

# **The Future of Private Services in Northern Ireland**

*Final Report*

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## **Preface**

This report is the final output from the NIERC/Regional Forecasts project commissioned by DETI on the Future of Private Services in Northern Ireland.

The Terms of Reference of the study are:

*“To assess the role of the private services in Northern Ireland over the next ten years and to identify/forecast where future expansion/development will occur and growth opportunities exist.”*

Within this aim four objectives are listed:

- *To survey current private services development in Northern Ireland compared with the UK ( and if possible other EU economies and the US) involving an examination at suitable sub-sector level of (a) the contribution to the economy, in terms of employment, output and GVA; and (b) productivity.*
- *To identify sub-sectors which are currently under-developed in Northern Ireland compared to the UK (and if possible other EU economies and the US).*
- *To project forward future trends for private services development in Northern Ireland (compared to UK trends and if possible trends in other EU economies and the US) and assess the sector’s future contribution to Northern Ireland economic development in ten years time, including a forecast at 2013 (detailed at suitable sub-sector level-subject to data availability) of employment, output, GVA and productivity.*
- *To assess the future implications for the Northern Ireland economy as a whole in terms of job quality and income levels.*

This report focuses on these four objectives. One key concern has been to establish the principal facts. The report thus includes an extensive review of the characteristics of the private services sector in Northern Ireland and its development over the last three decades. Definitions of the private services sector and its components are contained in annex 1.

Separate chapters cover the characteristics and development of employment, GVA and productivity in up to 30 detailed sub-sectors in Northern Ireland, compared with GB and with individual UK regions. Wider comparisons with the EU, including the republic of Ireland, and with the USA are also included for the four main sectors within private services.

The academic literature on private services has become voluminous in recent years. The main lessons from this literature are summarised in chapter two. The full literature review is in annex 2.

Although no economic forecasts can be fully accurate, the main trends in the growth of private services and the decline or stagnation in manufacturing are well established, and can be expected to continue into the future. It is thus useful to project these trends forward and we have done so in chapter 8. These projections are based on the detailed sectoral forecasts produced by Regional Forecasts and Oxford Economic Forecasting for the UK regions in Autumn 2003. These in turn reflect OEF's macro-economic forecasts for the global and UK macro-economies also produced in Autumn 2003..

The main purpose of the historical and forecast analyses is to inform policy. Based on an understanding of the past and a reasonable guide to the future, the task is to devise policies that will help Northern Ireland to arrive at its desired goals. In the final chapter and conclusions the report considers the nature of existing policy promoting private services and makes recommendations on how this might be further developed, not only by INVEST NI but by the Assembly or Direct Rule administration as a whole.

It is not possible to develop a detailed or fully developed policy prescription for private services within a single short project. More work will be needed, particularly on the important and diverse sub-sectors within the broad definition of business and professional services. Indeed since it is our view that employment in private services will continue to occupy an ever increasing share of all employment, the task of developing policy for the promotion of private services is likely to be an ongoing, rather than a once and for all, task.

## **Executive Summary**

### ***Overview of Private Services***

- The chief economic importance of the private services sector is that it has been the main source of growth in both output and employment throughout the developed world for several decades. It can also be expected to dominate growth over the next few decades.
- Private services are also strongly associated with prosperity. Richer countries generally have higher proportions of their economic activity in private services than do poorer countries.
- Within the UK the more prosperous regions are also those with most activity in private services. The richest regions, in London and the South East of England, have advanced furthest in de-industrialisation and restructuring their economies around private services. In these regions exports of services appear to be increasingly replacing goods exports as the major source of external income.
- In Northern Ireland private services has generated 155,000 out of the total of 172,000 additional jobs created over the last three decades. Since 1992 100,000 extra jobs have been created in private services out of an overall total of 128,000.
- However, Northern Ireland has both the lowest proportion of its economy in private services, and one of the lowest levels of per capita GVA of any UK region. It also has a lower proportion of jobs in private services than any EU country other than Portugal.
- We estimate that an extra 147,000 private services jobs would be needed for Northern Ireland to achieve the same proportion of its employment in private services as the UK average.
- Like other low income regions in the UK, Northern Ireland has particularly low levels of activity in Financial and Business services. These are the sectors with most potential for inter-regional and international exports.
- The rising importance of tradable services has not led to any major shift in the relative competitiveness of Northern Ireland, except that some six thousand jobs in call centres have been located in Northern Ireland since the cease-fires of 1995.

## **Literature Review**

- Consumer spending on private services rises over time as a proportion of total consumer spending. This is driven by two main factors:
- Firstly, physical consumption of services tends to rise with income both across the income distribution at any one time, and over time as aggregate incomes rise.
- Secondly, the price of services tends to rise faster than the price of goods due to the much slower growth of productivity in most service activities.
- The slower growth of productivity in many service sectors, which is due to the restricted opportunities to replace labour with capital, in turn results in the much faster expansion in employment in service sectors.
- However the experience of the USA over the 1990's economic boom (but not the UK) has been that service sector productivity growth has kept up with that in manufacturing due to the adoption of ICT. Whether this represents a permanent change in trend remains to be seen.
- Most academic research on private services has focussed on the financial and business services sectors. One conclusion is the outsourcing from industrial sectors forms only a limited part of the fast growing demand for business services. Nor are cost advantages the main reason for outsourcing. Rather, the process is more complex, reflecting the growing complexity of service requirements.
- A conclusion from Canadian research, of potential importance to Northern Ireland, is that most high level business services are located on central city areas, usually close to customers. Even where services are apparently 'footloose' the authors conclude that it will be difficult to relocate such services and government relocation incentives are unlikely to be effective.

## **Private Services in Northern Ireland**

- Private services are Northern Ireland's largest sector, larger than either the public sector or the private production sectors. It employed 318,000 people in December 2002 i.e. 42% of Northern Ireland's total employment (40% on a full-time equivalent basis) and 36% of Gross Value Added.
- The private services sector now has a slight majority of females among its employees, but not among the self-employed. In these respects it is close to the UK average.

- Part-time working is more prevalent in private services in Northern Ireland than it is in GB. In Northern Ireland 42% of employees are part-time, compared with 36% in GB. The reasons for this gap are unclear.
- Wages for full-time employees in private services in Northern Ireland are lower on average than in other sectors. Most major private services sectors in Northern Ireland have average wages of 80-90% of the Northern Ireland average for full-time employees.
- Wages are also much lower than in the same private services sectors in GB, by 15-30% depending on the sector.

### ***Productivity in NI Private Services***

- In this report productivity is measured in terms of Gross Value Added (GVA) per employee. This is a measure of the income generated in the production of private services. Real GVA per employee is calculated by dividing nominal GVA by national price deflators in each sector.
- GVA per employee in private services in Northern Ireland is lower than in public services, and much lower than in production sectors. The reasons include higher wages in the public sector, and high capital intensity in the production sectors.
- GVA per employee in private services in Northern Ireland is also 20% lower than in private services in GB. It is also lower in each of the four major divisions of private services. The gap between Northern Ireland and GB is however lower in the important Financial and Business Services Sector, at 10%
- GVA per employee has grown more slowly in Northern Ireland than in GB over the last three decades. The average annual growth rate has been 1.4% in Northern Ireland compared with 2% in GB.
- Slower growth in GVA per employee in Northern Ireland reflects the decline in national collective wage bargaining since the early 1980's, and the associated tendency for wages in Northern Ireland to fall behind those in GB.

### ***Development of Private Services and its Sub-Sectors***

- Employment has grown faster in private services than in any other large sector in Northern Ireland. While the production sector employment has declined over three decades, the service sectors in Northern Ireland have added 271,000 jobs. Of these 57% have been in private, rather than public services.

- The Distribution, Hotels and Restaurants sector has created most new jobs, i.e. 75,000, many of them part-time and low paid. The Financial and Business services sector has created 51,000 additional jobs since 1971, mostly full-time and better paid.
- Financial and Business services has also been the fastest growing major sector, expanding at 3.3% per annum since 1971, but with a notable acceleration since 1995 when the threat of paramilitary violence ceased to deter call centres from locating in Northern Ireland. However, this growth rate has been similar to the GB average, and this sector's large under-representation is little different from 30 years ago.
- All of the major private services sectors have grown faster than in GB. Distribution, Hotels and Restaurants and Transport and Telecommunications have both expanded their employment considerably faster than in GB, especially over the 1990's.
- At a detailed level, the three key sectors for job creation have been:
  - Retail Distribution 41,000 jobs
  - Professional Services (SIC section 74) 30,000 jobs
  - Hotels and Restaurants 29,000 jobs

### ***Tourism in Northern Ireland***

- Although numbers of visitors to Northern Ireland has been growing steadily the Tourism sector remains under-developed compared with other parts of the UK or with the republic of Ireland.
- A much lower proportion of Northern Ireland's visitors are holiday-makers compared to these other areas.
- The economic contribution of externally-based holiday-makers is consequently only 0.2% of GDP, a much lower level than for Scotland, Wales or the ROI.
- The negative impact of Northern Ireland's political instability and violent image has been and remains huge. We estimate that the number of visitors to Northern Ireland might be five or six times greater had it not been for the 'troubles'.
- The potential for future growth under benign conditions is correspondingly large. The restoration of a normal image for Northern Ireland could lead to a tripling in visitor numbers within ten years.

## **Tradable Business Services**

- Tradable business service sub-sectors are identified with reference to their distribution across GB counties. Insurance, non-bank financial activities, R&D, market research and advertising are the chief sectors in which most activity is tradable.
- Northern Ireland's finance sub-sectors have experienced little growth other than from two major call-centre investments. Insurance has been the worst performer with the loss of almost a thousand jobs since 1995.
- Business services, in contrast, has had a strong record of recent growth. Almost every sub-sector has grown faster in Northern Ireland than in GB in some cases by large margins.
- Excluding recruitment agencies, which is a special case, business services has created over 2,000 additional jobs per year since 1995.

## **The International Context**

- Northern Ireland has a lower proportion of its employment in private services than any other EU country and a very much lower proportion than the USA.
- However, the UK has a proportionately larger private services sector than any EU nation other than Luxemburg, and is closer to the USA level than any large EU country.
- Northern Ireland gains from aspects of the UK system including a high level of consumer spending and a well developed financial system. However, Northern Ireland's private services suffer from the under-development of business services, telecommunications and air transport.
- Northern Ireland is second only to Portugal in the small size of its business service sector. It is also third to Portugal and Greece in the small size of its transport and telecommunications sector.

## **Northern Ireland's Under-Representation in Private Services**

- Private services remain greatly under-represented in Northern Ireland. The sector employs 40% of full-time equivalent employment in Northern Ireland compared with 53% in GB. In terms of GVA the percentages are 34% in Northern Ireland and 47% in GB.

