, which tend to lead to more formal collaborations within the sector (Lawton et. al., 2009).

Having regard to the role of networking from the perspective of employees within the knowledge sector, the research revealed that informal networks that are established through an active social scene are considered important in terms of an individuals' career development. However, unlike the experiences described in the creative sector, many of migrants from the knowledge sector highlighted that that such links rarely develop into personal social relationships.

3.7.3 Recruitment

In terms of labour recruitment, mainstream contemporary methods of recruitment such as newspaper and online advertising are commonly used throughout the creative sector. However, the role of word of mouth and informal networks also emerged as being an important means of acquiring suitable staff. Problems with regard to recruiting in the creative sector generally relate largely to skill shortages in specific areas of the industry. Such skill shortages are largely attributable to the fact that many university courses are not specific enough with respect to Dublin’s relatively specialised creative sector (Murphy et. al., 2008). The failure of many universities and technological institutes to produce graduates with the specific skill set required by the industry has in some cases lead to firms providing their own in-house training. Nonetheless, once staff is attained, there appears to be relatively low levels of staff turnover within the sector. This deviates from Scott’s (2006) assumption that workers within the creative sector are highly mobile. However, the low levels of staff turnover observed may be attributed to the fact that many companies in Dublin’s creative sector go to tremendous measures for the purposes of staff retention (see section 3.5.4).

Having regard to labour recruitment in the knowledge intensive sector, as seen in the case of creative firms above, many companies use contemporary recruitment methods to seek suitable staff (i.e. internet and newspaper), while recruitment agencies are also used, albeit with varying degrees of success. However, it is worth noting that much less emphasis is attributed to the role of word of mouth and informal networks in the recruitment process than seen in the case of the creative sector above. In terms of staff retention, low levels of staff turnover were reported in the sector, although this is likely to be due to the majority of employees being relatively mature, which appears to be characteristic of the sector in general (Murphy et. al., 2008). This is largely due to the fact that past experience is a critical requirement for working in the business and management consultancy services sector (*Ibid*). Despite the low rate of staff turnover generally, there is concern regarding the increasing competitiveness of the labour market, as well as the difficulty of attaining highly skilled staff for specific positions. Such concerns can be reflected in the increasing awareness of knowledge based firms of the importance of keeping employees content by providing favourable physical and social working environments. However, it is important to note that the ‘soft’ measures taken with regards to staff retention are far less excessive than seen in the case of the creative sector, indicating tentatively that the creative sector may be a more mobile work force.

3.7.4 Impacts of changing technology

The implications of changing technology on the range of products and services offered by creative knowledge firms appears to vary considerably by sector, with the creative sector (in particular TV and Film) placing considerable emphasis on the potential impact of technology on the future direction of the industry at large. Advancements in digital technology, high definition television and the internet as a communication medium are having a profound impact on the manner in which the sector does business. As an example, the move towards digital television has rendered many of the existing buildings on the national broadcaster site redundant (Murphy et. al., 2008). Moreover, advancements in digital technology are also directly impacting on the labour force with many of the more mature employees requiring training and up-skilling to adjust to such advancements (*Ibid*). Another area which has impacted on the nature of the industry is the arrival of the internet and of internet television more precisely. There is the distinct possibility in the future that independent production companies could shoot programmes direct to internet television and bypass traditional broadcasters altogether (*Ibid*). However, it appears that the industry is not yet at the stage where there is a direct threat to traditional broadcasters, mainly because production companies have yet to figure out how to generate sufficient revenue from such ventures (*Ibid*). Nonetheless, such issues relate to what some producers see as the decline in the role and influence of television as a communication medium generally.

The potential impacts of changing technologies on the knowledge sector in terms of the products and services being offered are much smaller than seen in the case of the creative sector above. Rather, technological changes are having an influence on the location decisions of knowledge firms, with some companies identifying that advancements in communications technology are reducing the need for city centre locations or locating in close proximity to clients. The emergence of virtual offices[3] which have been facilitated by advancements in communications technology has also meant that individuals can increasingly work from home, a particularly useful service for smaller companies. However, such advancements cannot be considered specific to the knowledge sector and are also impacting on the location decisions of creative firms.

3.8 Conclusion

The foregoing demonstrates that the decision-making process and the spatial behaviour and orientations of the target groups within the creative knowledge sector is highly complex and dynamic even when overly simplified as done here. The above analysis attempts to identify the core factors influencing the target groups respective spatial behaviour, thus simplifying what is a complex process influenced by a wide range of interrelated issues and factors. Nonetheless, the above analysis demonstrates that despite the variations that exist between and within target groups, certain commonalities and generalisations can be made regarding the location factors influencing firms, migrants and workers involved in the creative

[3] A virtual office is a process whereby a company pays for the addresses of an office space and for the receptionist charges associated with answering calls for that particular company and for receiving post at that address.

knowledge sector. Essentially, classic ‘hard’ location factors such as the availability of a skilled and diverse labour pool, the provisions of transport infrastructure and the cost of living in the city all feature prominently within and between all of the target groups. As such, ‘hard’ factors remain of primary importance in the decision-making process of individuals and firms within Dublin’s creative knowledge sector. By way of contrast, far less emphasis was placed on the role of ‘soft’ location factors with the exception of a pleasant social and cultural environment, which was generally viewed in a positive light. Furthermore, the city’s ‘softer’ attributes feature more as a retaining factor rather than a core attracting factor (with the exception of foreign creative firms). As such, ‘soft’ location factors can generally be considered as being of secondary importance in the location decisions of the creative knowledge sector at large.

Overall however, Murphy et. al. (2008) and Murphy and Redmond (2009) highlight that there appears to be an inter-dependency between ‘hard’ and ‘soft’ conditions associated with Dublin as a city in which to live and as a city in which to do business. Labour is attracted to the city on the basis of ‘hard’ factors (i.e. job availability) and is retained on the basis of ‘soft’ factors (i.e. the social environment) while companies are attracted to the city on the basis of specialised labour availability (a ‘hard’ factor) which, in its turn, is retained in the city by ‘soft’ factors (i.e. the social environment). This inter-dependency indicates that policy makers must consider a wide range of policy measures in any attempts made to improve the competitiveness of the Dublin region as a creative knowledge economy. Such issues are developed further in the following two chapters.

Table 3.8 - Summary Matrix 1: Main location factors influencing target groups in the Dublin region.

Target Groups	Sub-groups	'Hard' (Production Related) Factors		'Soft' (Consumption Related) Factors	
		Attracting	Retaining	Attracting	Retaining
Employees	Creative	- Employment ✓ - Personal Trajectories ✓ - Cost of Living ✗ - Transport ✗	- Employment ✓	- Not of core importance	- Social & Cultural Facilities ✓
	Knowledge	- Personal Trajectories✓ - Employment ✓ - Cost of living ✗ - Transport ✗	- Employment ✓	- Not of core importance	- Social & Cultural Facilities ✓
Managers/ employers	Creative	- Skilled Labour Pool✓ - Access to Clients & Supporting Services✓ - Transport ✗ - Social & Cultural Facilities ✓	- Skilled Labour Pool ✗ - Cost of Living ✗	- Social Environment ✓	- Social & Cultural Facilities ✓
	Knowledge	- Skilled Labour Pool✓ - Access to Clients & Supporting services✓ - Transport ✗	- Cost of Living ✗	- Work Environment ✓	- Work Environment ✓
Migrant workers	Creative	- Employment ✓ - Personal Trajectories ✓	- Employment ✗ - Personal trajectories ✓ - Cost of living ✗ - Transport ✗	- Not of core importance	- Social & Cultural Facilities ✓
	Knowledge	- Employment ✓ - Personal Trajectories ✓	- Employment ✓ - Personal Trajectories✓ - Cost of living ✗ - Transport ✗	- Not of core importance	- Not of core importance

✓ = Viewed in a positive light by various target groups
✗ = Viewed in a negative light by various target groups

4 LOCAL CONDITIONS AND POLICIES

4.1 Introduction

The following chapter seeks to identify the core strengths and weaknesses of the Dublin region in terms of its capacity to accommodate the creative knowledge sector. Essentially, the position of Dublin with regard to the region's 'hard' and 'soft' conditions shall be analysed in order to evaluate the potential of Dublin to accommodate a thriving creative knowledge sector in the future. In doing so, a contextual analysis of past, present and proposed trajectories and policies that are considered to be impacting either positively or negatively on the 'hard' and 'soft' aspects of the city shall be provided. The conditions analysed below largely relate to those that featured most prominently amongst the various target groups during the course of the research previously undertaken and as such, more attention is attributed to the 'hard' relative to 'soft' conditions given the formers dominance in the research findings. Overall, the following sub-sections seek to evaluate the core strengths and weakness of the region with regard to their potential to impact on the spatial orientations and behaviour of creative knowledge workers and firms throughout Dublin.

4.2 Evaluation of the Dublin region from a European perspective

Although evaluating the core strengths and weakness of the Dublin region from the perspective of Dublin's creative knowledge sector is the overarching objective of this chapter, it is perhaps worth pointing to work that was carried out under previous work packages to briefly analyse Dublin's position in a European context (Redmond et. al., 2007; Kovács et. al., 2007). The latter publication referred to provides an overarching analysis of the thirteen other European cities involved in the ACRE research project in terms of their respective development paths and as such, compares Dublin's relative position in terms of its capacity to accommodate a robust creative knowledge sector.

The analysis referred to (*Ibid*) indicates that Dublin is relatively well placed in terms of the region's cultural, economic and political conditions when compared to the other cities analysed across the E.U. In particular, those conditions viewed in a positive light include the status of the region as a centre of decision-making, the city's specialised and skilled service industry, the richness of the city's historical urban core, as well as the region's well organised policy and governance structures. In fact, the only weakness identified related to the city's relatively low levels of tolerance and pluralism. Much of the explanation surrounding this particular drawback relates to the sustained influence of religious values in contemporary Irish society, coupled with the fact that Dublin has traditionally had a relatively homogeneous population (Redmond, et. al., 2007). However, it would appear that such issues are being gradually overcome given the declining influence of the Catholic Church in the past twenty years, coupled with the fact that the region's population is becoming much more culturally, socially and ethnically diverse due to unprecedented levels of immigration experienced in recent years (*Ibid*).

All things considered, Dublin appears relatively well positioned in terms of its ability to harness future economic success in the creative knowledge sector according to Kovács et. al. (2007), given that it only lagged behind what were regarded to be the most promising European cities (i.e. Amsterdam and Barcelona) with respect to the city's tolerance levels. It is important to note however, that the aforementioned deductions are not representative of the findings derived from research undertaken with the various target groups. Rather, they merely provide a contextual analysis from which to begin a more detailed discussion of Dublin's strengths and weaknesses as determined by city's creative knowledge sector itself. Indeed, the issues raised by Dublin's creative knowledge sector deviate considerably from the conditions analysed by Kovács (*Ibid*).