- The shortfall is even greater in relation to population. Northern Ireland's employment in private services is 31% less than would be the case if Northern Ireland had the same ratio of private services employment to population as in GB.
- One reason for the small size of the private sector in Northern Ireland is the relatively large size of the public sector. However, this only accounts for a minor part of the gap between Northern Ireland and GB. The more important reason is the lack of private sector companies producing services that can be exported to other regions and countries.
- The largest degree of under-representation in a single major sector is in Financial and Business Services. This sector has only half as many employees as the average for GB. The Distribution sector is closest to the UK average, with an under-representation of 15%. The other major private services sectors are under-represented by about 25%.
- Only 2 out of 30 sub-sectors within private services are not under-represented. One of these is Sea Transport, where geography is one factor, but a competitive position vis a vis Dublin port is another. The other is 'Membership Organisations' reflecting the large number of government supported charities and similar organisations in Northern Ireland.
- Northern Ireland is not unique within the UK in its degree of under-representation in private services. Other regions with similarly low levels of GVA per capita also have small private services sectors. In particular, Wales and North East England have private services sectors proportionately as small as in Northern Ireland. Not all peripheral regions share this characteristic. Scotland has a much larger private services sector due to its large Financial and Business and Tourist sectors.
- Northern Ireland compares well with Wales and the North East in Distribution but has proportionately lower employment in Hotels and Catering due to its small Tourism sector.
- Unlike Wales and the North East, Northern Ireland has been improving its representation in private services over the 1990's relative to the UK average. In Wales and the North East under-representation has increased as London and the South East of England have become even more dominant in private services over the 1990's.
- The question now is whether Northern Ireland will overtake Wales and the North East thus detaching itself from the poorest performers or whether all three regions have reached a new, joint, low level equilibrium in private services.

## **Forecasts of Employment in Private Services**

- Forecasts are presented for the period 2003-13 based on published forecasts for major private service sectors in Northern Ireland and the UK as a whole. The forecasts are consistent with existing macro-economic forecasts for the UK and international economies.
- The overall forecast is for 54,000 additional jobs to be created by 2013 in private services in Northern Ireland. This is expected to account for most of the total of additional jobs in Northern Ireland over the period.
- The majority of these extra jobs are projected to be generated in hotels and restaurants and particularly in business services. Employment growth in distribution is expected to be slower than in recent years.
- Within business services computer services (including software), accountancy, consulting, architects and engineering services are all expected to expand rapidly. Industrial and office cleaning and recruitment agencies should also continue to expand.
- Even so, the projection is that Northern Ireland will still be significantly under-represented in these activities in ten years time. Our estimate is that there is considerable scope for Northern Ireland to develop larger specialisms in some of these sub-sectors, but that this will be difficult and will require strong government backing.

## **Policy Implications**

We have drawn out a number of potential policy implications based on the research findings. These are outlined below and have been ordered to follow the structure of Porter's approach to cluster development.

### **Stimulating Demand for Local Services**

- We suggest that the Northern Ireland Assembly, or Direct Rule Administration promote privatisation of appropriate organisations still in the public sector.
- An audit of large companies in Northern Ireland could be undertaken to establish the nature and extent of demand for financial and business services. This should include an assessment of the potential for local companies to replace external suppliers of sophisticated services.

- We suggest that Invest NI work with sub-sectors within financial and business services to identify potential markets in GB and the ROI including identification of advantages in costs and service quality.
- We suggest that an audit be undertaken of public sector activities which could reasonably be undertaken by new or existing local companies, and steps then be taken to privatise these activities to local companies with the ability and ambition to develop these activities for sale beyond Northern Ireland.

### **Developing Indigenous Suppliers of Tradable Services**

- An audit could be undertaken by the Government Purchasing Agency (GPA) of its own and other regulatory frameworks with the aim of making it easier for small businesses to win government contracts. This should include restraints on legal advice outside Northern Ireland.
- DETI and Invest NI could work up proposals for a relaxation of EU State Aid rules to equalise assistance per job for different types of firm and should lobby the UK government and EU Commission to effect changes.
- Current eligibility rules could be clarified throughout Invest NI and the Local Enterprise Agencies.
- Invest NI could establish a unit specifically to promote growth in professional services sectors other than network services and software.
- Invest NI could consider a programme of assistance specifically targeted at companies, partnerships etc providing services rather than developing products. This should include assistance for product/service development.
- An audit of existing assistance Invest NI programmes could be undertaken to examine the possibility of making them more accessible to tradable service providers.
- Invest NI could consider a scheme akin to the ‘Making It Back Home’ programme to induce potential entrepreneurs with relevant expertise to return to Northern Ireland.
- A specialised E-commerce unit could be established within Invest NI to maximise the potential for Northern Ireland companies to extend their wholesale or retail operations to markets outside Northern Ireland.

## **High Quality Support Services**

- Invest NI currently works closely with the universities to promote R&D in high technology. Similar support could be considered for a wider range of tradable services activities.

## **Conclusion**

- Although Northern Ireland has had a rapid growth in private services over several decades, and has caught up a little with other UK regions, it remains the most under-represented of all UK regions. In particular, Northern Ireland needs to increase its representation in a range of high wage tradable business services including computer services, R & D, consultancy, advertising and market research.
- This report outlines 13 recommendations for government policy to begin the difficult task of reducing Northern Ireland's under-representation in a range of tradable sectors in addition to software and network services where Invest NI has well developed strategies.
- The reasons for Northern Ireland's remarkably large under-representation in most fast growing business and professional services are not well understood. Research is required on the specific sub-sectors where scope exists for a specialism to develop.

## **Chapter 1: Overview of Private Services**

### **Chapter Summary**

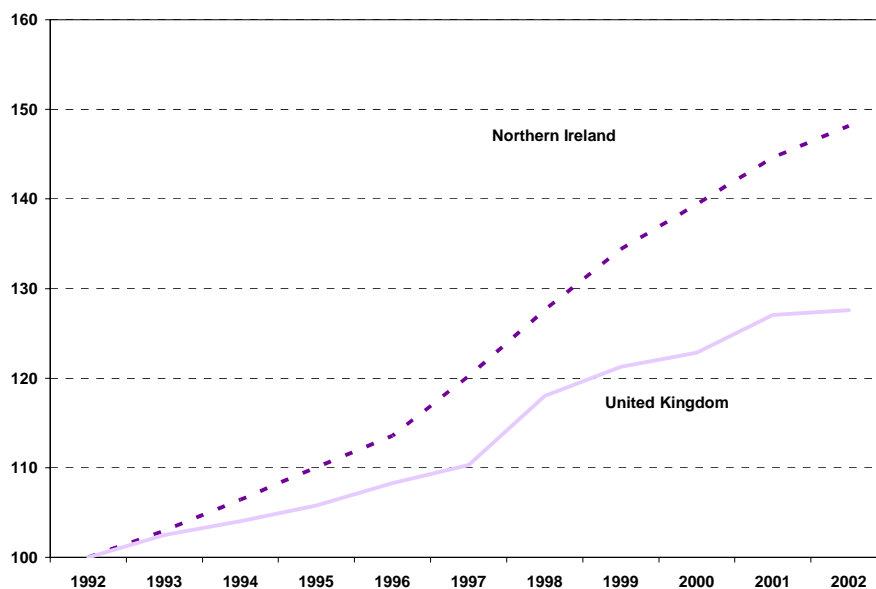
- The chief economic importance of the private services sector is that it has been the main source of growth in both output and employment throughout the developed world for several decades. It can also be expected to dominate growth over the next few decades.
- Private services are also strongly associated with prosperity. Richer countries generally have higher proportions of their economic activity in private services than do poorer countries.
- Within the UK the more prosperous regions are also those with most activity in private services. The richest regions, in London and the South East of England have advanced furthest in de-industrialisation and restructuring their economies around private services. In these regions exports of services appear to be increasingly replacing goods exports as the major source of external income.
- In Northern Ireland private services has generated 155,000 out of the total of 172,000 additional jobs created over the last three decades. Since 1992 100,000 extra jobs have been created in private services out of an overall total of 128,000.
- However, Northern Ireland has both the lowest proportion of its economy in private services, and one of the lowest levels of per capita GVA of any UK region. It also has a lower proportion of jobs in private services than any EU country other than Portugal.
- We estimate that an extra 147,000 private services jobs would be needed for NI to achieve the same proportion of its employment in private services as the UK average.
- Like other low income regions in the UK, Northern Ireland has particularly low levels of activity in Financial and Business services. These are the sectors with most potential for inter-regional and international exports.
- The rising importance of tradable services has not led to any major shift in the relative competitiveness of Northern Ireland, except that some six thousand jobs in call centres have been located in Northern Ireland since the cease-fires of 1995.

The chief economic importance of the private services sector is that it has been the main source of growth in both output and employment throughout the developed world for several decades. It can also be expected to dominate growth over the next few decades. Private services are also strongly associated with prosperity. Richer countries generally have higher proportions of their economic activity in private services than do poorer countries. Within the UK the more prosperous regions are also those with most activity in private services. The richest regions, in London and the South East of England have advanced furthest in de-industrialisation and restructuring their economies around private services. In these regions exports of services appear to be increasingly replacing goods exports as the major source of external income.

## A Fast Growing but Under-Developed Sector

The Northern Ireland economy has shared these trends but lags behind most UK regions and EU countries in the extent to which it has restructured in the direction of private services. This is not because private services has grown slowly in Northern Ireland in recent years. Over the last decade over 100,000 net new jobs were created<sup>1</sup>. Private services was easily the fastest growing of Northern Ireland's major sectors, accounting for 80% of the 128,000 additional jobs generated between 1992 and 2002. Northern Ireland also outstripped GB in this respect, as shown in the chart below.

**Figure 1.1: Growth in Private Services Employment, UK and NI 1992-2002**

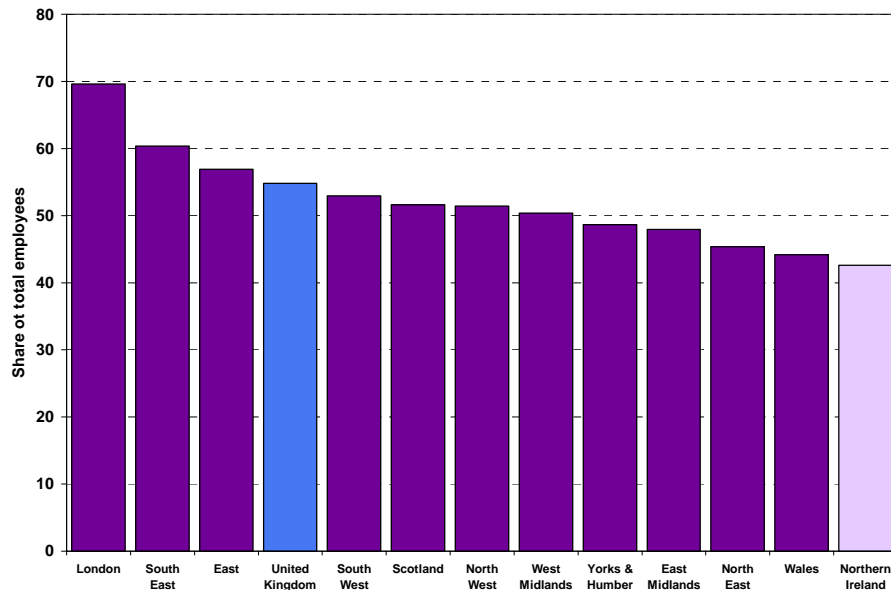


Source: DETI, National Statistics

Despite this strong recent growth the sector remains relatively small and underdeveloped by UK standards as the chart below demonstrates. This reflects the low level from which Northern Ireland has had to develop its private services sectors. This in turn is due to two influences. Firstly, Northern Ireland has little tradition in producing services other than for local consumption. It has not had the traditions of Edinburgh in financial services, Glasgow in pension funds, or West Yorkshire in building societies and its more recent spin-off in corporate law. Secondly, the development of private services was set back by the 'troubles' of 1968-1998 to a greater extent than other sectors. Investment in retailing lagged well behind GB, and several wholesalers began to distribute directly from the mainland. Tourism was particularly badly affected and still has not recovered to the level it would have otherwise attained.

<sup>1</sup> Some of the new jobs have been part-time

**Figure 1.2: Share of Private Services in Total Employment, UK regions 2003**



Source: DETI, National Statistics

To set this under-representation in context, an increase in Northern Ireland’s private services employment to the same proportion of total employment as in the UK as a whole would require the creation of 101,000 additional jobs. However, this assumes a static level of total employment. In reality this is a moving target since the UK average is rising steadily. Using RF/OEF forecasts to look ahead we estimate that 147,000 additional jobs would be needed for Northern Ireland to achieve the UK average in 2012.

Even these large numbers under-estimate the total scale of the shortfall because Northern Ireland has a lower level of employment in relation to its population than does the UK as a whole. An alternative comparison is to take private services as a share of working age population. This share currently stands at 25% in Northern Ireland compared to 36.9% in the UK. Closing the current gap would require the creation of almost 145,000 net new private services jobs, an increase of almost 50% on the current level. Again, if convergence were to be achieved over a decade, the required increase would be 203,000 jobs.

The under-representation of private services, coupled with the recent strong positive growth trend suggests an important opportunity and major challenge for future economic growth in the sector. In turn, helping this to happen could be a major focus of economic development policy in Northern Ireland. Understanding the sector in order to unlock this potential is a key aim of this research project.

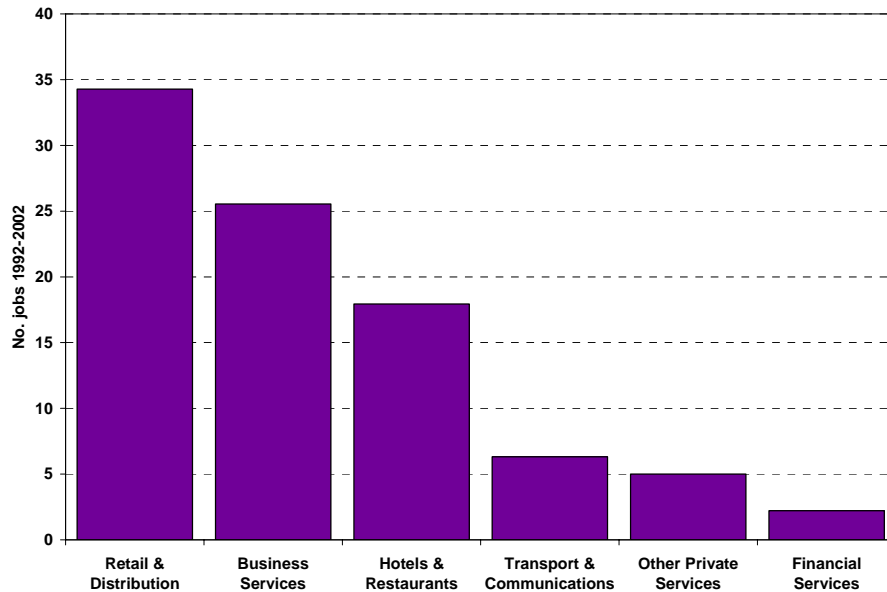
Of course, it might be argued that Northern Ireland has a pressing need to emulate the rest of the UK. It could perhaps specialise in other activities, and in any case its large public sector, partly funded from Great Britain reduces the need for as large an export base as in other UK regions. Most other EU countries are less dependent on service

exports than the UK and consequently have smaller private services sectors although Northern Ireland has a proportionately smaller private sector than any EU country other than Portugal.

### Sectoral Trends within Private Services

It is evident that two main sectors dominant growth, namely retail distribution and business and related professional services, as shown in the chart below.

**Figure 1.3: Contribution of Major Sectors to Growth in Private Services Employment, NI 1992-2002**

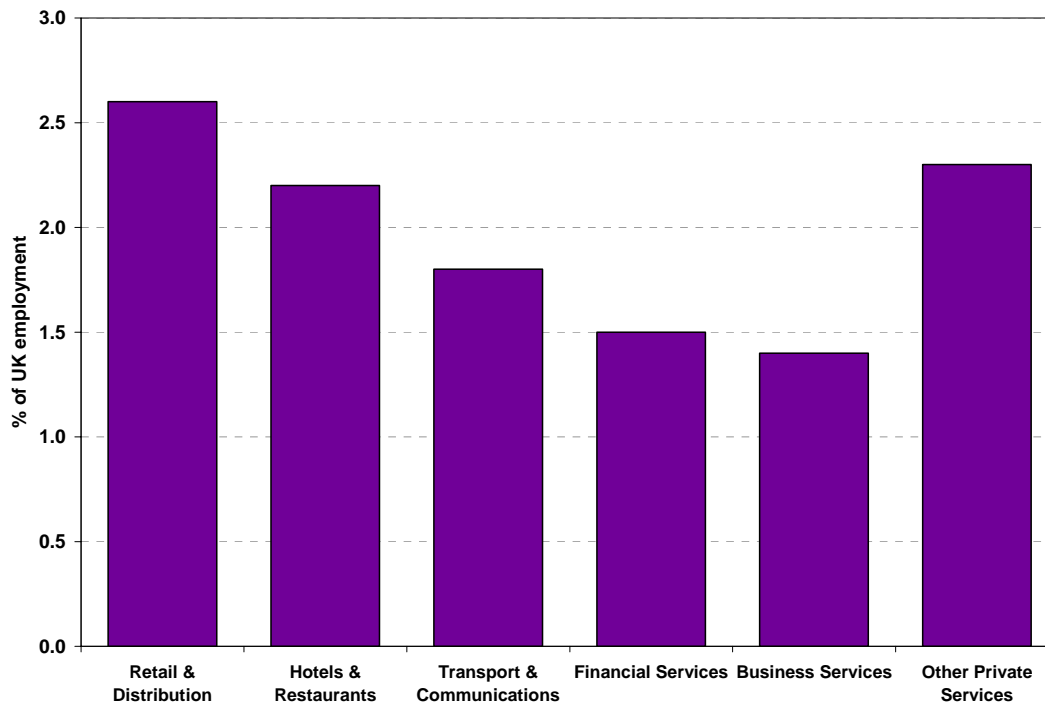


Source: DETI

With almost 60,000 net new jobs created between them the retail and business services sectors have had a huge impact on the local economy over the last decade. More importantly, the business services sector has also grown strongly, building a base from which some services are exported and from which others may be exported in future.

It is unfortunately, the financial and business services sectors, with their export potential, that are most under-represented in Northern Ireland. The chart below shows that all of the individual private services sectors in Northern Ireland are under-represented on a per capita basis. Northern Ireland has 2.9% of UK population. Hence any sector in Northern Ireland with less than 2.9% of UK employment can be regarded as under-represented. Financial services (1.5%) and business services (1.4%) are the most under-represented sectors on this measure.

**Figure 1.4: Northern Ireland Employment as a % of UK Employment, 2002**



Source: DETI, National Statistics

## **Output and Earnings**

The private services sector may be relatively small in Northern Ireland but it still accounted for some 42 % of GVA in the latest data for 2000. GVA in private services had also grown faster than in other sectors over the 1990's. Using RF estimates of constant price GDP the estimated growth in real GVA was 63% in private services in Northern Ireland 1992-2000 compared with 58% in the whole economy.

Although private services include a number of activities with low productivity, overall GVA per employee for the whole group of sectors sits just above the average for the economy as a whole. It is, however, well below the level for manufacturing where heavy capital investment raises productivity. What is obvious is that private services include some of the lowest productivity sectors in Northern Ireland but also some of the highest. Business and professional services has the highest GVA per employee within the sector of £42,000 per full-time equivalent employee. Hotels and catering, by contrast has only £17,800 per employee, one of the lowest productivity levels of any sector in the economy. However, these crude comparisons reflect the nature of the sectors including necessary levels of capital investment. Following chapters examine the influences on productivity, in more detail.

Because the profits of high productivity sectors are often distributed nationally to shareholders and others, it is the wage component which can have most impact on local

incomes. Average earnings in private services are slightly below the Northern Ireland average. However, this is largely because public sector pay, largely at national rates, is well above that of the private sector. Within the private sector, there is less difference, for instance, between services and manufacturing.

Private services include a disparate mix of activities, with many low paid jobs but also some of the best paid. Earnings in business and professional services are a quarter higher than retail, and over 50% higher than in hotels. In finance average earnings are almost double those in hotels and restaurants. Clearly an ambition to raise NI's productivity and income levels to UK or EU average levels would be helped by a major expansion of high wage sectors like finance and business services.