Table 4.1 - Ranking cities according to certain conditions

	Cities known as national or international political and economic decision-making centres	Internationally known historical-cultural centres	Cities with good governance & financial & organisational resources	High-tech activity or early service profile, where industry has never been a dominating sector	Active innovation & technology policy	Cities known as welcoming and pluralistic
Amsterdam						
Barcelona						
Dublin						
Munich						
Helsinki						
Budapest						
Milan						
Riga						
Sofia						
Leipzig						
Toulouse						
Birmingham						
Poznan						

Source: Kovács et. al., 2007:24

4.3 Summary Matrix 2: Evaluation of the region by target groups

Chapter three analysed the relative importance of various factors in the attraction and retention of creative knowledge workers and firms in the Dublin region. However, the analysis provides limited insight into the actual performance of such conditions in the Dublin region from the perspectives of the various target groups. In order to gain a more comprehensive understanding of the region from the perspectives of creative knowledge employees, migrants, managers and stakeholders on a more wide range of local conditions, a second matrix system has been developed. The matrix evaluates the performance of various location factors using a coding system. The numbers ‘one’ to ‘three’ relate to the three target groups; employees, firms and transnational migrants respectively. The codes ‘A’, ‘B’ and ‘C’ have been devised to represent the various subdivisions within each target group. The code ‘A’ represents the creative sector, ‘B’ the knowledge sector, while the letter ‘C’ relates to the stakeholders researched. For example, allocating the code ‘1B’ to a factor means that the allocation is only relevant to knowledge intensive workers. In this part of filtering process, the objective is to highlight those factors performing well (i.e. strong regional performance), fair (i.e. intermediary regional performance) or poor (i.e. weak regional performance) based on the empirical research findings carried out on the various target groups. There are instances in the matrix where some target groups or sub-groups have not been included in ranking the performance of certain factors. Such omissions indicate that the factor under consideration was not analysed by that particular subgroup during the course of the research, and as such, it is impossible to understand how that sub-group rates the performance of the factor.

The matrix clearly highlights the Dublin region’s strengths and weaknesses from the perspectives of the various target groups. As such, the matrix provides a sound basis from which to evaluate the region in terms of its ability to accommodate a robust creative knowledge sector in the future. The above matrix demonstrates that many of the region’s ‘harder’ conditions are viewed in a negative light, whilst there appears to be generally high levels of satisfaction with many of the cities ‘softer’ attributes. Such findings shall be discussed in detail in the following chapter, while their implications in terms of policy formulation are addressed in chapter five.

Table 4.2 - Coding system for summary matrix 2

Target Group	Sub-Category	Codes
1 - Employees	Creative	1A
	Knowledge intensive	1B
2 - Managers	Creative	2A
	Knowledge intensive	2B
	Stakeholder	2C
3 - International migrants	Creative	3A
	Knowledge intensive	3B
	Stakeholder	3C

Table 4.3 - Summary Matrix 2: Evaluation of metropolitan regions according to different location factors

	Strong Regional Performance	Intermediary Regional Performance	Weak Regional Performance
'Hard' factors			
International accessibility		1, 2, 3	
Regional accessibility & congestion			1, 2, 3
Employment availability	1, 3A, 3B		
Working conditions (salary/ contracts/ facilities etc)	1, 2A, 2B, 3A, 3B		
Educational attainment	2, 3C		
Rage & quality of universities & higher education institutes	2, 3C		
Skilled & diverse labour pool	2, 3C		
Proximity to clients/ supporting services	2, 3C		
Transport infrastructure			1, 2, 3
Health & medical facilities			1
Childcare facilities			1
Housing affordability		2C, 3C	1, 2A, 2B, 3A, 3B
Overall cost of living		2C	1, 2A, 2B, 3
Business start-up assistance	2A		
'Soft' factors			
Quality of the city environment	1, 2A, 2C, 3		
City Scale	3A, 3B		
Image of the city	3A, 3B, 2C, 3C	2A, 2B	
Cultural Milieu	2A, 2C, 3		
English Speaking Language	2C, 3		
Attractive Architecture		1	
Attractive Residential Environment		1, 2A, 2B, 3A, 3C	
Cultural and Leisure Facilities	1, 2, 3		
Cleanliness, Pollution, Noise			1, 3
Green and public spaces		1	
Sports Facilities			1, 3A, 3B
Public safety/police services			1
Physical working environment	2A, 3A, 3B	2B	
Social working environment	2A, 2B, 3A, 3C		
Business Networks	2, 3		
Overall quality of Life	1, 2C, 3C	2A, 2B, 3A, 3B	
Tolerance & diversity		1, 3A, 3B	3C
Social cohesion & equality	3A	1, 3B	3C

4.4 'Hard' conditions

The most pertinent regional conditions in Dublin, both positive and negative, to emerge from the research previously undertaken largely relate to traditional 'hard' location factors (see summary matrix 2). As outlined in chapter three, 'hard' factors are related to the tangible and classic location conditions such as the region's transport infrastructure, the cost of living, the availability of employment and the presence of a skilled and educated labour pool amongst many others. While a more exhaustive range of factors were identified by individual target groups (see Murphy and Redmond, 2008; Murphy et. al., 2008; Lawton et. al., 2009), the most pertinent conditions that appear to be influencing the overall attractiveness of Dublin from the perspective of the creative knowledge sector have been identified for discussion below in an attempt to determine the future capacity of the region in this regard. These factors have been selected on the basis that considerable emphasis was placed on such conditions by the various target groups, albeit to varying degrees, as the following analysis attempts to convey.

4.4.1 Transport infrastructure

It has been widely documented that Dublin's transport infrastructure provision has lagged behind the country's economic trends (Killen, 1994; Clinch et. al., 2002). Although the roll-out of physical infrastructure improvements is generally associated with periods of economic expansion, either as a catalyst (see Bannister & Lichfield, 1995; Berechman, 1995) or a by-product, Dublin's physical infrastructure has become increasingly incapable of meeting the city's growing needs despite the country's rapid economic growth from the 1990's. The following provides a brief evaluation of the issues at play throughout the region and largely relate to the concerns raised during the course of the research previously carried out (see chapter three).

At the regional and city level, traffic congestion is causing major problems with regard to business efficiency, quality of life and overall mobility throughout the Dublin region, the origins of which can be related to the city's spatial development over the past 30 years. The suburbanisation of economic activity has become an increasingly familiar trend in Dublin and was originally initiated with the movement of industrial functions from the city centre to purpose built industrial estates in the periphery (MacLaran and Beamish, 1985; MacLaran, 1993). Since the 1980's the phenomenon of commercial suburbanisation has extended to the retail sector, and even more recently there has been an outward shift of tertiary functions to the periphery with the emergence of office and science parks in relatively unconventional locations. The resulting effect has been the creation of an 'edge city' at a considerable distance from the city centre.

The aforementioned trends in the commercial sphere have coincided with a surge in the demand for housing driven by natural population change, as well as significant immigration into the region over the past decade. Given the time lags associated with the relatively inelastic supply of housing, which was further exacerbated by the lack of serviced development land in the region, dramatic house price inflation in the metropolitan area has resulted in the ‘leapfrogging’ of large scale residential developments into the hinterland area (Williams and Shiels, 2000).

The suburbanisation of commercial activity, coupled with widespread residential development activity at distances up to 90km from the city centre, has placed severe pressure on the region’s transport network (William and Shiels, 2000; 2002). Furthermore, this pattern of spatial development has led to the emergence of increasingly complex commuting trends which negate from the traditional radial patterns of movement that are characterised by the generation of trips from residential neighbourhoods in the periphery towards employment centres in the core. Rather, the city region is now characterised by increasingly complex and diffuse commuting patterns due to the increase in the numbers of origins and destinations in the region (Killen, 1994). Such patterns are notoriously difficult to serve efficiently and effectively by public transport and have led to the continued dominance of the car, thus placing additional pressures on the region’s already below-par transport system when compared to other similarly sized EU countries (see Hall, 1995; Redmond et. al., 2007). Overall, the result has been the imposition of high social and financial costs given the reduced quality of life experienced by the city’s residents and the growing demands for costly road improvements respectively (MacLaran and Killen, 2002).

The scale of Dublin’s transport problems are readily identifiable when considered within the context of the OECD’s (2006) research based on city size and the generation of externalities. The OECD’s (2006) study on metro-regions found evidence to suggest that a threshold exists whereby regions with a population above six million begin to show evidence that congestion and other externalities gain the upper hand over agglomeration effects. Bearing this in mind, it is of note that although the Dublin region is small (c 1.7 million persons) from the vantage point of the global economy (far below the 6 million threshold set by the OECD), congestion and other transport related externalities emerged as being the biggest drawback and constraint for doing business and living in Dublin amongst all of the target groups researched. Most expressed that whilst Dublin enjoyed reasonably good national and international air connections, the level of traffic congestion and the highly radial transport system in Dublin is leading to major problems in terms of travel times and intra-regional accessibility.

As discussed in the previous chapter, transportation issues were viewed as a significant regional weakness by all of the target groups interviewed irrespective of their sectoral backgrounds. Employees working in Dublin’s creative knowledge sector expressed considerable dissatisfaction with a range of transport related issues such as the levels of congestion and the availability of public transportation in the region, with 88.3 per cent and 53.8 per cent of the total sample being ‘somewhat worried’ or ‘very worried respectively’. Transnational migrants were also highly dissatisfied with the city’s public and private transport provision with many highlighting the problems associated with the region’s radial system. As such, there is a general consensus that cross city accessibility is very poor. What is interesting about creative knowledge employees and migrants is the manner in which they attempt to negotiate around such issues, with many tending to locate in close proximity to the city centre or their respective place of work, or alternatively choosing to live in suburban locations which are served with better than average transport links.

From the perspective of creative knowledge firms, Dublin's poor transport infrastructure emerged as being a key problem in the region which is impacting negatively on productivity levels. Further reference was made by creative knowledge firms to the high levels of congestion, the lack of parking and the overall dominance of the car in the city, as well as the issue of cross city connectivity and the emergence of more complex commuting patterns.. Having regard to such concerns, many creative knowledge firms considered such infrastructural problems to be reducing the city's competitiveness in terms of attracting, as well as retaining both business and labour. In a similar manner, the stakeholders interviewed identified that the city's transportation problems are impacting negatively on labour recruitment for large companies, as well as the overall attractiveness of the city to foreign enterprise. Indeed, the bi-variate analysis conducted by Murphy and Redmond (2008) which explored the relationship between commuting levels and satisfaction with the city found that the greatest proportion of respondents who are dissatisfied with the city are those with the longest commuting times and vice versa.

Overall, the problems associated with the city's transport system appear to be impacting seriously on the attractiveness of the city in terms of company location, as well as staff attraction and retention given the emphasis placed on such issues by all of the target groups interviewed. It is worth pointing out that the quality of a city's transport infrastructure is a traditional 'hard' location factor, which constitutes one of the 'core building blocks' upon which foreign companies locate (Murphy et. al., 2008). At present, it is clear from the research findings that the city's transport problems are seriously threatening the viability of sustaining and developing the creative knowledge sector in Dublin.

Arguably, the foregoing contextual analysis and research findings indicate that the single most important challenge in protecting the Dublin city region's dynamism and attractiveness will be improvements in the integration of transport and land use planning. The new Dublin Transport Authority must play a significant role in this regard by effectively guiding local authorities to reduce the dominance on the car and maximising the overall efficiency of the Dublin region. As the National Economic and Social Council (NESC)(2008, 195) warn, 'failure to surmount the challenges of urban sprawl in the GDA in the medium term would not see benefits displaced to other regions within Ireland but to metro-regions elsewhere in Europe to which the businesses, young professionals and migrant workers currently attracted to Dublin are more likely to move'.