**Table1.1: GVA, Productivity and Earnings in Private Services Sectors**

Sector	GVA 2000 (£m)	Real growth 1992 - 2002(%)	GVA per FTE employee 2000 (£'000)	Average gross weekly full-time earnings 2002 (£)
Retail & Distribution	2305	55.4	23.5	316
Hotels & Restaurants	537	55.4	17.8	254
Transport & Comms	1043	90.0	34.8	384
Financial Services	556	96.1	39.4	472
Business Services	2628	96.1	42.0	393
Other Private Services	771	47.6	31.3	353
Private Services Total	7840	71.3	30.2	342
Manufacturing	3731	35.6	36.0	358
Total	18414	30.6	29.2	390

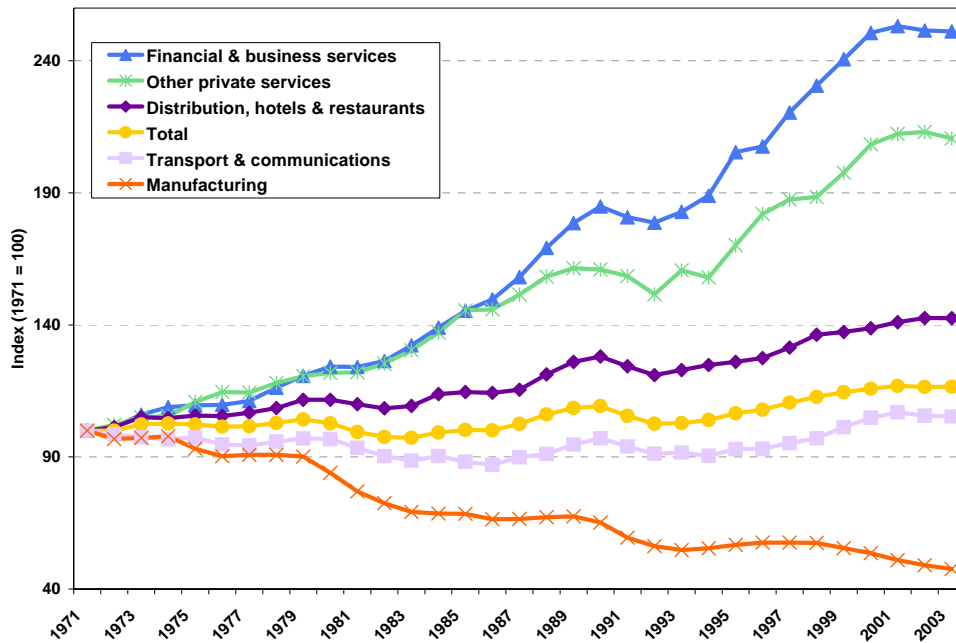
Source: National Statistics, NES. Deflation of nominal GVA uses UK sectoral GVA deflators.

Notes: Employees include the self-employed. FTE indicates full-time equivalent employees, calculated assuming part-time employees work half-time.

## The UK Context

The development of private services output and employment is examined in a comparative context in the following chapters. In this introduction we make two important observations. Firstly, as already noted private services have generally grown faster than industrial sectors in recent decades. This is particularly true for employment, and the contrast shown in Figure 1.5 below is striking. It has been the labour intensive services that have expanded their employment most. Private services with a more capital intensive, and hence more industrial, character have experienced more sedate growth in employment.

Figure 1.5: Total Employment in UK (1971=100)

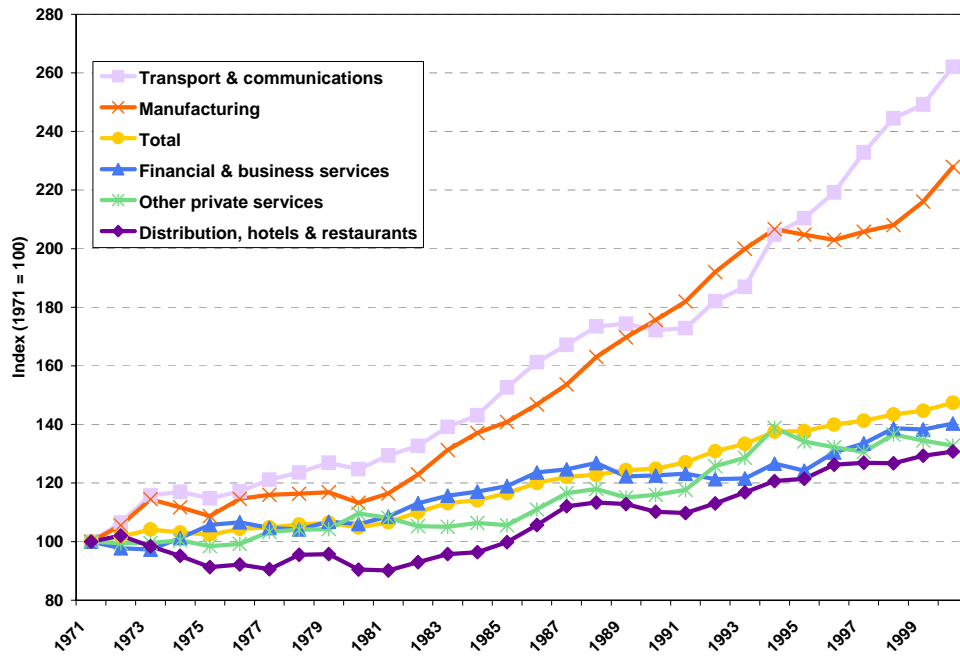


Source: National Statistics

The second point is that employment change is inversely related to productivity growth. Sectors with the fastest growth in productivity tend to shed jobs most rapidly. It is sectors with slow productivity growth that experience the fastest growth in employment. The huge contrast in productivity growth between labour intensive services, and the more capital intensive manufacturing, transport and communications sectors is illustrated in Figure 1.6. Some of the reasons for these contrasts are explored in the literature review in Chapter 2.

Having described some of the main characteristics and issues concerned with private services in Northern Ireland, we now turn to examine each of them in more detail. This begins with a brief review of the academic literature on private services, concentrating on the reasons for rapid growth in the financial and business sectors and on the issues of outsourcing and location of service provision.

Figure 1.6: GVA per Employee in UK (1971=100)



Source: DETI Quarterly Employment Survey, Regional Accounts

## Chapter 2: Literature Review: A Summary

### Chapter Summary

- Consumer spending on private services rises over time as a proportion of total consumer spending. This is driven by two main factors:
- Firstly, physical consumption of services tends to rise with income both across the income distribution at any one time, and over time as aggregate incomes rise.
- Secondly, the price of services tends to rise faster than the price of goods due to the much slower growth of productivity in most service activities.
- The slower growth of productivity in many service sectors, which is due to the restricted opportunities to replace labour with capital, in turn results in the much faster expansion in employment in service sectors.
- However, the experience of the USA over the 1990's economic boom (but not the UK) has been that service sector productivity growth has kept up with that in manufacturing due to the adoption of ICT. Whether this represents a permanent change in trend remains to be seen.
- Most academic research on private services has focussed on the financial and business services sectors. One conclusion is that outsourcing from industrial sectors forms only a limited part of the fast growing demand for business services. Nor are cost advantages the main reason for outsourcing. Rather, the process is more complex, reflecting the growing complexity of service requirements.
- A conclusion from Canadian research, of potential importance to NI, is that most high level business services are located on central city areas, usually close to customers. Even where services are apparently 'footloose' the authors conclude that it will be difficult to relocate such services and government relocation incentives are unlikely to be effective.

### Introduction

The literature on describing the growth of the service industries and commenting upon its implications has become voluminous. Its expansion since the early 1980s in particular has been exponential and in 1995, for example, four major journals devoted special issues to the subject. This review is not designed to be comprehensive; rather it seeks to elucidate those aspects of the subject which bear most immediately in interpreting the present position of Northern Ireland's economy and its prospects for the future.

The review focuses, firstly, on the key aspects which lead employment in services to grow faster than in manufacturing or other industrial sectors. Having laid this groundwork, the review focuses for the most part just on *business services* (sometimes referred to as "advanced producer services") and has little to say on the specifics of other categories of private services (for example, distribution, tourism, transport and so on).

The literature in these cases has generally less to say of direct relevance to economic development policy in Northern Ireland.

Three distinct but interrelated themes run through the ‘story’, which seeks to explain the extraordinary growth of the service sector employment and output, and each is associated with a different strand of economics thinking. These three are,

- *Productivity* (macroeconomics)
- *Outsourcing* (managerial economics)
- *Location* (economic geography)

Although the separation between these three is far from clear-cut, it makes matters simpler if we look at them separately. Accordingly, this summary deals with the logic of the argument made under each of three heads, and it provides a succinct account of the nature of the arguments being made. Annex 2 contains a more detailed account of the most noteworthy recent developments in these three areas.

## **Employment Growth and Productivity**

The core proposition from the literature is a simple one,

*Labour productivity in manufacturing grows more rapidly than labour productivity in services so the number of workers required to produce a given volume of manufactured goods will fall faster than the numbers of workers required to produce a given volume of services.*

And associated with this proposition we have a number of ancillary arguments. Firstly, an empirical proposition about consumer demand,

*The demand for services is income elastic so as income rises an increasing proportion will be spent on services.*

The relative productivity proposition may also have implications for wages and relative prices,

*If manufacturing wages rise in line with manufacturing productivity, **and if** manufacturing wages act as a ‘pacesetter’ for service sector wages, **then** service sector wages will necessarily rise faster than service sector productivity, **and so if** profits in the service sector are not to be squeezed, **then** the price of services will rise faster than the price of manufactures.*

Clearly this a closely inter-linked set of arguments, and associated with it there is a further ancillary proposition about demand for services,

*The demand for services is price inelastic, so as the relative price of services rise the demand for services falls less than proportionately.*

Taken together these propositions lead to the conclusion that employment in services expands more rapidly than in manufacturing, and the rate of expansion is further amplified as rising living standards bias the composition of output towards services whose price inelasticity ensures that demand growth is not cut off by the rising relative price of services.

## **Outsourcing**

The key issue for firms considering outsourcing are whether its internal administration costs are lower than the (transactions and coordination) cost of arm's length market exchange? Outsourcing is relatively attractive when outside specialists are able to benefit from economies of scale or scope because their client's needs are limited, the less the assets involved in supplying the client's needs are relationship specific, which means their client may have relatively cheap access to more than one supplier. Another way of summing up this argument, in a slightly different vocabulary, is to say that a firm may wish to focus on developing its 'core competences' and seek to buy in supporting services.

So it seems plausible, *a priori*, to expect that outsourcing will lead the business (here it is the business and not the consumer) services sector to expand, as larger previously integrated firms outside the service sector seek to divest themselves of their service divisions. Of course such an expansion may not in fact mean that the numbers employed doing service jobs increased, it is just that those delivering services have become visible in the measurement system. Employees of manufacturers may not have changed the job that they do, nor even the role that they play in the manufacturing process, they have just become a bought in service provider.

However the logic of the outsourcing argument works, the emergence and growth of specialist service provision is likely to be able to price its services sufficiently attractively so as to encourage other, smaller, firms to decide to 'buy' rather than 'make' as the external market becomes more developed. Equally, the enthusiasm for 'contracting out' significant proportions of what was previously state supplied is now international and clearly no longer confined to governments of any particular ideological persuasion.

## **Location**

The argument about location comes in two parts, both of which involve proximity. In one case the concern is about proximity between service providers and their customers, the other is about proximity between providers of the same service. Let us take them in turn.

The need for the co-location of business service providers and their customers, particularly their manufacturing customers, has been of particular relevance to discussions of the spatial dynamics of urban economies. For example, as manufacturing firms moved out of the centre to more suburban locations, will service providers follow?

The other argument is about agglomeration economies. Is there a natural tendency for providers of relatively sophisticated business services to co-locate? To what extent might the benefits of face-to-face contact with other suppliers offset the costs of keeping in face-to-face contact with their customers?<sup>2</sup>

Having set the scene by considering some of the larger issues involved in the growth of the service sectors, we next examine the Northern Ireland sector in more detail. This includes questions of the size and composition of the sectors, part-time working and wage levels. Also introduced is the key issue for this report, the under-representation of private services in Northern Ireland.

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<sup>2</sup> Obviously, to the extent that there is substantial service-to-service business this conflict is lessened.

## Chapter 3: Private Services in Northern Ireland

### Chapter Summary

- Private services are Northern Ireland's largest sector, larger than either the public sector or the private production sectors. It employed 318,000 people in December 2002 i.e. 42% of Northern Ireland's total employment (40% on a full-time equivalent basis) and 36% of Gross Value Added.
- The private services sector now has a slight majority of females among its employees, but not among the self-employed. In these respects it is close to the UK average.
- Part-time working is more prevalent in private services in Northern Ireland than it is in GB. In Northern Ireland 42% of employees are part-time, compared with 36% in GB. The reasons for this gap are unclear.
- Wages for full-time employees in private services in Northern Ireland are lower on average than in other sectors. Most major private services sectors in Northern Ireland have average wages of 80-90% of the Northern Ireland average for full-time employees.
- Wages are also much lower than in the same private services sectors in GB, by 15-30% depending on the sector.

### ***Northern Ireland's Largest Sector***

Private services dominate the Northern Ireland economy in both employment and GVA. Total employment in the sector, including the self-employed, was 318,000 in December 2002, or 41.5% of all employment (Table 3.1). Since part-time employment is concentrated in some of these sectors, private services is a little less dominant when employment is measured in full-time equivalents (FTE). Nonetheless it remains Northern Ireland's largest sector with just under 40% of Northern Ireland's FTE employment (Table 3.1).

**Table 3.1: Employment in private services – December 2002**

	Employees	Self - Employed	Total	Full-time Equivalent	FTE (%)
Retail & Distribution	119.6				
Hotels & Restaurants	40.4				
Distribution, Hotels & Restaurants total	160.0	13.0	173.0	132.4	20.5
Transport	18.9	7.3	26.2	24.6	3.8
Communications	3.8	0.0	3.8	3.6	0.6
Financial Services	16.2				
Business Services	55.0				
Financial & Business Services total	71.2	8.4	79.6	69.5	10.8
Other Private Services	30.5	4.4	34.9	28.3	4.4
<b>PRIVATE SERVICES</b>	<b>284.4</b>	<b>33.1</b>	<b>317.5</b>	<b>258.4</b>	<b>40.0</b>
<b>PUBLIC SERVICES</b>	<b>238.1</b>	<b>8.0</b>	<b>246.1</b>	<b>199.4</b>	<b>31.0</b>
<b>OTHER PRIVATE SECTOR</b>	<b>150.1</b>	<b>47.6</b>	<b>197.7</b>	<b>187.5</b>	<b>29.1</b>
<b>TOTAL</b>	<b>672.6</b>	<b>88.7</b>	<b>761.3</b>	<b>645.2</b>	<b>100.0</b>

Sources: DETI Quarterly Employment Survey, Labour Force Survey

Notes: Full-time equivalent is defined as full-time employees plus half of part-time employees plus the self-employed. Public sector is defined as public administration, defence, education, health and social work (i.e. sectors L,M,N of the SIC 1992) plus postal services (SIC 64)

Private services are a little less dominant again when measured in terms of value-added (GVA), since these sectors tend to generate less value-added per employee than the industrial sectors. Even so, the private services sector remains larger than either the public sector or the other private sectors, (i.e. Agriculture, Industry and Construction). It generated GVA of over £6 billions in 2000 or 37% of total GVA generated by Northern Ireland's sectors (Table 3.2).

**Table 3.2: GVA in private services, 2000**

	GVA (£m)	%
Distribution, Hotels & Restaurants	2,842	16.4
Transport & Communications	1,043	6.0
Financial & Business Services	1,709	9.9
Other Private Services	771	4.5
<b>PRIVATE SERVICES</b>	<b>6,365</b>	<b>36.7</b>
<b>PUBLIC SERVICES</b>	<b>5,037</b>	<b>29.1</b>
<b>OTHER PRIVATE SECTOR</b>	<b>5,929</b>	<b>34.2</b>
<b>ALL SECTORS</b>	<b>17,330</b>	<b>100.0</b>

Source: National Statistics

Notes: Communications and total private services includes postal services. Public sector excludes postal services

Easily the largest sector within private services is Distribution, Hotels and Restaurants, employing nearly a quarter (23%) of Northern Ireland's workforce (20% of FTE employment), and generating one sixth of total value added. Next are Financial and Business services with around 10% of both employment and value-added. The other private services sectors are much smaller. Both Transport and Telecommunications, and the collection of 'Other Private Services' each contribute close to 5% both FTE employment and value-added.

### **Composition of Employment**

Almost a fifth of the full-time workers in private services are self-employed. These amounted to 33,000 people in December 2002, and comprised most of the self employed outside agriculture (Table 3.1). Many were running shops, restaurants and similar businesses, but road haulage, and professional and consultancy services are also well represented.

Of the employees in employment in private services, a little over half were female and 43% were part-time, at the end of 2002 (Table 3.3). (Numbers of full-time and part-time employees are given in annex 3). The proportion of females is much lower than in the public sector, where teachers, nurses and secretaries are professions that have traditionally had female majorities. It is, however, very much higher than the rest of the private sector where males continue to predominate, especially in agriculture and construction, but also in manufacturing.

**Table 3.3: Employees in Employment, December 2002**

	Total	% Male	% Female	% Full-time	% Part-time
Retail & Distribution	119.6	45.8	54.2	53.3	46.7
Hotels & Restaurants	40.4	41.6	58.4	37.1	62.9
Transport & Communications	22.7	74.0	26.0	84.8	15.2
Financial Services	16.2	34.0	66.0	80.9	29.1
Business Services	55.0	49.3	50.7	68.9	31.1
Other Private Services	30.5	48.2	51.8	56.4	43.6
<b>PRIVATE SERVICES</b>	284.4	47.7	52.3	58.5	41.5
<b>PUBLIC SERVICES</b>	238.1	30.0	70.0	60.7	39.3
<b>OTHER PRIVATE SECTOR</b>	150.1	79.3	20.7	86.1	13.9
<b>TOTAL</b>	672.6	48.5	51.5	65.5	34.5

Source: DETI Quarterly Employment Survey

Perhaps surprisingly, the greatest dominance of females within private services is in the Financial Services sectors where females have increasingly replaced males in banks and building societies. However, females make up over half of all employees in most of the main private services sectors. The one clear exception is Transport and Telecommunications. The industrial and capital-intensive nature of many of these activities means that they remain mostly male dominated. However, some parts of this sector have high proportions of females, for example travel agencies and directory inquiries organisations.

Private services sectors have a higher proportion of part-time workers than the public sector, and a much higher proportion than in the rest of the private sector, where part-time working is relatively rare. Part-time workers constitute over half of all employees in hotels and restaurants, and close to half in both distribution and 'other' private services (Table 3.3). The proportion is lower in Transport and Telecommunications and in Financial and Business Services, at around 30%, but is still much higher than in other private sectors.

Some sectors, of course, lend themselves to part-time working due to the irregular pattern of demand, or the ease with which part-time working can be organised. However it is also true that part-time working is more prevalent in Northern Ireland than in Great Britain (Table 3.4). This is true throughout the private sector, including all major private services sectors, but is not true for the public sector where Northern Ireland has a lower proportion of part-time workers than GB.

**Table 3.4: Part-time Employees, December 2002 (% of total)**

	NI	UK	Ratio NI/UK
Retail & Distribution	46.7	42.7	1.09
Hotels & Restaurants	62.9	57.7	1.09
Transport & Communications	15.2	14.7	1.03
Financial Services	19.6	17.9	1.09
Business Services	31.1	26.3	1.18
Other Private Services	43.6	41.8	1.04
<b>PRIVATE SERVICES</b>	41.5	35.9	1.15
<b>PUBLIC SERVICES</b>	39.3	39.5	0.99
<b>OTHER PRIVATE SECTOR</b>	13.9	9.4	1.47
<b>TOTAL</b>	34.5	31.6	1.09

Source: DETI Quarterly Employment Survey, Labour Market Trends

It is not immediately obvious why Northern Ireland should have more part-time workers in most sectors. Influences may come from both the demand and supply sides. Demand for part-time workers could, in principle, be lower in Northern Ireland due to a low proportion of higher level occupations compared with GB (and especially compared with London). The proportion of part-time workers in London is the lowest in the UK, but there is little obvious pattern across the UK. The North East region, with few high level occupations has a proportion of part-time workers close to the UK average and well below that in Northern Ireland. Supply side factors might include the influence of a higher birth-rate with more females having child-rearing responsibilities and hence preferring part-time work. If this were a dominant factor however, we might expect it to also apply to the public sector in Northern Ireland, but it does not.