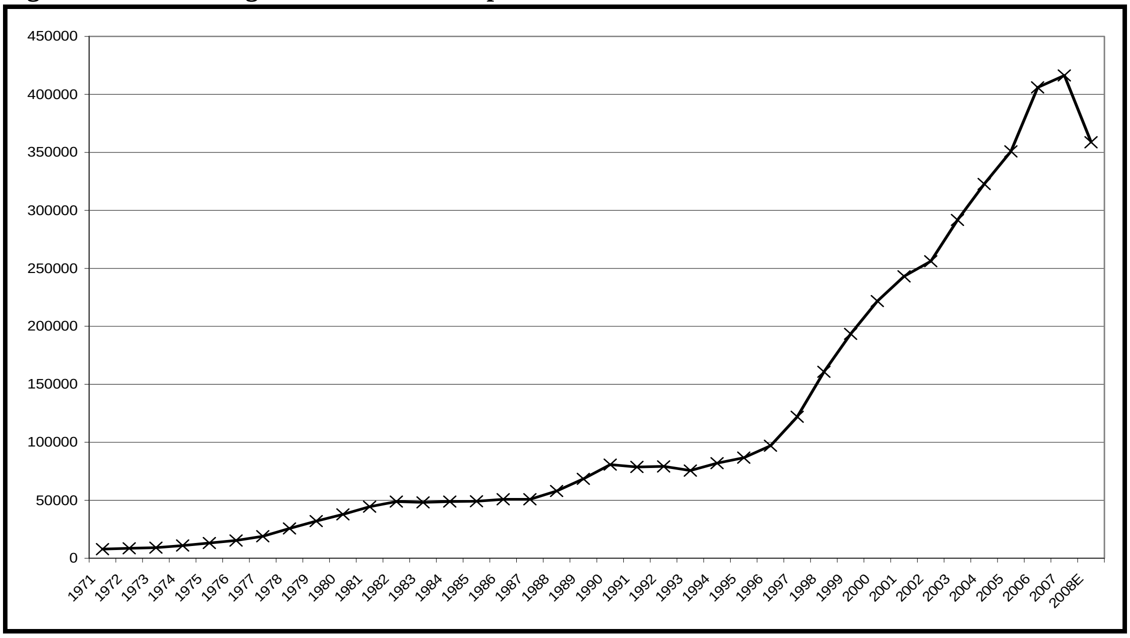
It appears that such threats are recognised by policy makers as being of utmost importance to the future success of the region, with the recently published *'Economic Development Action Plan for the Dublin City Region'* (2009), as well as a range of other policy documents (i.e. RPGGDA, 2004; NSS, 2002 etc.) promoting higher densities of development to replace the costs associated with urban sprawl. Furthermore, the *Dublin Regional Authority* (2009) has highlighted the need to prioritise projects such as Metro North, the extension of Luas lines, and the provision of the Luas line interconnector. Such provisions would undoubtedly alleviate some of the region's accessibility problems. However, for many it would appear that such efforts and recommendations are 'too little, too late' given that the resources to activate such measures are becomingly increasingly scarce in the current economic climate and the impacts incurred by development activity in the hinterland region are largely irreversible.

4.4.2 Cost of living

Ireland's period of unprecedented economic expansion over the past decade has seen a dramatic rise in the price of goods and services, not least the cost of housing, all of which appear to be posing a significant threat to the future competitiveness of Dublin. Having particular regard to the latter, escalating house price trends experienced over the past decade are attributable to a range of diverse but interrelated factors. On the economic side, low interest rates, low levels of unemployment and the significant wage increases that emerged during the 'Celtic Tiger' period combined to increase the demand for new housing (Redmond et. al., 2007, 50). Demographically, natural population increase coupled with the fruition of the 'baby boom' of the 1970s, as well unprecedented levels of in-migration led to significant increases in the numbers of individuals in the 25-44 age cohort (*Ibid*, 50). This age cohort has been identified by Williams and Shiels (2000, 5) as being the 'prime' age group in terms of economic activity and household formation.

Given the time lags involved in the supply of housing due to its relatively inelastic nature, the pent up demand for housing in the Dublin region throughout the past decade has resulted in dramatic house price inflation and the subsequential displacement of such demand to locations as far as 90km from the city centre (Williams and Shiels, 2000; Redmond et. al., 2007). Such trends have manifested themselves even further within the metropolitan region itself given the high demand for accommodation in close proximity to the city centre where a critical mass of employment exists. For instance, with the onset of the so-called 'Celtic Tiger' era in the mid-1990s, house prices in real terms increased for thirteen consecutive years between 1994 and 2006, with average annual increases over the period of 11.7 per cent in real terms (Lawton et. al., 2009). Furthermore, it is worth highlighting that the affordability of housing as determined by the relationship between average house prices and the average industrial wage has also deteriorated in recent years. In the 'pre-boom' years, average house prices were roughly four times the average industrial wage. However, average prices in the state during the peak of the boom were approximately eight times the average annual industrial wage, whilst in Dublin the situation was once again exacerbated with average prices being close to twelve times the average industrial salary (Redmond et. al., 50). However, it is important to highlight that house prices have depreciated significantly in light of the recent economic downturn. Indeed, the latest Permanent tsb/ESRI House Price Index reported a 24 per cent drop in national house prices from peak levels in January 2007. As such, problems regarding housing affordability are being ameliorated somewhat by the fall in national house prices.

Figure 4.1 - Nominal growth in new house prices in Dublin, 1971-2008



Source: Lawton et. al., 2009:10

As alluded to briefly above, it is not the cost of housing alone that has appreciated greatly in recent years, but also the cost of goods and services more generally. For instance, childcare costs, as well as the price of utilities such as gas, electricity and oil are relatively expensive in Ireland, with petrol costs being particularly high by US standards given that Ireland is an oil-dependent economy (NESC, 2008). The city's 'softer' leisure and cultural facilitates are also relatively expensive, which is likely to have a negative impact on the attractiveness of the region as a tourist destination. Indeed, visitor numbers to Dublin fell by 2.5 per cent from 2007 to 2008, whilst the recent Worldwide Cost of Living Survey (2009), conducted by Mercer, ranked Dublin as the 25th most expensive of 143 cities studied (DRA, 2009, 9-10).

A general consensus emerged amongst the target groups researched wherein the cost of living in Dublin was considered to be impacting negatively on the attractiveness of the region. Employees within the creative knowledge sector expressed their dissatisfaction with levels of expense throughout the Dublin region with 83.7 per cent of respondents expressing that the cost of housing in the city is very expensive. In fact, not a single respondent felt that housing costs were average or less in terms of expense. Respondents also felt that the cost of basic services related to housing are highly expensive suggesting that housing affordability, in terms of capital cost as well as the provision of basic services, is a considerable concern to workers in the creative knowledge sector (Murphy and Redmond, 2008). However, unease with the levels of expense in the city were not isolated to the area of housing but also related to the cost of 'softer' consumption related services (i.e. leisure facilities, food, beverages etc.), with the vast majority stating that the general cost of living in the region is either expensive or very expensive (94.5 per cent).

Similar sentiments were expressed in the case of transnational migrants, with high levels of unease articulated with respect to the cost of living in Dublin. Many considered the high cost of basic goods and services, as well as accommodation costs, as a key drawback in terms of remaining in the city. In particular, both rental and capital housing costs were considered to be highly restrictive in terms of remaining in Dublin for the majority of younger and more mobile respondents. Indeed, there were some indications to suggest that accommodation costs could potentially force individuals to relocate.

Creative and knowledge based firms also perceived levels of expense throughout the city region in a negative light, with creative knowledge firms placing particular emphasis on its ability to reduce the attractiveness of the city to employees. The high cost of living emerged as being a considerable constraint in terms of attracting suitably skilled staff in the first instance, but also in terms of retaining them in the city region given the relatively high costs associated with residing in Dublin. Furthermore, creative knowledge firms also reported that that house price inflation was leading to increased wage demands by employees to negotiate problems of affordability, which in turn increasing the overall cost of production.

By way of contrast to the experiences of the foregoing target groups, far less concern was attributed to the cost of living in Dublin by the relevant stakeholders. Although reference was made to the relatively high levels of expense throughout the city region, some stakeholders did not consider it to be a deterrent to creative knowledge workers. Nonetheless, the aforementioned findings warn that the high cost of living borne directly by employees is impacting negatively on the operational costs incurred by creative knowledge firms in Dublin. It is suggested that such trends have the ability to seriously undermine Dublin's future competitiveness with regards to prospective, as well as existing foreign and indigenous investors.

The central findings of the research reveal that house price escalation in particular, as well as the highly inflated prices of good and services more generally, when compared to other similar sized European cities, raises serious concerns regarding the potential impact of such trends on the future attraction and retention of creative knowledge workers and firms in the future. Although house prices have fallen in the region of twenty four per cent since February 2007 (ESRI, 2009), the global credit crunch has resulted in the establishment of stricter lending requirements by financiers. For instance, lenders are now requesting more substantial deposits from applicants, which in turn have made access to credit more difficult (Murphy and Redmond, 2009). As such, the housing market is still beyond the reach of many as the problem has shifted from one of housing affordability, to one of accessibility.

In light of the foregoing contextual analysis and research findings, it is suggested here that polices aimed at ensuring the adequate provision of zoned and serviced land would greatly assist in the timely reaction of housing supply to prospective surges in demand in the future, thus reducing the scale of pent-up demand and price inflation. The forthcoming publication '*Developing and Enterprise Strategy for the Dublin Region*' also highlights the need for a more integrated approach to economic, social and infrastructural planning in order to improve the competitiveness of the region from the perspective of enterprise development. With regard to the cost of living in a more general sense, policies are being slowly introduced on a national scale in attempt to reduce further price inflation of goods and services in the future. In particular, there is an increasing awareness by central government of the need to secure the country's energy supply and reduce its dependence on oil producing countries, as increasing oil prices have the potential to result in rapid rates of inflation. Furthermore, since the imposition of European Directive 96/92/EC, Ireland has gradually opened up its electricity market. This deregulatory directive has opened Ireland's energy market to competition, which has resulted in the emergence of new domestic suppliers (i.e. Airtricity, Bord Gáis Energy etc), all of which aim to provide consumers with average annual savings in the region of 10-14 per cent (www.bordgaisenergy.ie). Such policies, if implemented properly, may go someway in maintaining a competitive regional economy and may not only have the benefit of fostering a robust creative knowledge sector in the region, but also enhance the socio-economic environment for the city's residents at large.

4.4.3 Education & the availability of a skilled labour pool

For many years Ireland, and Dublin in particular, have been marketed to foreign investors on the basis of its young, English speaking and well-educated population. There is justifiable pride in the contribution that Ireland's educational system in particular has made to the country's impressive economic development. The earliest inward investors appreciated the quality of Ireland's Leaving Certificate, while today's multinational employers appear to value the numbers and quality of Ireland's third and fourth level graduates (NESC, 2008, 222). Several features of Ireland's educational system continue to bear comparison favourably with those of other advanced countries, principally the high literacy levels attained in schools in Ireland and the high probability that young people will progress to third level education (NESC, 2008, 222).

The Dublin region is the dominant player in the country's third level education sector. The Greater Dublin Area has four public universities, five institutes of technology, as well as a wide range of other specialist and private third level institutions. Third level education is a particular strength throughout the city region itself with over 90,000 full-time and part-time students studying in Dublin city alone. Trinity College ranks amongst the World's Top 50 Universities, while University College Dublin has moved from 177th to 108th from 2007 to 2008, indicating the quality of graduates being produced in the region (DRA, 2009, 8).

Having regard to the region's labour pool, it is of note that the national labour force has grown to c. 2 million (2006 levels), which has been in part assisted by the increased participation of women in the labour force and is reflective of changing attitudes towards working women in Ireland (Coleman, 2006; Redmond et. al., 2007). Given the primacy of Dublin, coupled with the strength of the higher education sector in the region, much of this workforce is located within the city region, thereby providing a critical mass of highly skilled employees to prospective investors.

The research carried out by Murphy et. al. (2008) reveals that the presence of a young English speaking demographic with high levels of education and training is a key regional asset from the perspective of creative knowledge firms. Such conditions served as a core motivation for creative knowledge firms to locate in the Dublin region regardless of company origin or size, with locations outside of Dublin viewed as restrictive in terms of accessing people with the necessary skills and in sufficient quantities. As such, the critical mass of skilled and diverse people in Dublin is a core attracting factor for creative knowledge firms. The relevant stakeholders interviewed emulated the views of creative knowledge firms, with many highlighting Dublin’s robust skilled labour pool as a key regional strength in terms of the role it plays in attracting and retaining creative knowledge industries to the region.