### **A First Look at Under-Representation**

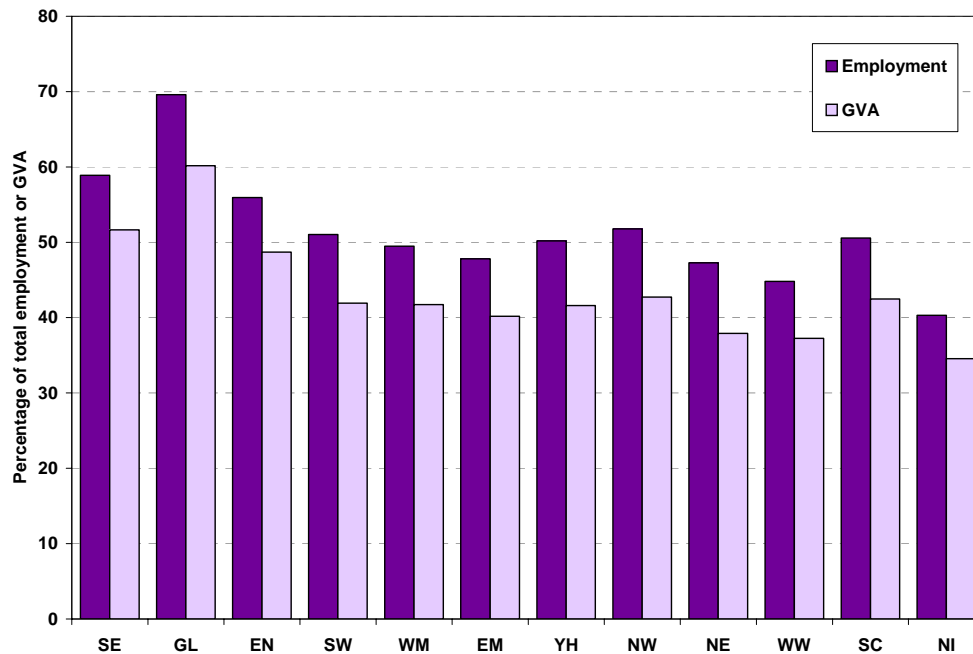
The most obvious factor about the private services sector in Northern Ireland is its small size. With under 40% of FTE employment, it is much smaller than the GB average of almost 55% (Table 3.5). It is also proportionately smaller than in any other UK region (Figure 3.1). Northern Ireland has proportionately less of its FTE employment in every major private service sector, but the most striking shortfall is in financial and especially business services. The same pattern is evident for value-added (Table 3.6).

**Table 3.5: Full-time Equivalents, NI & GB compared, December 2002**

	NI FTE (%)	GB FTE (%)
Distribution, Hotels & Restaurants	20.5	22.0
Transport & Communications	4.3	4.7
Financial & Business Services	10.8	20.3
Other Private Services	4.4	5.9
<b>PRIVATE SERVICES</b>	<b>40.0</b>	<b>52.9</b>
<b>PUBLIC SERVICES</b>	<b>31.0</b>	<b>23.6</b>
<b>OTHER PRIVATE SECTOR</b>	<b>29.1</b>	<b>23.5</b>
<b>ALL SECTORS</b>	<b>100.0</b>	<b>100.0</b>

Source: DETI Quarterly Employment Survey, Labour Market Trends

**Figure 3.1: Employment & GVA: Private Services % of total in each region, 2000**



Source: National Statistics Regional Accounts, ABI and DETI Quarterly Employment Survey

**Table 3.6: GVA, NI & GB compared, 2000**

	NI GVA (%)	GB GVA (%)
Distribution, Hotels & Restaurants	14.5	15.1
Transport & Communications	6.6	10.0
Financial & Business Services	9.4	17.4
Other Private Services	3.6	4.6
<b>PRIVATE SERVICES</b>	34.1	47.0
<b>PUBLIC SERVICES</b>	26.3	16.7
<b>OTHER PRIVATE SECTOR</b>	39.6	36.3
<b>ALL SECTORS</b>	100.0	100.0

Source: National Statistics Regional Accounts

Part of the reason for the small proportionate size of the private services sectors is the large size of the public sector. A large public sector implies a proportionately smaller private sector as long as nothing else changes. In practice, of course, an expansion of the public sector sets in train other consequent changes. These are however likely to create fewer jobs in private services than the original jobs created in the public sector for the reasons outlined in the footnote<sup>3</sup>.

Our estimate, however, is that this factor is unlikely to depress the proportion of employees or output in any private services sector by more than 5% (i.e. by less than one percentage point in the case of Distribution, Hotels and Restaurants or Financial and Business Services). The much more important factor, especially in Hotels and Restaurants, Transport and Communications and Financial and Business Services, is a failure to develop private services exports to other regions and countries. In the case of tourism, and hence Hotels and Restaurants, the reasons for Northern Ireland's failure to develop a larger sector largely reflects Northern Ireland's legacy of violence and lingering well-publicised incidents stemming from that legacy. In other private services sectors the probable reasons are more complex, and will be discussed later in this report.

<sup>3</sup>The public sector can be regarded as part of Northern Ireland's economic base since much of it is funded from outside the Province. A large public sector is thus likely to expand the size of both the whole economy and population of Northern Ireland (in the latter case by attracting in-migrants, including return migrants, and deterring out-migration). An expanded population raises demand for private services in Northern Ireland, but in doing so generates fewer jobs than the number in the original public sector expansion. This is because an extra job in the public sector is unlikely to raise the population, even in the long term, by more than 2-3 people. However there are only two jobs in private services for each ten people. Thus one extra job in the public sector is likely to create half a job in private services.

In the next chapter we turn to the issue of productivity in private services in Northern Ireland and develop an explanation for the fact that GVA per employee has lagged behind GB.

## Chapter 4: Productivity & Wages in Private Services

### Chapter Summary

- In this report productivity is measured in terms of Gross Value Added (GVA) per employee. This is a measure of the income generated in the production of private services. Real GVA per employee is calculated by dividing nominal GVA by national price deflators in each sector.
- GVA per employee in private services in Northern Ireland is lower than in public services, and much lower than in production sectors. The reasons include higher wages in the public sector, and high capital intensity in the production sectors.
- GVA per employee in private services in Northern Ireland is also 20% lower than in private services in GB. It is also lower in each of the four major divisions of private services. The gap between NI and GB is however lower in the important Financial and Business Services Sector, at 10%.
- GVA per employee has grown more slowly in Northern Ireland than in GB over the last three decades. The average annual growth rate has been 1.4% in Northern Ireland compared with 2% in GB.
- Slower growth in GVA per employee in Northern Ireland reflects the decline in national collective wage bargaining since the early 1980's, and the associated tendency for wages in Northern Ireland to fall behind those in GB.

Productivity is usually measured as output per unit of the resources needed to produce that output. The resources always include labour and where possible also include capital. In the case of private services, output is often difficult to measure with accuracy, and data on capital employed is rarely available. For this report the most consistently available data are for gross value-added (GVA). This is a measure of the income earned from production of goods and services. To allow some measure of volume we deflate GVA in each sector by the UK output deflator for that sector. These are not ideal measures of productivity in the strict sense, but do give a useful measure of the income generated per employee in each sector. This allows us to compare sectors both within Northern Ireland, and across UK regions.

Our principal data sources are the Regional Accounts for GVA, DETI quarterly employment estimates for employment, and the Labour Force Survey (LFS) for self-employment. A second potential source is the Annual Business Inquiry (ABI). In principle this is a preferable source for productivity measures, since the GVA and employment data derive from the same survey and the same firms. With the Regional Accounts and DETI employment data the sources are separate, although they both target the same population of firms.

We have preferred not to use the ABI as a principal source for four reasons:

- Firstly, the time period covered is short, extending back only to 1998 for some sectors.
- Secondly, not all private service sectors are included, some have only partial coverage.
- Thirdly, the ABI provides no separate figures for part-time and full-time employment, and this undermines comparisons of Northern Ireland with other areas.
- Finally, the ABI figures are volatile from year to year, and in some cases differ greatly from the more plausible Regional Accounts figures

However in Annex 5, we provide comparisons of the two data sources. In general, differences do not affect our conclusions. Our main conclusions are as follows:

- The first main conclusion is that GVA per FTE employee is 10-20% lower in most major Northern Ireland private services sectors than in the UK as a whole. For the private services as a whole, GVA per FTE employee was 20% lower in 2000 (Table 4.1).
- The second conclusion is that **within** Northern Ireland GVA per FTE employee in 2000 was lower in private services than both the public sector, and the rest of the private sector. GVA per employee in Northern Ireland was 23% lower than GVA per employee in the rest of the private sector in Northern Ireland. However, this is to be expected since GVA in sectors like Manufacturing and Energy includes a larger profit element, representing a return to the greater volume of capital invested.

Table 4 .1 shows that in 2000 Northern Ireland's GVA per FTE employee was further behind the UK average in private services than in the rest of the private sector. Not surprisingly, GVA per FTE employee in the public sector was much the same in Northern Ireland as in the rest of the UK. This mainly reflects the uniform pay levels across the UK in the public sector.

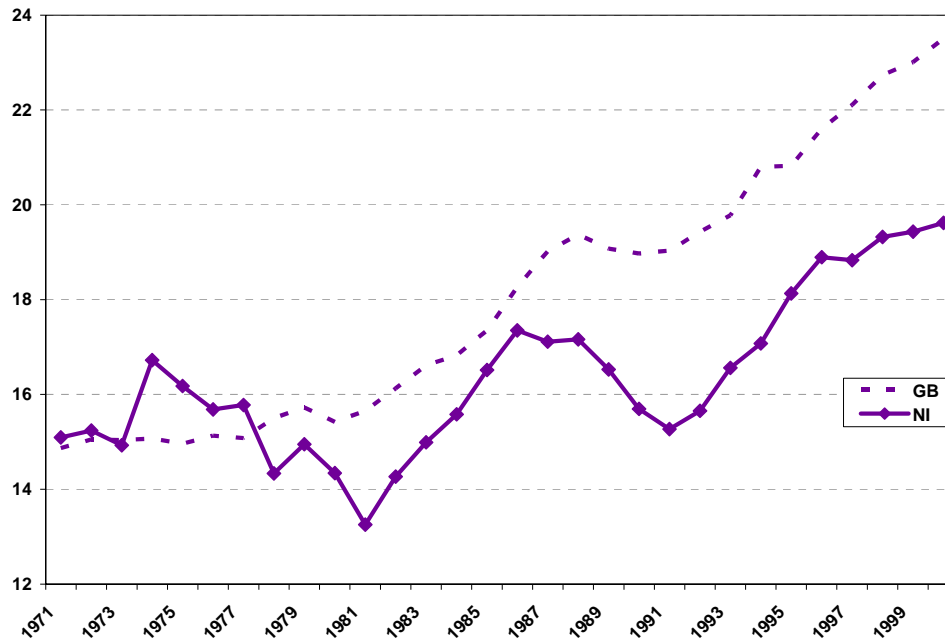
**Table 4.1: GVA per Full-time Equivalent Employee (£ 000's), 2000**

	NI	UK	Ratio NI/UK
Distribution, Hotels & Restaurants	21.5	23.8	0.90
Transport & Communications	33.4	41.3	0.81
Financial & Business Services	24.6	27.6	0.89
Other Private Services	27.3	29.4	0.93
<b>PRIVATE SERVICES</b>	24.6	30.7	0.80
<b>PUBLIC SERVICES</b>	25.4	25.7	0.99
<b>OTHER PRIVATE SECTOR</b>	31.6	37.8	0.84
<b>ALL SECTORS</b>	28.4	35.6	0.80

Sources: National Statistics (GVA), DETI Quarterly Employment Survey Dec. 2000, Labour Market Trends  
Notes: Transport and communication includes postal services. Public sector excludes postal services

The trend in real GVA per employee has been for Northern Ireland to grow more slowly than in GB. In Northern Ireland real GVA per employee has grown on average by 1.4% per annum since 1978. In GB the rate has been 2% per annum. The evidence is that GVA per employee in Northern Ireland was a little above that in GB in the 1970's, but the consequence of slower growth over more than two decades has been that Northern Ireland has fallen well behind the GB level (Figure 4.1). Northern Ireland's GVA per employee was close to the UK average level until the mid 1980's, but fell rapidly behind until the early 1990's. A period of partial catch-up followed, but since the mid 1990's it has fallen behind once more.