Despite Dublin’s diverse and skilled labour pool emerging as a key regional asset in terms of attracting creative knowledge firms, some weaknesses were also identified by managers within the creative sector. Particular regard was attributed to the actual volumes of skilled labour available to the creative sector in the region. Essentially, it appears that Dublin may not have sufficient quantities of skilled individuals necessary to sustain the future growth of creative companies. Another weakness identified within the creative sector (and the TV and media sector in particular) related to the skill level of graduates, as epitomised by certain companies undertaking their own in-house training on an on-going basis in an attempt to up-skill their workers.

As mentioned previously, Florida (2002, 2005) postulates that creative companies are increasingly attracted to areas that are ‘hubs’ for talented workers. However, the foregoing demonstrates that firms are locating in Dublin on the basis of a skilled and diverse labour pool rather than Florida’s *(Ibid)* conception of ‘talented’ workers. It is worth acknowledging however, that although the availability of a skilled and diverse labour force is a key attraction of Dublin to creative knowledge investors, such conditions were also a core motivating factor for the establishment of low skilled, branch plant, foreign manufacturing jobs in the Dublin region during the 1970s. As such, the observation made by Florida (2005) is my no means exclusive to the creative knowledge sector. Furthermore, one must remember that the availability of skilled labour has been a classic factor in company location theory for some time and as such, Florida’s theory is considered here as being far from pioneering (Murphy and Redmond, 2009).

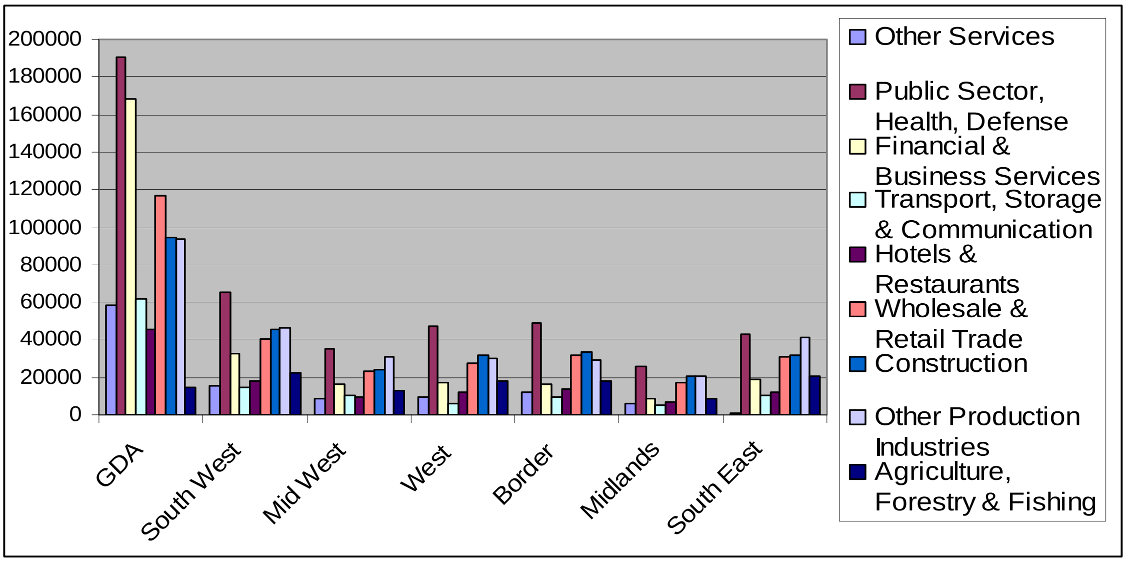
Despite Dublin’s apparent abundance of skilled and diverse labour, serious concerns have been raised regarding the ability of Dublin to provide sufficient volumes of labour with the necessary skills to expand the sector considerably moving forward. As such, further investment in human capital is considered a prerequisite for the future expansion of the creative knowledge economy in Dublin, despite the fact that the existing labour pool continues to be a key regional asset attracting creative knowledge firms to the region. Such concerns could be addressed by the promotion and further development of quality third level courses in this field in order to secure the expansion and future growth of the creative knowledge sector in the future. However, such investment will become increasingly difficult to secure in light of the current economic downturn, with the reintroduction of third level fees and other roll-back mechanisms being proposed to address the current shortfall in the public finances.

4.4.4 *Employment opportunities*

Florida (2002, 2005) and others (Saris and Brouwer, 2005) argue that companies are increasingly attracted to regions on the basis of where 'talented' human capital wants to reside (Murphy and Redmond, 2009, 73). The foregoing section (see section 4.4.3 above) demonstrates that the presence of skilled and diverse labour, rather than 'talented' workers per se, is important in the case of Dublin's creative knowledge sector. However, in arguing the importance of 'talented' labour in the decision-making process of creative knowledge firms, Florida (2002) fails to recognise the continued relevance of the classic location framework of labour following companies. However, as seen in chapter three, the availability of employment remains a core strength in terms of attracting creative knowledge workers and migrants to the Dublin region. The following analysis attempts to evaluate the current state of Dublin's creative knowledge employment market (and how it was arrived at) in an attempt to uncover Dublin's potential to foster a thriving creative knowledge economy.

The restructuring of Dublin's regional economy from a manufacturing branch plant economy to a predominantly service sector based economy was largely driven by lucrative financial incentives introduced by increasingly neoliberal styles of urban governance from the 1980's onwards. This shift has been in part responsible for the rapid economic growth experienced over the past fifteen years. The primacy of Dublin in this regard has been exacerbated in recent years by large scale level of investment in the region, particularly in service sector, which now accounts for approximately 75 per cent of the region's employment (Garwood et. al., 2005). This investment has led to the emergence of a critical mass of banking, financial and creative knowledge services throughout the region (Figure 4.2). Undoubtedly then, service employment in the Dublin region is in a 'considerable position of dominance relative to other sectors of the economy' (Redmond et. al., 2007, 46).

Figure 4.2 - Regional Employment Levels by Sector

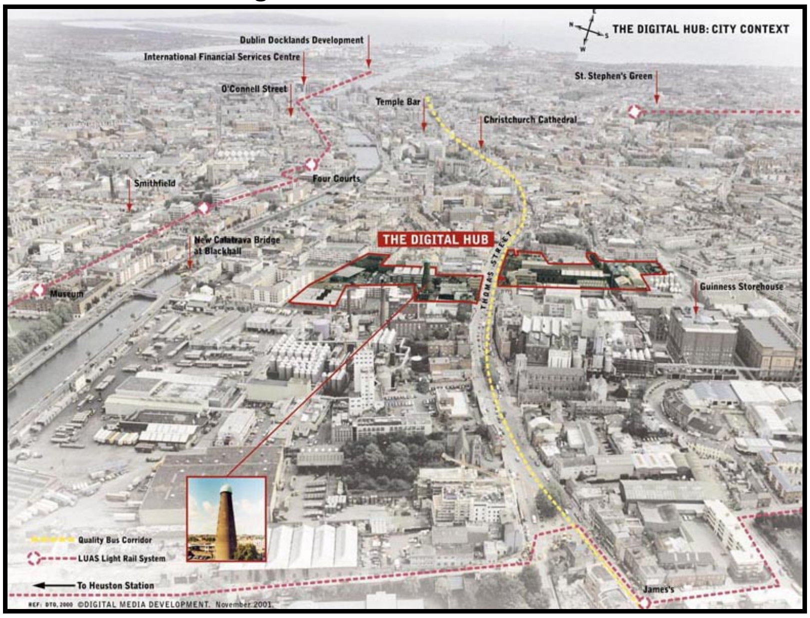


Source: CSO Online Database

The growth of the service sector has not been wholly organic however; rather it has been heavily influenced by state intervention with central government identifying the knowledge intensive economy as the key driver of economic development. For instance, the Irish government has purposely sought to develop Dublin's financial services sector and has been quite successful in this regard. A central element to this strategy was the formation of a tax incentive zone within downtown Dublin, the Irish Financial Services Centre (IFSC). Established in 1987 with European Union approval, firms locating in the IFSC were taxed at 10 per cent until the end of 2005 (Redmond et. al., 2007, 57). A total of 450 international financial services companies are now located within the IFSC, with approximately 30,000 people employed there (*Ibid*).

More recently, government policy has promoted the expansion of the creative sector in Dublin though the establishment of the Digital Hub in 2001, an urban digital cluster in a part of Dublin city undergoing urban renewal. The Digital Hub seeks to create an international centre of excellence for knowledge, creativity and innovation focused on digital and technological enterprises and encompasses an area of 3.7 hectares close to Dublin's city centre (Bayliss, 2007) (See plate 4.1). It is managed by the Digital Hub Development Agency (DHDA), an Irish government agency which functions as a mediator between the various government bodies responsible for urban and national economic development. The DHDA works in conjunction with Dublin City Council, Enterprise Ireland and the Industrial Development Authority to attract and support start-up companies. While in 2005 the Digital Hub housed over 50 national and international creative companies, the number had increased to 72 companies in 2006 (The Digital Hub, 2006; Redmond, *Ibid*, 54). Such interventionist strategies which seek to develop agglomeration economies are by no means outdated, as exemplified by the recent publication of the *'Economic Development Action Plan for the Dublin City Region'* (DRA, 2009, 21), as well as the forthcoming publication *'Developing an Enterprise Strategy for the Dublin Region' (Fitzsimons Consulting, 200, unpublished)*, with both reports recommending the development of 'key economic growth clusters' in the Dublin city region and the further development of the IFSC.

Plate 4.1 - Dublin's Digital Hub



Source: www.thedigitalhub.com

The government's interventionist approach towards the development of favourable conditions for creative knowledge industries has achieved relative success given that Ireland – a relatively small European state – is now the largest exporter of software in the world, as well as being a relatively important hub for financial services (Redmond et. al., 2007). However, several academics (Bayliss, 2007; Mugnano et. al., forthcoming) have questioned the application of such entrepreneurial strategies to the creative sector given that some of the most creative regions in the world have developed successfully in the absence of any policy intervention (e.g. Milan) (see chapter 5). Overall however, the foundations of Dublin's successful financial district and software industry have been built upon many decades of government intervention, coupled with the adoption of increasingly entrepreneurial approaches to urban and economic development throughout the city region. The resulting effect has been the creation of a critical mass of specialised and highly skilled creative knowledge jobs in the city relative to the rest of the country.

The primacy of Dublin with regard to its critical mass of skilled employment opportunities emerged as a significant regional strength from the perspective of creative knowledge workers during the course of the research previously carried out. Migrants and employees within the creative knowledge sector generally perceived Dublin as being the only realistic location in terms of securing suitable job opportunities in their respective fields.

Although the critical mass of employment opportunities emerged as a key regional asset in terms of attracting and retaining creative knowledge workers to the city region, it is important to acknowledge that it is not only the availability of employment opportunities that is considered important to creative knowledge workers, but also the availability of employment at a significant level of expertise. From the foregoing contextual analysis, coupled with the findings of the research, Dublin's employment market appears relatively robust in this regard given central governments active promotion of clusters of specialised, skilled and high value added firms in their quest to achieve comparative economic advantages in the region.

Despite the foregoing analysis focusing on the capacity of Dublin to attract creative knowledge workers on the basis of the availability of employment opportunities in the region, it is important to acknowledge the role of such conditions in the retention of the creative knowledge labour force. Although the importance of employment opportunities as a retaining factor was stated less explicitly than its role as an attracting factor during the course of the research, many respondents did indicate that the loss of employment would be a motivating factor for them to relocate from the city. This is perhaps an obvious conclusion to draw from the research given that creative knowledge workers are unlikely to be able to stay in a place without the ability to earn a living. Scott (2006,11) succinctly illustrates this point by stating that 'any city that lacks a system of employment able to provide these individuals with appropriate and durable means of earning a living is scarcely in a position to induce significant numbers of them to take up permanent residence there, no matter what other encouragements policy makers may offer'. In line with Scott's (2006) argument, the findings of the research reveal that the key to attracting and retaining creative knowledge workers in Dublin lies within the production system, and not the realm of consumption as Florida (2002) would otherwise claim (see section 4.5).

Furthermore, the research carried out previously reveals a tentative link between the retention of employees in a city and their respective income levels, whereby those on middle income levels appear more likely to leave the city. Although salaries are relatively high in Dublin compared to other similarly sized countries within the EU, it remains to be seen as to what the full impacts of the economic downturn will have on the income levels of creative knowledge workers moving forward. Given the anecdotal evidence of pay cuts and jobs losses across the public and private sector at large over the past twelve months, it would appear that the capacity of Dublin to attract and retain creative knowledge employees in Dublin on the basis of employment opportunities and salary levels is uncertain at present.

The foregoing analysis indicates that the continued creation of employment opportunities with sufficient levels of expertise and income is a vital prerequisite in terms of attracting and retaining a robust creative knowledge labour force throughout the city region. In this regard, the future capacity of Dublin to attract and retain workers is perhaps dubious in light of the current economic downturn. The recently published Quarterly National Household Survey (Q2, 2009) reported an 8.2 per cent drop in employment levels over the past twelve months. Although such figures are not exclusive to the creative knowledge sector, they indicate the scale of Irish job losses and the volatility of the national economy at present. Such fears were raised briefly by migrants in the research previously carried out, although it is probable that higher levels of concern would have been expressed regarding job security had the full impacts of the global financial crisis been fully realised at the time the interviews were conducted (i.e. February/March 2008). Overall Dublin’s employment market has been an important regional asset in terms of its ability to attract and retain creative knowledge workers in the region. However, the future capacity of the region to anchor talented creative knowledge workers remains uncertain given the volatility of the economy at present and the direct impact that this is likely to have on the generation of employment opportunities in the short to medium term.

4.4.5 Dublin’s economic dominance

Dublin’s dominance in the national economy appears to be a regional asset in terms of its capacity to facilitate the future development of a robust creative knowledge sector. Dublin has always been the commercial, political and cultural centre of Ireland and at present the city region accommodates approximately 80 per cent of government agencies, more than 70 per cent of headquarters (HQ) of the major public and private companies, as well as the majority of HQ operations of Irish financial institutions (Williams and Shields, 2002). Although Dublin has always been a dominant player in the country’s economic fortunes, the unprecedented period of economic growth observed over the past decade has reinforced Dublin’s primacy even further, with the majority of recent inward flows of foreign direct investment (particularly in the service sector) being channelled into the region.

In light of the region’s economic dominance, the National Competitiveness Council (NCC) has identified Dublin as Ireland’s only internationally competitive city region and, as such, its continued success is considered critical for the performance of the entire economy (DRA, 2009, 6). Much of the region’s recent growth has been fostered by the country’s economic strategy at large, which has focused on creating an attractive financial environment for investors, with many lucrative opportunities being made available in the Dublin region (e.g. IFSC, Digital Hub, Tax Incentive Renewal Areas etc) (Redmond et. al., 2007). More recently, there has is an explicit desire to further develop ‘the Dublin City Region as the engine driving Ireland’s economy’ (DRA, 2009, 14).

Dublin’s economic dominance appears to provide Dublin with a distinct advantage relative to the rest of the country given the critical mass of companies and services that are located in the region, with roughly two thirds of the country’s financial services and banking activity based in the capital. Indeed, the MasterCard Centres of Commerce Index (2008) recognised Dublin as the 31st most influential business centre in the world, whilst it ranked seventh just behind New York under the category ‘ease of doing business’(NRA, 2009, 8). It is worth pointing out that the creative industries are equally dominant in the region. The primacy of Dublin in this regard appears to be a particularly important motivating factor for creative knowledge firms’ decision to locate in the city region, with Dublin appearing to be the only realistic option in terms of location choice in Ireland. This is particularly true of export orientated firms.

Almost all of the managers interviewed within the creative and knowledge intensive industries stressed the importance of Dublin, particularly the city centre, in terms of its accessibility to clients, supporting services and its expansive market indicating the importance of clusters and agglomeration effects to creative knowledge firms. This appeared to be of relatively equal importance to creative and knowledge firms alike, although slightly more emphasis was placed on such benefits by knowledge intensive firms, indicating the continued importance of face-to-face contact.

At a more micro-level, it appears that being in close spatial proximity to clients and supporting services is an important consideration in determining the specific location of creative knowledge firms within the city region itself. Such findings from the research correlate with the literature based on the ‘new economy’ in general, whereby sectors in new economy are considered to have a ‘marked propensity’ to cluster not only in specific cities within the global economy, but to also ‘assume geographic expression in the form of specialised location clusters’ (Scott, 2006:11; Murphy and Redmond, 2009).

Having regard first to the spatial orientations of the creative sector in Dublin, the importance of localised clusters is clearly identifiable from the clustering of relatively small media (i.e. TV and film) related activities in the general vicinity of the national broadcaster to the south of the inner city. Such spatial tendencies conform to Scott’s depiction of the ‘new economy’. In referring to the characteristics of the new economy, Scott (2005 as cited in Scott 2006:5) points out that networks of firms exist, typically dominated by big firms that play a role in financing and coordinating the activities of large numbers of small and medium sized units that typically constitute a ‘localised web of interrelated products’. Evidence of large numbers of small creative firms in the television and film sector in the vicinity of the national broadcaster strengthens Scott’s (2006) depiction of the spatial behaviour of companies in the ‘new economy’. Similar evidence can also be seen in the case of the gaming and electronic publishing sector, whereby a large number of small firms are locating in the ‘Digital Hub’ to the west of the inner city. Despite Bayliss (2007) highlighting the varying problems associated with the development of the ‘Digital Hub’, in many ways, the growth of creative knowledge clusters has been cultivated directly by central government’s interventionist policies (i.e. Digital Hub, IFSC etc). By way of contrast however, the agglomeration of media based industries in the south of the city in the vicinity of the national broadcaster has evolved much more organically due to the natural tendency for firms to locate on the basis of agglomeration benefits. Such patterns are not exclusive to creative firms per se, with managers of knowledge intensive companies expressing that such companies also tend to favour central locations in close proximity to clients and supporting services.

From the research carried out previously by Murphy et. al. (2008) it would appear that spatial proximity is important to companies in terms of facilitating the establishment of collaborative links within clusters in order to specialise their respective outputs and gain comparative advantages. Indeed, Scott (2006) highlights that such networks often operate in a manner that Piore and Sabel (1984) have called flexible specialisation in which producers focus narrowly on the type of output. The creation of these agglomeration economies bring benefits to those involved in terms of their ability to share infrastructural facilities, matching specialised input and output as well as information exchange (Durantion and Puga, 2004 as cited in Scott, 2006:9). However, it must be acknowledged that collaborative networks within the creative knowledge sector can also extend far beyond the boundaries of the city. In particular, the research revealed that such networking and collaborative links were especially evident in the case of creative firms where it seems that the establishment of international collaborative links are not uncommon.

Despite Dublin’s economic dominance in general, and its capacity to accommodate specialised clusters of creative knowledge industries, it is worth highlighting that recent attempts have been made by central government to foster more balanced regional development throughout the country through the development of various gateways and hubs (see NSS[1], 2002). It essentially attempts to redress the imbalance of economic activity in the mid-east region relative to the rest of the country. However, the research shows that the economic dominance of Dublin is in fact an asset to the region (as well as the country at large) in terms of its ability to attract and retain specialised creative knowledge firms that require a critical mass of clients, supporting services and specialised labour. Furthermore, it is likely that reducing the region’s national dominance in this regard would impact negatively on Dublin’s ability to compete with other European and international cities for increasingly mobile flows of global capital, as efforts to disperse economic activity more evenly throughout Ireland could potentially dilute the already established critical mass and clustering of creative knowledge industry in the city region. The National Economic and Social Council (2008, xx) highlights such concerns by indicating that strategies such as those adopted in the NSS can create a ‘degree of false opposition between Dublin's development and that of the other gateways when developments in the latter are exclusively benchmarked against the former’. Essentially, the development of Dublin should be based on comparisons with other European metro-regions, not other small Irish cities such as Cork or Limerick. Indeed, NESC (2008:197) outlines that the gateways identified in the NSS (if properly understood) should be considered ‘not in a second division to Dublin, but playing a different sport’ due to their

[1] Ireland’s *National Spatial Strategy 2002-2020* (NSS) is a twenty year planning framework designed to achieve a better balance of social, economic, physical development and population growth between regions.

difference in scale, their varying regional strengths, as well as their potential to exploit complementarities from Dublin.

The foregoing shows that the Dublin region's critical mass of clients, supporting services and its expansive market relative to the rest of the country is a key regional asset in terms of its future ability to further develop the creative knowledge sector. The emergence of specialised clusters throughout the city is depictive of the nature of the 'new economy' in general, whereby creative knowledge firms collaborate to increase their respective levels of specialised output and thus their comparative advantage. Whilst some forms of economic clustering have occurred organically (i.e. the media cluster in southern part of city), others have been fostered by interventionist government policy (with varying degrees of success i.e. The Digital Hub and the IFSC), demonstrating that that the promotion of a knowledge intensive city has become a key part of the national economic discourse (Redmond et. al., 2007). Whether or not local governance structures should continue to pursue such interventionists approaches to the region's development remains to be seen given that some of the world's most successful creative city's (i.e. Milan) have tended to evolve more organically without any interventionist government policy (see Mugnano et. al., forthcoming). Such arguments are developed further in chapter five.

4.4.6 Personal trajectories

Given the pertinence of 'personal trajectories' as a core attracting and retaining factor in the decision-making process of the various target groups analysed (see chapter three), this factor merits attention in any analysis of the 'hard' factors at play throughout the Dublin region. The factor classified here as 'personal trajectories' encompasses a wide range of personal factors which serve to attract and retain people in a place (i.e. born here, family lives here, proximity to friends, partner moved here etc). Such considerations are representative of classic 'hard' location factors which have governed the location decision-making process of individuals for a long time. It is worth pointing out, that despite the importance of 'personal trajectories' in attracting and retaining creative knowledge workers and indigenous creative knowledge firms, it is acknowledged that this factor is by no means Dublin-specific. Nonetheless, it is considered warranted to highlight this factor's role and contribution to the future capacity of Dublin to accommodate a robust creative knowledge sector.

As previously discussed in chapter three, the role of personal trajectories emerged as being the most pertinent factor influencing creative knowledge employees and migrants' initial decision to locate in the Dublin region. The most dominant reason in terms of respondents' respective personal trajectories was that they resided there all of their life, family members live in the region or because family of a spouse or partner are from Dublin. In the case of managers of creative knowledge firms, the relative weight attributed to the issue of 'personal trajectories' as an attracting factor to the Dublin region was considerably less than was observed in the case of employees and transnational migrants. However, as suggested in the previous chapter, the lack of emphasis placed on this issue is likely to be attributed to the fact that many of the managers (particularly those of indigenous firms) subconsciously factor personal trajectories into their decision making process, and thus failed to explicitly state its importance during the course of the interviews undertaken.

Personal trajectories will continue to play a significant role in the retention and attraction of creative knowledge workers and firms to Dublin. As such, this factor is likely to serve as a significant asset in terms of the future capacity of Dublin to foster a robust creative knowledge sector moving forward as personal trajectories, whether consciously or sub-consciously, influence creative knowledge workers, migrants and firms to locate and remain in the region. Once again, it is important to acknowledge that this is not a regional strength per se. Rather, it is a classic factor influencing the location decision making process of individuals the world over and unlike the other factors considered in the analysis; it does not necessarily give Dublin a distinct advantage over other European cities in this regard.

4.5 'Soft' conditions

Although 'hard' production related factors emerged as being of core importance in determining the overall attractiveness of the city region in terms of its capacity to attract (and indeed retain) creative knowledge workers and firms, considerable regard with respect to the city's 'softer' conditions is considered nonetheless warranted given the findings of the research previously undertaken. Although the relative importance of 'soft' factors varied somewhat depending on the target groups, as well as their respective sectors (see chapter 3), the research findings reveal that some of the city's 'softer' conditions are impacting positively on the capacity of the region to accommodate a robust creative knowledge sector in the future (see summary matrix 2).