**Figure 4.1 Real GVA divided by Employment (£ thousand) in Private Services, 1971-2000**



Source: National Statistics, Regional Accounts. DETI and ABI Employment Surveys

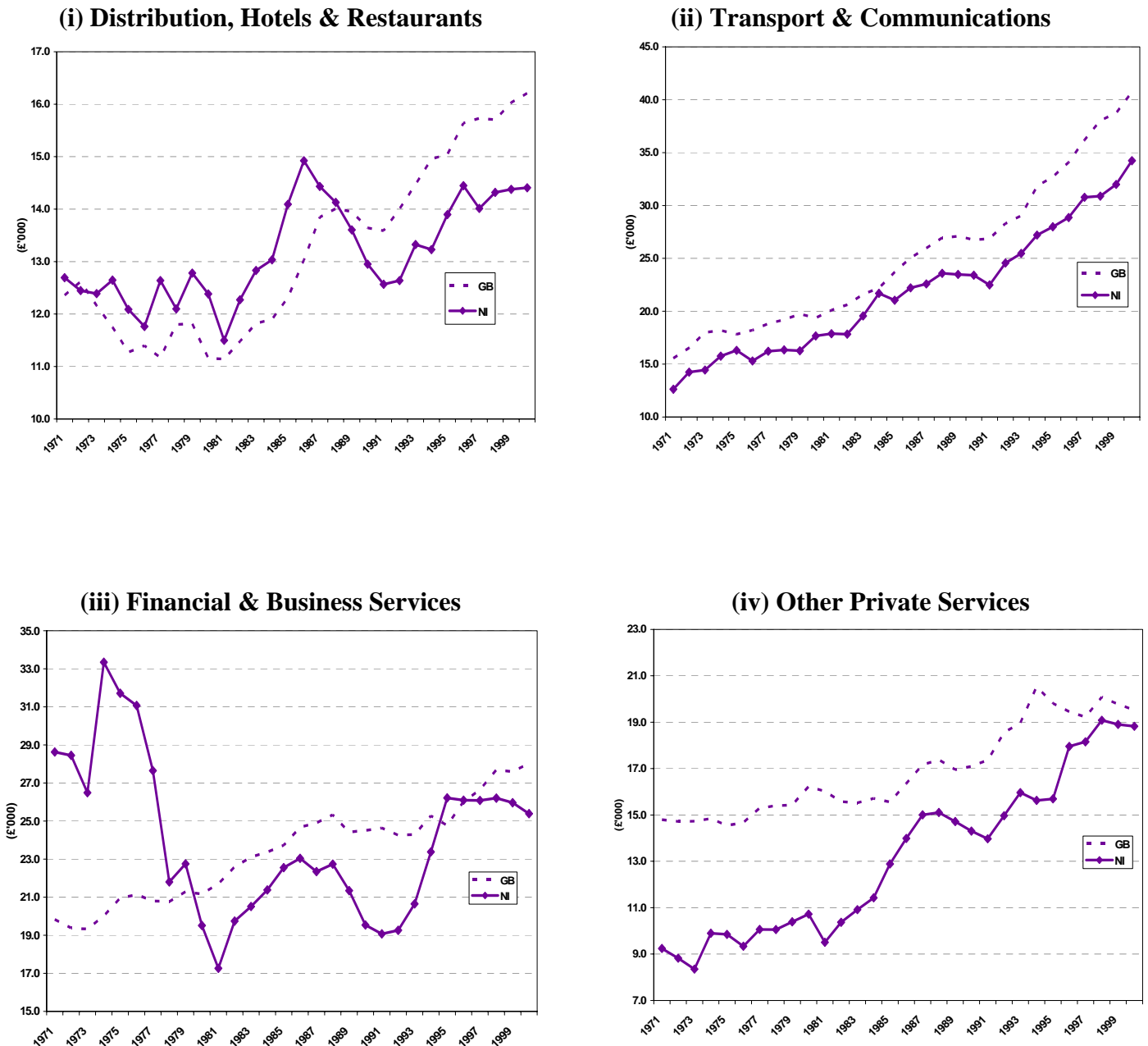
One of the underlying reasons for the observed trends may have been the decline of collective wage bargaining across the UK from the early 1980's. Previously many large companies paid similar wage rates across the UK, just as the public sector continues to do. The decline of national bargaining meant that wages came to reflect local labour market conditions. With unemployment in Northern Ireland much higher than in GB, especially in the 1980's, wages began to fall behind those in GB and have continued to do so up until the present.

If prices for private services were relatively uniform across all regions lower wages would not depress GVA. Instead profits would be higher. This may be the case in manufacturing or agriculture where the real world is closer to the economist's theoretical law of one price. However, where markets are local, as in many private services, prices are more likely to be competed downwards towards a level reflecting lower-wage costs. This has the effect that low wages will result in low GVA per employee.

The general trend of slower growth in Northern Ireland's GVA per employee is masked to some extent by quite large cyclical swings. The largest of these occurred during the UK recession at the beginning of the 1990's. Demand for many services fell more in England than in Northern Ireland, due to the greater indebtedness of English households and hence the greater intensity of recession in England. It is possible that businesses in England used this period of falling employment to raise productivity more than in Northern Ireland. After 1991, productivity in Northern Ireland businesses began to catch up, but slipped behind again as southern England reached full employment in the boom conditions of the late 1990's.

The pattern in the major individual private services sectors is shown in Figure 4.2. In Distribution Hotels and Restaurants GVA per employee was recorded as being 5-10% above GB until the mid 1980's. It then slid behind GB and has remained at close to 90% of the GB level since 1992. Higher GVA in the early period is unlikely to reflect genuine productivity differences, since few of the major national or international retailers were present in Northern Ireland until the 1990's. The reason is more likely to reflect relative wage rates.

**Figure 4.2: Real GVA per Employee (£000's), 1971 - 2000**



Source: :National Statistics, Regional Accounts. DETI and ABI

In Transport and Communications GVA per employee was converging towards the UK average until 1984, but since then it has grown a little more slowly than in GB, and has fallen further behind. By 2000, it was almost 20% below the UK average.

We do not fully believe the GVA data for Financial and Business Services, especially over the 1970's. Since 1980 Northern Ireland's GVA per employee has averaged 90% of the GB level, although in the mid 1990's it was briefly recorded as being above the UK average.

The one sector with a clear pattern of convergence towards the UK level is Other Private Services, including recreational, cultural and sports services alongside waste management and miscellaneous private services. This had a level of GVA per employee of only two-thirds of the GB level in the 1970's, but has converged strongly towards the GB level since then.

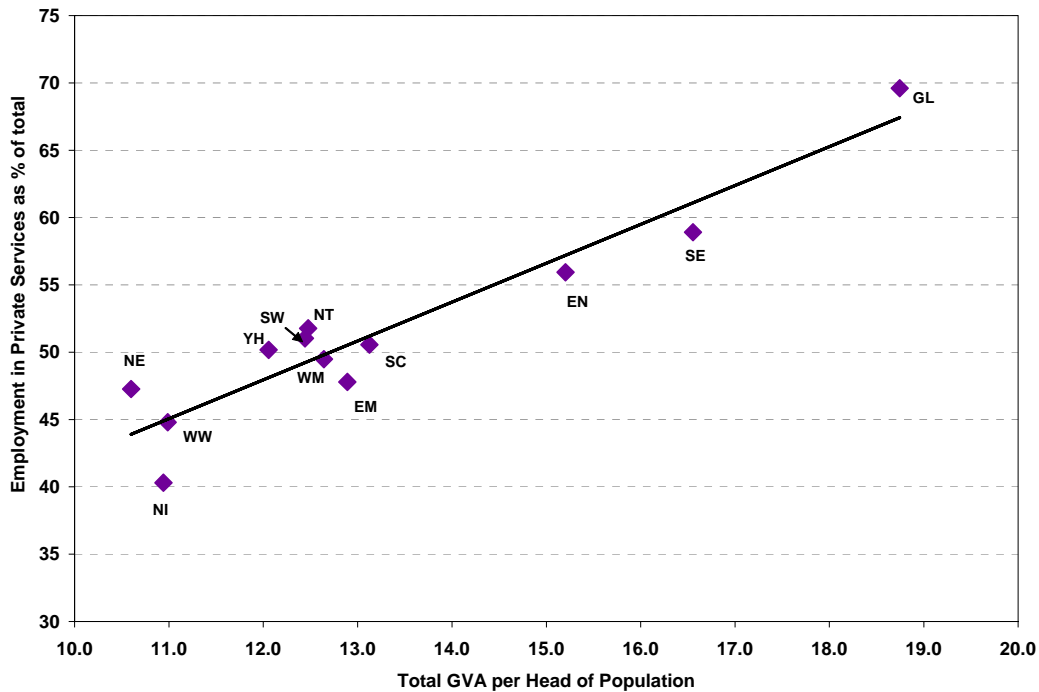
### ***Full-time Equivalent Employment***

The above analysis was undertaken with total employment (including the self-employed) without distinguishing between full-time and part-time employees. For the shorter period 1991-2000 we have calculated a full time equivalent employment series for each sector in both Northern Ireland and GB. The use of these FTE figures to calculate GVA per employee, raises Northern Ireland's level relative to GB because Northern Ireland has higher proportions of part-time workers. However the difference is generally only one or two percentage points and conclusions are little affected. However, GVA per FTE employee is increased enough in 'Other' Private Services to bring this sector up to the GB average. The figures for each main private services sector are shown in Annex 6.

### ***Private Services and per Capita GVA***

What is clear in the UK regional pattern is that the proportion of all employment in private services is strongly correlated with the overall GVA per capita. The relationship between the private services share and aggregate per capita GVA is shown in Figure 4.3. A rise in per capita GVA from £11,000 (i.e. close to that in Wales) to £17,000 (the average in south and east England) is associated with an increase in the private services share of employment from 45% to 62%. Sophisticated high-wage economies with relatively skilled labour forces tend to have de-industrialised furthest and to have a larger representation in those services which can be exported from the region.