Some of the more recent publications relating to the 'new economy' and Florida's thesis have raised concern over the ambiguity of terms associated with the 'creative class' vocabulary. In particular, Murphy and Redmond (2009) highlight the difficulty in determining precisely what constitutes 'soft' factors given their largely intangible nature (i.e. 'buzz element' of cities, social environment etc). Florida (2002) focuses on physical aspects such as bars, restaurants, cafés and other semi-public spaces that create attractive 'people climates', whilst others feel that 'soft' conditions broadly relate to the 'overall living environment' of a place such as the 'cultural and leisure facilities, the city environment and the level of tolerance and openness within cities' (Murphy and Redmond, 2009, 74). The 'soft' conditions focused upon in the following analysis broadly relate to the social environment of the city, paying particular attention to the provision of leisure and cultural facilities in the Dublin region. The following is by no means an extensive evaluation of Dublin's 'soft' conditions, but rather represents the core issues raised during the course of the research with regard to the 'softer' aspects of the city's environment.

4.5.1 Social environment: Leisure and cultural facilities

Although Dublin has been traditionally well recognised for its range and quality of pubs, the city has developed considerably over the past decade in terms its provision of leisure and cultural facilities. New centres of activity include the O2 arena, the refurbished Croke Park Stadium, the National Concert Hall, the soon to open convention centre, the Libenskind theatre, as well as the Lansdowne Road Stadium which is undergoing a total refurbishment at present (DRA, 2009, 11). Dublin also accommodates a significant level of prime retailing areas in both the city centre itself, as well as several regional shopping malls including Dundrum Town Centre in the south of the city, Liffey Valley to the west, as well as the Blanchardstown Centre to the north. Furthermore, Dublin is endowed with many natural amenities such as the Dublin Mountains, the Phoenix Park, the coastal stretch from Howth Head to Bray Head, whilst it also enjoys relative ease of access to the region's countryside.

The improved provision of leisure and cultural services in the city region in recent years is in part reflected by the 175 per cent increase in visitor numbers to Dublin from 1990 to 2003 (Deegan and Moloney, 2005). The growing number of entertainment and leisure activities in the region has not only increased the attractiveness of Dublin to tourists, but also for the city's resident population at large. Table 4.1 overleaf was produced by Murphy and Redmond (2008, 62) to provide a rough indication of the level of leisure facilities currently available in the Dublin Area relative to the rest of the country. However, it is important to note that such figures are likely to be underestimated as the information below was gathered using the Golden Pages website, which does not necessarily list all leisure facilities (*Ibid*).

Table 4.1 - Number of leisure facilities located in Greater Dublin Area, 2006

	State	**GDA**	**% in GDA**
Number of theatres	164	105	64 %
Number of restaurants	2,542	1,215	48 %
Number of Cafés*	97	65	67 %
Number of Discotheques	20	6	30 %
Number of cinemas	98	33	34 %
Number of art galleries	214	84	39 %
Number of Pubs	5,815	1,411	24 %
Number of Festivals	146	23	16 %

* - excluding internet cafés

Source – www.goldenpages.ie *as produced by Murphy and Redmond, 2008, 62*

The increased provision of social and cultural facilities in Dublin since the 1990's has in part been demand driven due to increases in the levels of disposable income that were brought about by Ireland's 'economic boom'. However, there is also evidence to suggest that some improvements to the 'soft' consumption related conditions of the city were largely policy driven. In particular, recent years has seen the adoption of cultural promotional strategies such as the Dublin City Business Association's (DCBA) 'Make the City Yours' campaign, whilst other attempts to raise the profile of the city include successful bids to host international events such as the Europa League (UEFA Cup 2011) and The Tall Ships (2012). Furthermore, Lawton (2008) highlights that physical alterations throughout the city have been used by public or quasi-public bodies to create a city that is 'dominated by a specific urban image associated with up-market consumption patterns and the tourist industry' (*Ibid*, 8). The foregoing is reflective of the desire for 'iconographic distinction' (differentiation) and 'environmental standardisation' (uniformity) in the Dublin region, wherein particular buildings, monuments and sculptures are used as a means of making the city 'in some way different to other cities, while at the same time attempting to promote public spaces which can be experienced in a similar way to other western cities' *(Ibid).*

Figure 4.3 - DCBA's 'Make the City Yours' Promotional Campaign Logo

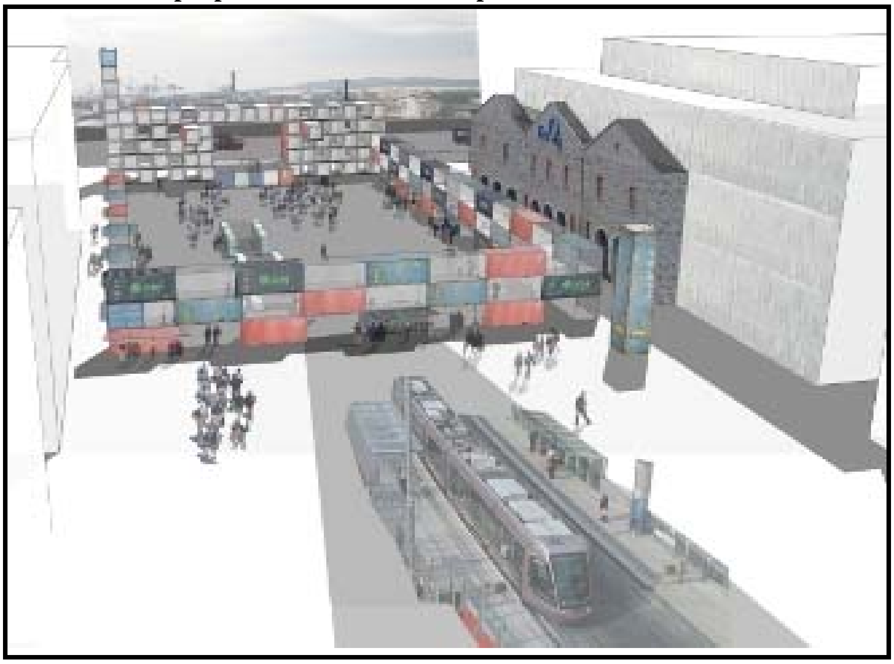
Source: www.dublinks.com

The aforementioned strategies are amongst a wide range of initiatives that are reflective of 'place making' and 'city boosterism', all of which have the ultimate objective of raising the international profile of the city to compete for highly mobile flows of international capital. Scott (2005) and Peck (2006) consider such policy approaches to be characteristic of the 'new economy' in general. Indeed, a recent publication by the Dublin Regional Authority (2009, 14) succinctly reveals the entrepreneurial approach of local governance structures with the region's new 'Economic Action Plan' (DRA, 2009, 15) expressing an explicit desire to 'develop the Dublin brand and a marketing strategy to raise Dublin's international profile''.

The policy direction being adopted in Dublin is akin to Florida's (2002) recommendation for city officials to invest heavily in the provision of high quality urban environments that are rich in cultural and social amenities as they will attract talented individuals and investment (Scott, 2006). Essentially, Florida (2002c, 749 as cited in Murphy and Redmond, 2009, 71-72) postulates that cities with 'vibrant music scenes, street level culture, active nightlife, and other signifiers of being 'cool' are better positioned than those without in terms of their ability to attract 'talented' individuals', the presence of which ultimately stimulates regional economic growth. For Florida then, the key to attracting and retaining creative knowledge workers lies in the sphere of consumption (Scott, 2006).

Many academics (Peck, 2005; Scott, 2006; Murphy and Redmond, 2009) have highlighted that Florida's 'urban toolkit solutions for cities' has quickly become the policy choice of many 'leftish policy makers' largely because such consumption orientated strategies 'are feasible within the parameters of local electoral horizons and fiscal constraints' and are generally representative of 'low-cost, feel-good' strategies (Peck, 2005, 751). The recently proposed 'Parlour' development in Dublin's Docklands is testament to the penetration of consumption based 'boosterist' schemes by policy makers in the Dublin Region, with Dublin City Council referring to this proposed cultural quarter as 'the new 'living room' of the city' (www.dublincity.ie/planning). The winning design strategy for the proposed civic space is based on the re-use of shipping containers as the main building components of the design which can be used flexibly. Although this form of development is by no means common, it is worth highlighting that many of the global cities (i.e. New York, London, Boston) have already approved and developed similar projects. Such duplication is indicative of the desire for a marriage of 'spatial distinction' and 'environmental standardisation' (Lawton, 2008).

Plate 4.2 - The proposed 'Parlour' Development in Dublin's Docklands



Source http://dublin.metblogs.com/ *2009/08/08/the-palour-point-village*

Bearing in mind the penetrating influence of Florida's arguments on the actions of policy makers in Dublin, it is important to draw upon the principle findings of the research that were presented in chapter three. Essentially, the research findings support Scott's (2006) point wherein enticing creative knowledge workers to reside in the city on the basis of favourable 'soft' conditions alone is a futile exercise if appropriate employment opportunities are not first in place. As pointed out by Murphy and Redmond (2009, 71), such consumption orientated strategies as recommended by Florida *(Ibid)* act almost as if such individuals operate and exist 'independently of the rest of the economy'. This exact point has been exemplified by the findings of the research given that no creative knowledge workers or transnational migrants referred to city's social and cultural environment as a core motivating factor in their initial decision to live in Dublin and rather cited the importance of employment and other traditional 'hard' location factors. Nonetheless, it must be highlighted that the 'buzz' or social atmosphere of the city emerged as a significant regional asset, particularly when considered in terms of its potential to retain the creative knowledge sector. Indeed, the strength of the region's social and cultural environment was generally referred to as being an important (albeit largely a secondary) factor in their decision to locate in Dublin. However as seen in chapter three, the relative importance of the city's social and cultural facilities in terms of attracting and retaining creative knowledge firms and workers varied somewhat between and within the target groups analysed.

Employees and transnational migrants generally viewed the region's leisure and cultural facilities in a favourable light. However, as mentioned above, the 'softer' assets of the region did not play any significant role in the initial attraction of creative knowledge workers to Dublin, with traditional 'hard' factors featuring far more prominently. Despite the apparent strength of the city region in terms of its cultural and social environment, there did appear to be a certain degree of dissatisfaction on the part of creative knowledge employees with regard to the city's sport facilities, as well as the availability and quality of public spaces throughout the region. Furthermore, reference was made to the narrow range of leisure facilities on offer in the Dublin region, with some migrants commenting on the domination of drink related social activities. Nonetheless, it is suggested that given the overall high levels of satisfaction expressed with regard to the cities social environment, the strength of the city's leisure and cultural facilities is likely to contribute to positively in the retention of creative knowledge workers in the region.

Having regard to companies in the creative knowledge sector, considerable deviation emerged between firms in the knowledge and creative sector respectively in terms of the relative importance placed on the city's social environment in determining their actual location. The social and cultural environment of city was generally viewed as an important regional asset influencing in the spatial behaviour of creative firms, with many firms indicating that the surrounding social environment played a significant role in their motivation to locate in a particular area. By way of contrast however, the provision of leisure and culture facilities and the general social environment of the city appeared to be an insignificant factor for the location patterns of knowledge intensive companies. However, as mentioned in the previous chapter, this observation may be attributable to the fact that all of the firms interviewed within the knowledge sector were indigenous and as such it is unlikely to be the case that they were attracted to the Dublin region on the basis of the region's 'soft' attributes (Murphy et. al., 2008).

It is worth pointing out that the various stakeholders researched were more explicit in their opinion on the role of 'soft' conditions in the city, with many considering the social environment of the city, particularly the provision and quality of leisure facilities, as being an important regional asset in terms of attracting and retaining creative knowledge firms in region. However, it must be reiterated that Murphy and Redmond (2009) found that stakeholders tended to stress the importance of such conditions only in situations where 'hard' factors were adequate in more than one competing city. In particular, the city's 'soft' attributes tend to be important in terms of their ability to 'sell' the city to senior personnel who are vital in the initial development of a branch plant. Essentially, foreign companies are often interested in selling the 'soft' factors of a city to their senior executives in order to entice them to relocate. Such findings are illustrative of the penetration of Florida's ideas into the mindset of various stakeholders, many of whom place considerably more importance on the 'soft' consumption related factors than seen in the case of the target groups.

The foregoing contextual analysis, coupled with a brief analysis of the research findings indicates that Dublin is relatively well positioned with regard to its social environment in general, and in particular, the provision of cultural and leisure facilities. The quantity and quality of such facilities in Dublin appears to be perceived in a positive light by most. The strength of the region's cultural and leisure facilities is largely attributed to the fact that Dublin is endowed with strong historical and cultural associations (Phillip and Kearns, 1993 as cited in Scott, 2006, 10) which have more recently been built upon by entrepreneurial policies that promote particular forms of social and cultural development in the competition for increasingly mobile flows of investment capital. However, in the pursuit of consumption based urban society that is considered to attract creative knowledge workers, there has been a degree of neglect by policy makers regarding what people really want. For instance, the research raised concern surrounding the levels of drink related social activities in the city, the lack of basic sports facilities, as well as the provision of basic public services in general.

Furthermore, the continuous pursuit for a robust social and cultural environment raises serious concerns regarding the social equity and distributional effects of what has become to be regarded as ‘cappuccino urban politics with plenty of froth’ (Peck, 2005, 760), as such strategies essentially cater for what policy makers think the creative middle class want rather than society at large (Malanga 2004 as cited in Peck, 2005). Furthermore, despite such conditions adding to the attractiveness of the region for creative knowledge workers in particular, it is extremely difficult to determine the degree to which such conditions enhance the capacity of the city region to further develop the creative knowledge economy moving forward. As Peck (2005, 755) warns ‘street level cultural innovation and conspicuous consumption may just as easily be consequences of economic growth, rather than causes of it’. Regardless of such warnings by members of the academic community, the persistence of such consumption-based development strategies can be clearly seen in the Dublin Regional Authority’s (2009, 18) recent publication wherein the importance of ‘café culture, arts and music, outdoor activities and public spaces’ in terms of attracting investment and capital is explicitly stated.

4.6 Conclusion

The foregoing chapter has provided a general evaluation of the core strengths and weaknesses influencing the future capacity of the Dublin region to accommodate a robust creative knowledge sector in the future. The conditions analysed have been derived from the research undertaken by the various target groups, whereby the core factors influencing the decision making process of target groups have been identified.

Although Kovács et. al. (2007) positions Dublin well in European terms, the research findings themselves highlight that a range of strengths and weaknesses are at play in the region. Much of these conditions, be they favourable or weak, can be classified as traditional ‘hard’ location factors. On a positive note, the strength of the third level education sector in the region coupled with the availability of a highly skilled and diverse labour pool has emerged as a key attracting factor for creative knowledge firms’ initial decision to locate in the Dublin region. Furthermore, the availability of job opportunities at suitable skill levels in the creative knowledge sector is a significant regional strength given the importance placed on such condition by employees and migrants in the sector. In terms of the ‘soft’ consumption related conditions of the city, the region was viewed in a very positive light by most, although some concerns were raised surrounding the dominance of the drink culture in the city, coupled with the lack of sporting facilities. Conversely however, many of the cities ‘hard’ production related factors appear to be impacting negatively on the future capacity of the region to foster a robust creative knowledge economy. For instance, the region’s public and private transport infrastructure system is a significant regional drawback from the perspective of creative knowledge workers, migrants and firms respectively. Similarly, the generally high cost of living, as well as the accessibility problems associated with the region's housing stock, is threatening the ability of creative knowledge workers and migrants to reside in the region. Such a phenomenon is also directly undermining the economic viability of creative knowledge firms given the higher wage demands of creative knowledge workers in the Dublin region in an attempt to offset the high cost of living incurred by them. Herein lies the core conclusion to emerge from the research. Essentially, policies are becoming increasingly orientated towards the relatively well developed 'soft' consumption orientated conditions of the region, rather than the 'hard' elements. However, it is clearly the 'hard' conditions of the region that require attention and significant investment given their core importance in terms of attracting and retaining creative knowledge workers, coupled with the fact many 'hard' aspects of the city have been identified as regional drawbacks.

Despite the clear problems associated with the adoption of Florida's 'urban toolkit solutions' in the hope of delivering consumption related regional economic growth (Peck 2005), it is likely that the adoption of such strategies will nonetheless continue in an attempt to redress the economic downturn. This direction is explicitly stated in the Dublin Regional Authority's Action Plan (2009), as well as various other proposals throughout the city (e.g. The Parlour development etc). However, as discussed previously, such strategies fail to recognise the need for economic growth to have a production based foundation, as well as the need to address the problems associated with the various 'hard' conditions of the city. As pointed out by Scott (2006:11), any viable development programme with the objective of fostering the development of a creative knowledge economy 'must deal – at a minimum – with setting up a local production system'.

5 CONCLUSIONS

5.1 Overview

The primary objective of the current work package has been to understand the spatial orientations of the target groups, as well as the strong and weak points of the region having regard to its capacity to accommodate a robust creative knowledge economy. The analysis initially focused on determining the core factors influencing the spatial behaviour and orientations of the various target groups, as well as the differences between them in terms of the relative weight they attribute to such factors. From this initial filtering process, the aim was then to evaluate the future capacity of Dublin to accommodate a creative knowledge economy by analysing the core strengths and weaknesses at play throughout the region, as identified by the various target groups. It is important to highlight that the conditions evaluated in chapter three and four respectively merely represent the core factors influencing the spatial behaviour of creative knowledge workers and firms, as well as the attractiveness of the region more generally. A more comprehensive analysis of the wide range of diverse and interrelated factors at play can be found in work packages five to seven respectively (see Murphy and Redmond, 2008; Murphy et. al., 2008; Lawton et. al., 2009).

The following chapter seeks to briefly discuss the core findings presented in this work package within the context of the literature relating to the 'new economy' (Scott, 2006) and the 'creative class' (Florida, 2002). In addition, a reflection on the development strategies and policies being perused in the region will be provided, as well as possible policy recommendations where relevant. The conclusions drawn from the report will also be briefly discussed in light of the changed economic conditions currently facing the Dublin region in order to provide an up to date analysis of Dublin's potential to accommodate a robust creative knowledge sector in the short to medium term. The chapter includes a S.W.O.T analysis to provide a succinct summary of the core issues to arise from this synthesis report relating to Dublin's overall competitiveness.

5.2 Dublin's 'New Economy'

There is a general consensus in the academic literature that advanced capitalist societies are undergoing a transformation from an economic order associated with Fordist mass production systems towards a new economic order (Murphy and Redmond, 2009). There have been various attempts to describe and term this new order, the most recognised of which include 'post-Fordism' (Albertsen, 1988), 'flexible accumulation' (Harvey, 1987), and the 'new economy' (Scott, 2006). Although this 'new economy' is difficult to characterise, Scott (2006) identifies key features that underpin this new order; namely a mobile and flexible labour market, extended networks of firms that collaborate to produce specialised outputs that cater for increasingly individualistic demands, which in turn create comparative advantages.

In chapter three, the organisation of labour and the role of networks were explored in some detail. The findings indicate that many of the characteristics identified by Scott (2006) are identifiable in Dublin's creative knowledge sector. For instance, there is a clear tendency for work in the creative knowledge sector to be organised around the concept of teams. In accordance with Scott's (2006) depiction, these teams tend to work on specific projects in order to produce collectively more synergistic outcomes in terms of the products and services offered by the company. Such arrangements are generally seen to enhance the variety, stimulation, and self-responsibility attached to individual jobs, which in turn provide employees with higher levels of job satisfaction.

Scott (2006) also suggests that the creative economy is characterised increasingly by highly mobile workers on short-term and fixed employment contracts. However, this does not appear to be the case throughout the creative knowledge sector as a whole, with the majority of workers and migrants researched having full-time permanent contracts. Conversely however, there does appear to be considerable evidence of employees on short-term and fixed employment contracts in Dublin's television and film sector, although this is largely attributable to the cyclical nature of the industry. In terms of staff retention, there also appears to be relatively low levels of staff turnover in the sector. However, this may be attributed to the fact that many companies in Dublin's creative sector go to tremendous measures for the purposes of staff retention (see section 3.5.1).

Scott (2006) argues that high levels of instability and risk prevail the 'new economy' and in response to this, dense networks of specialised and complementary firms develop to produce product differentiation (without the usually inefficiencies), thus creating competitive advantages. The importance of networking within the creative knowledge sector was clearly identifiable during the course of the research with formal collaborative links being used to foster product improvements through an amalgamation of different specialisms. In the creative sector, formal collaborative links often extend to being international in scope regardless of firm size, whereas knowledge firms' links tend to be more local in scope. Formal collaborative links are commonly established at a personal level in both the creative and knowledge sectors. Such findings coincide with Scott's (2006:7) observation that 'workers tend to be inveterate joiners of professional organisations and other work-related associations, mostly to gain knowledge about fluctuating job opportunities but also to a keep abreast of new developments in their field'.

Informal links are also considered essential to Dublin's creative knowledge employees in terms of career development. This adds significant weight to Scott's (2006:7) notion that careers in the creative sector are 'typically focused on the building up of personal reputation and the acquisition of multiple useful contacts'. However the low levels of staff turnover reported by creative knowledge firms suggests that this is not due to the job-hopping habits of creative knowledge workers as Scott (*Ibid*) would suggest. Furthermore, it emerged that many creative knowledge workers (particularly in the creative sector) find that their social lives are a natural extension of their working lives with their wider social network being inseparable from their work environment.

The foregoing indicates that many of the attributes that Scott *(Ibid)* considers as being characteristic of the 'new economy' can be seen in Dublin's creative knowledge sector. However, there are some important deviations from Scott's (*Ibid*) assumptions, namely relating to the levels of job mobility and flexile working contracts in this new economic order. However, the organisation of labour more generally and the importance of collaborative links in the case of Dublin's creative knowledge sector bears considerable resemblance to Scott's (*Ibid*) depiction of the 'new economy'.

5.3 Central findings

Florida (2002) refers to workers in the 'new economy' as the creative class. In *The Rise of the Creative Class*, Florida's *(Ibid)* argument centres on what he refers to as the three Ts of economic growth - Technology, Talent and Tolerance, all three of which he considers prerequisites in the attraction of creative knowledge workers (Murphy and Redmond, 2009,71). The 'creative class' thesis essentially implies that the mere presence of creative workers in a city will lead to regional economic growth. As mentioned elsewhere in this report, many critics (Peck, 2005; Scott, 2006; Murphy and Redmond, 2009) argue that policy makers have welcomed Florida's theory with open arms given that such regional growth strategies are assumed to provide a quick-fix, relatively cheap solution to the problems of urban growth and development. Nonetheless, the emergence of the 'new economy' and Florida's (2002) 'creative class' thesis, have raised a number of questions regarding the role of 'hard' and 'soft' factors in the location decision-making process of creative knowledge workers and firms (Murphy and Redmond, 2009).

The previous two chapters, as well as the research more generally, demonstrates that despite Florida's (*Ibid*) claims, 'hard' factors remain of core importance in the decision-making process of firms and workers in their initial decision to locate in the Dublin region, with 'soft' factors generally being of secondary importance. Despite the prominence of classic 'hard' factors such as job opportunities, transport infrastructure, cost of living, as well as the skilled and diverse labour pool in the location decisions of the various target groups, it was in fact the 'hard' aspects of the city that received the most negative attention from respondents during the course of the research. In particular, high levels of dissatisfaction were expressed by virtually all target groups with regard to the city's transport infrastructure and the cost of living. By way of contrast, the city's 'softer' conditions were generally perceived as being regional strengths, although such features played a far less important role in motivating the target groups to locate in Dublin in the first instance.

The central findings of the research demonstrate a significant departure between Florida's *(2002)* assumption that creative workers and firms are increasingly drawn to places on the basis of a city's 'softer' attributes on the one hand, and what was actually found to be the case in Dublin's creative knowledge sector on the other. However, chapter four highlights that policies being actively pursued in the Dublin region at present are becoming increasingly orientated towards the sphere of consumption, or what Peck (2005, 760) refers to as 'cappuccino urban politics with plenty of froth'. Such strategies come in many variations but all include elements of rebranding the city and the use of boosterist strategies which tend to focus on physical and consumption orientated urban renewal (i.e. the development of ‘cultural quarters’, bars, cafes, plazas, galleries etc). However, the research findings presented clearly demonstrate that channelling investment towards the ‘softer’ conditions of the city is problematic given the disjoint that currently exists between the current direction of policy (i.e. towards ‘soft’ conditions) and where policy attention is actually needed (i.e. ‘hard’ conditions). Furthermore, critics have commented that such consumption orientated policies essentially cater for what policy makers think the creative middle class want, rather than the real needs of society at large (Malanga 2004). Evidence of such trends are already identifiable in the Dublin region with those on higher incomes expressing higher levels of satisfaction with the city than those on lower salaries (Murphy and Redmond, 2008). This raises serious concerns regarding the social equity and distributional effects of such development strategies. In the pursuit of cafes, bars, clubs and restaurants that cater for the ‘creative class’, there is a real threat that the city will become a privatised playground for skilled workers with above average income levels, thereby excluding the rest of the city’s residents.

The foregoing warns that consumption orientated policies should be pursued with a significant degree of caution, as ‘soft’ factors appear to play little to no role in the initial attraction of workers to the region, but also negate resources from where investment is needed most (i.e. infrastructure, housing, education etc). The investment of increasingly scarce resources into the ‘soft’ conditions of the region represents a significant opportunity cost to the city’s ‘harder’ elements which clearly require attention. Furthermore, such policies consider economic growth to be rooted in the sphere of consumption. This is a flawed assumption, as it fails to acknowledge that the region’s production base is the foundation of economic growth, which subsequently leads to consumption. As such, consumption orientated growth strategies lack a fundamentally sound economic basis. As Peck (2005:755) highlights, ‘street level cultural innovation and conspicuous consumption may just as easily be consequences of economic growth, rather than causes of it’.

In order to succinctly synthesise the core issues impacting (either positively or negatively) on Dublin’s future competitiveness a summary of the core strengths, weaknesses, opportunities and threats currently facing the Dublin region are provided here (see Table 5.1 overleaf). As discussed above, many of the regional weaknesses and threats relate to the ‘harder’ aspects of the city, whilst many of the ‘softer’ conditions are generally perceived as being relatively well developed. The opportunities identified have been highlighted on the basis that they have the potential to overcome the regional drawbacks identified by the various target groups or build upon the region’s exiting strengths where possible. Such an analysis provides a useful synthesis of the wide range of issues which require consideration in the derivation of future policy recommendations (see section 5.3).

Table 5.1 S.W.O.T Analysis

S.W.O.T Analysis: Dublin's Competitiveness
Strengths
- Well developed and highly regarded public education system, - High standards of third level education with high participation rates, - Critical mass of third level institutions in Dublin, - Skilled and diverse labour pool (c. 2 million in 2006), - Critical mass of employment opportunities at required skill levels, - Relatively high income levels, - Favourable working conditions (i.e. job satisfaction, social environment, contracts etc) - Clusters of economic activity in areas such as international financial services (i.e. IFSC), digital media (i.e. Digital Hub), general media (i.e. South of city near national broadcaster). - Entrepreneurial and pro-active governance structures, - Critical mass of clients and services in Dublin, - Dublin's expansive market. - Good business environment, - Evidence of networking and collaboration to foster specialisation and comparative advantages, - Pleasant social and cultural environment, - Extensive regional and international market (member of the E.U), - English speaking country, - Well established global supplier of software.
Weaknesses
- Radial public and private transport system, - Poorly developed public transport system relative to similarly sized EU countries, - High congestion levels, - Lengthy and complex commuting patterns, - Sprawling low density metropolitan region, - Inflated house prices relative to average industrial wages, - High cost of living in general (utilities, goods and services)
Opportunities
- Actively encourage indigenous start-up enterprises, - Develop the green economy to secure energy supply and stimulate economic growth, - Further develop the region's reputation as a global supplier of software, - Further establish the region as a centre of financial services, - Re-orientate the economy towards the exportation of goods and services, - Development of the 'Smart Economy', - Redress the region's transport problems via public transport provision and the integration of land use and transportation planning,
Threats
- Dominance on oil producing countries for the country's energy supply, - Lacking critical mass of labour to further develop the creative knowledge economy, - Policy makers channelling too much investment into 'soft' conditions of the city rather than 'hard' conditions, - Development of a very inequitable city region dominated on the one hand by high end creative knowledge jobs, and low grade on the other, - Too much reliance on F.D.I, - Vulnerable to economic restructuring in the global economy, - Further taxation measures to address the shortfall in the public finances, - Shrinking resources due to falling tax base in the current economic climate.

5.4 Future recommendations

It is considered important to highlight the radically altered economic context with which we are now faced in discussing Dublin's prospective ability to accommodate a robust creative knowledge sector. Over the past twelve months, Ireland's economy has shifted from being the envy of other countries throughout Europe and indeed the world, to one which has been heavily hit by the onslaught of the global economic crisis. The sharp downturn in Ireland's economic fortune since 2008 has been largely associated with the international credit crunch, a recession in our major trading partners, rising energy costs, adverse exchange rate movements and the severe correction of the national housing market (Government of Ireland, 2008, 26). The resulting effect has been a rapid rise in unemployment and rapidly deteriorating public finances, which are at present incapable of funding the day-to-day running of the country.

The economic circumstances that now face the country pose a significant threat to the future capacity of the Dublin region to foster a robust creative knowledge sector in the short to medium term. The Department of Finance's Supplementary Budget published in April 2009 has enforced a wide range of debilitating expenditure and taxation measures in order to redress the shortfall in the public finances. Many of these measures are not only reducing the disposable incomes of the general public, but are also likely to affect the competitiveness of the Dublin region from the perspective of the creative knowledge sector in particular due to lower productivity levels, as well as the regional economy more generally.

Despite the bleak economic picture at facing the Dublin region, a range of detailed policy responses are provided in appendix A. Such policy responses provide a range of specific means in which public resources can most effectively improve the competitiveness of the creative knowledge sector based on the findings of the research, the opportunities identified in Table 5.1 above, as well as the summary matrices presented in the previous two chapters. It is suggested that such strategies, if implemented properly, have the potential to increase the competitiveness of Dublin's creative knowledge regional economy as they specifically address how the strengths of the region can be built upon, and the weakness addressed (see chapter four). As such, considerably more attention is attributed to the potential of 'hard' investment measures rather than the 'soft' in improving Dublin's capacity to foster a robust creative knowledge economy. However, as the foregoing suggests, such measures will become increasingly difficult to implement given the country's deteriorating financial situation.

Overall however, the synthesis of the previous three work packages demonstrate that the bulk of the region's increasingly scarce resources should be channelled into the 'hard' elements of the city to simulate growth via the region's production base. Policies and investment in certain areas such as the region's physical transport infrastructure are quite obvious, however the manner in which other 'hard' aspects of the city can be improved are rather more ambiguous. For instance, it remains unclear as to whether city authorities should actively encourage the development of economic clusters by interventionist government policy. Mugnano et. al. (forthcoming) have investigated the policy approaches adopted in a small number of European cities (i.e. Toulouse, Milan and Dublin) in order to establish whether different approaches have laid the foundations for economic growth in the creative and knowledge sectors respectively. The aforementioned work (*Ibid*) concludes that the implementation of interventionist policies in Toulouse and Dublin have been relatively successful in terms of their ability to attract and retain knowledge intensive industries. However, the relative success of such policies with regard to the creative sector remains ambiguous (see Bayliss, 2007). Conversely, the successful development of Milan's creative regional economy has occurred much more organically in the absence of any top-down strategic economic policy. As such, Mugnano et. al. (forthcoming) suggests that government intervention may be a more appropriate strategic economic policy option in the case of the knowledge rather than creative sector given the latter's tendency to successfully develop in a spontaneous and organic manner. However, the adoption of bottom-up non-interventionist strategies is becoming increasingly unlikely in light of the growing inter-urban competition for increasingly mobile flows of international capital. As such, the Dublin region may be subjected to further boosterist and interventionist strategies aimed at stimulating the creative sector by local governance structures, despite their unproven success to date.

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APPENDIX

Table 6.1 - Improving Dublin's Competiveness: Policy Options

Policy Area	Aims	Detailed Policy Recommendations
Transport	- Integration of land use & transport planning - Reduce dominance of motorised transport - Reduce congestion - Improve cross-city accessibility	- Luas interconnector, - Integrated ticketing, - Traffic information systems, - Public transport investment delivered in tandem or as a precursor to economic growth (not a reaction to it).
Cost of living	- Reduce overall cost of living, - Improve accessibility to housing, - Prevent unprecedented levels of house price inflation reoccurring.	- Secure Ireland's energy supply and reduce oil dependence, - Further deregulation of key market areas to improve market competitiveness, - Timely and adequate provision of zoned and serviced land in the Dublin region in order to facilitate a quick response to any possible future surges in housing demand, - More direct provision of social and affordable housing options by local authorities. Overly reliant on private sector delivery via Part V of 2000 Planning and Development Act.
Education & Labour Pool	- Further develop Ireland's reputation as a highly educated, skilled and diverse labour force. - Prevent leakage of skilled labour to other countries during the economic downturn.	- Improve the content of media courses to bring skill levels up to the required standard, - Promote the uptake of creative knowledge third level courses to increase the volumes of labour needed to sustain the future growth of the industry and perhaps steer students away from declining areas of the economy which are over supplied in terms of labour requirements (i.e. construction). - Prevent the reintroduction of third level fees to address the shortfall in the public finances, - Encouraging companies who are struggling in the current economic down turn to offer short career breaks rather than redundancies in order to provide skilled workers with an incentive to return home once the economy regains momentum to prevent another 'Brain Drain'. - Increase the uptake of research positions and programmes for graduates with little employment prospects in order to simultaneously retain skilled labour in the region and facilitate innovation.
Cultural & Social Environment	- To achieve a socially equitable city region in terms of accessibility to leisure & cultural amenities.	- Encourage the development of a wide range of social and cultural developments and not just those aimed at a relatively well off middle class, - Promote affordable leisure facilities to ensure accessibility for the city's residents at large, - Encourage the development of non-drink related social activities in the city region, - Improve the quality and quantity of basic sporting activities and facilities in the Dublin region.

Table 6.1 Continued….

Job Opportunities	- Retain and further develop the critical mass of skilled creative knowledge jobs in the Dublin region.	- Promote indigenous start-ups which are less likely to relocate due to economic restructuring - Promote the retention of jobs. For instance, the Employment Subsidy Scheme has been initiated to support the retention of jobs in viable exporting enterprises that might otherwise be made redundant as a result of the impact of the global and financial economic crises (www.employmentsubsidy.ie). The rollout of such schemes to the creative knowledge sector would go some way in retaining jobs in light of the current economic climate. - Continue interventionist polices with regard to the knowledge intensive sector given the relative success of such policies in the past (e.g. IFSC).