**Figure 4.3: Employment in Private Services and per capita GVA, UK Regions 2000**

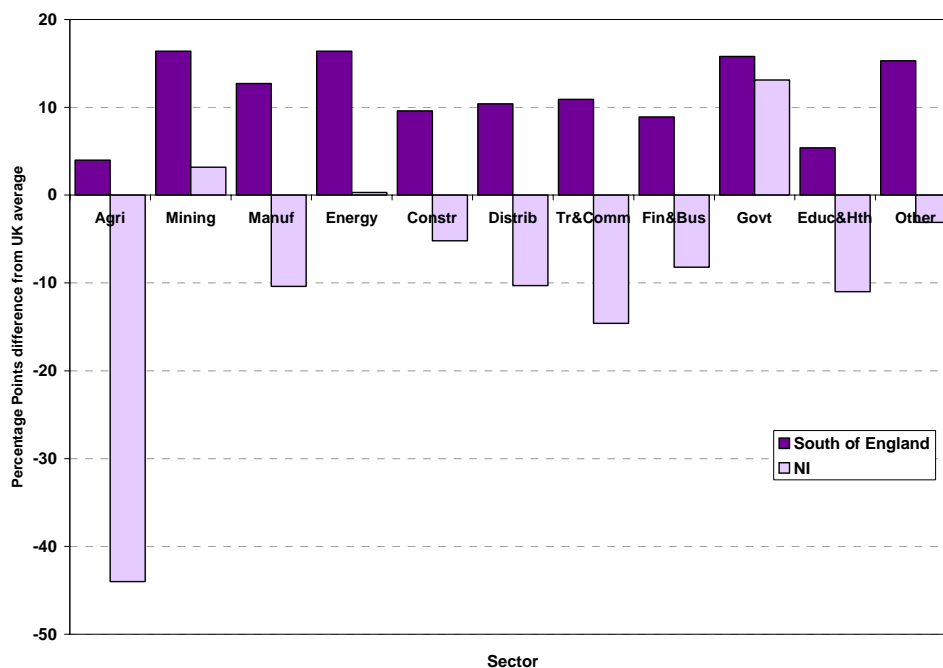


Source: National Statistics, Regional Accounts. DETI and ABI Employment Surveys

Northern Ireland has the lowest proportion of its employment in private services of any UK region. This is partly associated with its low per capita GVA. However, Northern Ireland also has a lower proportion of its employment in private services than expected on the basis of its per capita GVA (Figure 4.3). The gap is 5 percentage points, and is larger than can be accounted for directly by its large public sector.

It is perhaps surprising that regions with a high average level of GVA per employee should be above average in almost all individual sectors (Figure 4.4). Conversely, below average regions like Northern Ireland tend to be below in virtually all sectors, (in Northern Ireland Public Administration is above the UK average because of high police wages).

**Figure 4.4: GVA per Employee % points difference from UK average 2000**



Source: National Statistics, Regional Accounts.

This supports the view, outlined above, that regional wage levels may play an important role in relative GVA per employee.

## Wages in Private Services

GVA consists of the income received from the production of goods and services. Its main components are wages and profits, but the largest component is wages. This is also the component of GVA most likely to be spent within the region, since the profits component of GVA accrues to shareholders and creditors, many located outside the region. Wage levels are also important in our view in influencing the level of GVA relative to other regions for reasons set out in the previous section.

Wages in Northern Ireland are low by UK standards, and have been slowly falling further behind the UK average. This is a trend shared with most regions outside the regions of south and eastern England, as the latter areas have seen wages grow faster than elsewhere, especially since 1990.

Within Northern Ireland, private service sector wages are the lowest of all. Full-time male employees in Distribution for instance, earn between 80%-90% of the Northern Ireland average (Table 4.2). In Hotels and Restaurants wages are usually below 80% of the Northern Ireland average. For female non-manual employees, full-time wages in Distribution in 2002 were only two-thirds of the female average for Northern Ireland. The only exception is the more 'industrial' Transport and Communications sector, in which

wage levels are generally close to those in Manufacturing and hence also close to the Northern Ireland average.

**Table 4.2: Average Weekly Wages. Full-time Employees, 2002 (NI average = 100)**

	Male		Female	
	Manual	Non Manual	Manual	Non Manual
Retail & Distribution	88.5	80.2	-	67.0
Hotels & Restaurants	76.6	79.4	81.9	72.7
Transport & Communications	106.9	99.1	-	89.9
Financial Services	-	118.6	-	98.6
Business Services	87.4	102.3	-	83.9
Other Private Services	72.5	88.5	-	90.4
Public Admin & Defence	101.9	102.9	120.0	88.6
Education	80.4	112.4	99.3	136.7
Health & Social Work	93.1	113.2	93.2	115.8
<b>All services</b>	93.3	100.5	97.0	101.2
<b>Manufacturing</b>	105.1	96.7	105.8	90.3
<b>TOTAL</b>	100.0	100.0	100.0	100.0
<b>(£)</b>	(342.2)	(532.0)	(230.2)	(364.9)

Source: New Earnings Survey

Note: Where sample sizes are too small for reliable estimation figures are omitted. Actual wage levels are given in annex 3

In 2002 average full-time wages for males were around 88% of the GB average. For females, the gap was a little less due to the high public sector representation, but even so, were around 91% of the GB level (Table 4.3). In most private services sectors the disparities between Northern Ireland and GB were greater than this. In Distribution wages were 15% below GB for males and 25% for female non-manual workers. The disparity is even larger in Financial and Business Services, in which Northern Ireland lacks highly paid staff in finance and some professional services including stock, bond, currency and commodity dealing and corporate law.

**Table 4.3: Northern Ireland Average Weekly Wages. Full-time Employees, 2002  
(GB = 100)**

	Male		Female	
	Manual	Non Manual	Manual	Non Manual
Retail & Distribution	85.5	84.5	-	76.1
Hotels & Restaurants	94.8	94.2	90.1	82.5
Transport & Communications	90.8	90.3	-	80.6
Financial Services	-	75.5	-	80.2
Business Services	81.7	76.8	-	69.8
Other Private Services	69.0	77.6	-	81.8
Public Admin & Defence	99.1	107.5	100.4	86.2
Education	80.4	108.9	91.2	114.6
Health & Social Work	98.0	96.2	93.2	103.3
<b>All services</b>	87.9	87.9	90.6	90.9
<b>Manufacturing</b>	87.7	83.6	93.5	80.8
<b>TOTAL</b>	88.0	87.2	91.7	90.1

Source: New Earnings Survey

Note: Where sample sizes are too small for reliable estimation figures are omitted.

Not all wages in Northern Ireland are lower than those in GB. In several of the major public sectors average wages are well above those in GB. In Public Administration this reflects high police wage rates. In Education it is likely to reflect an older age profile among teachers on national pay scales. Unexpectedly, wages in Hotels and Restaurants in Northern Ireland are closer to the GB average than are other Northern Ireland sectors. However, 'other' private services continue to have wage levels at only around three-quarters or less of the GB level.

Lower wages in Northern Ireland compared with GB has been one factor in the rapid growth of private services employment in Northern Ireland, notably through the attraction of call centres and other network services. In the next chapter we examine the growth of private services employment at the detailed level of individual sectors and begin to focus on the key sectors in generating new employment.

## Chapter 5: Development of Private Services and its Sub-Sectors

### Chapter Summary

- Employment has grown faster in private services than in any other large sector in Northern Ireland. While the production sector employment has declined over three decades, the service sectors in Northern Ireland have added 271,000 jobs. Of these 57% have been in private, rather than public services.
- The Distribution, Hotels and Restaurants sector has created most new jobs, i.e. 75,000, many of them part-time and low paid. The Financial and Business services sector has created 51,000 additional jobs since 1971, mostly full-time and better paid.
- Financial and Business services has also been the fastest growing major sector, expanding at 3.3% per annum since 1971, but with a notable acceleration since 1995 when the threat of paramilitary violence ceased to deter call centres from locating in Northern Ireland. However this growth rate has been similar to the GB average, and this sector's large under-representation is little different from 30 years ago.
- All of the major private services sectors have grown faster than in GB. Distribution, Hotels and Restaurants and Transport and Telecommunications have both expanded their employment considerably faster than in GB, especially over the 1990's.
- At a detailed level, the three key sectors for job creation have been:
  - Retail Distribution 41,000 jobs
  - Professional Services (SIC section 74) 30,000 jobs
  - Hotels and Restaurants 29,000 jobs

Private services have dominated job creation for several decades in Northern Ireland and throughout the UK and indeed in most of the economically developed world. In Northern Ireland, private services employment (including the self-employed) rose by 155,000 between 1971 and 2002. This is greater than the increase of 116,000 in the public services. It contrasts strongly with the 100,000 decline in employment in the rest of the private sector including manufacturing.

These sectoral contrasts are typical of most developed economies, and as suggested in the first section of this chapter, largely reflect differences in productivity growth between the services and production of goods. In Northern Ireland, employment in both public and private services has grown faster than in GB, mainly in consequence of faster expansion in population and hence demand (Table 5.1). The same is also true of the Other Private (i.e. production) Sectors. In this case output in manufacturing has long expanded faster than in GB due to high rates of government assistance both in attracting new inward investment and in supporting investment in locally-based firms. Faster growth in the

production sectors and in the public sectors have both expanded Northern Ireland's economic base and thus provided the necessary economic support for the growing population.

**Table 5.1: Change Total Employment (thousands) 1971-2002**

	NI		GB
	No.	% pa	% pa
Distribution, Hotels & Restaurants	+ 75.1	1.9	1.2
Transport & Communications	+ 9.6	1.0	0.2
Financial & Business Services	+ 50.8	3.3	3.0
Other Private Services	+ 19.6	2.7	2.5
<b>PRIVATE SERVICES</b>	+ 155.1	2.2	1.7
<b>PUBLIC SERVICES</b>	+ 115.6	2.1	1.5
<b>OTHER PRIVATE SECTOR</b>	- 99.2	-1.3	-1.8
<b>ALL SECTORS</b>	+ 171.5	0.8	0.5

Source: GB and NI employment Survey

Note: includes self employment

Within private services almost half of all the extra jobs created over three decades were in the Distribution, Hotels and Restaurants sector (Table 5.1). Most of the rest were in Financial and especially Business Services. The path of employment growth in detailed (2 digit) private services sectors in Northern Ireland since 1978 is shown in the charts in Annex 7. A comparison of employment growth in Northern Ireland with that in GB is shown in the charts in Annex 7 for the period 1991-2002.

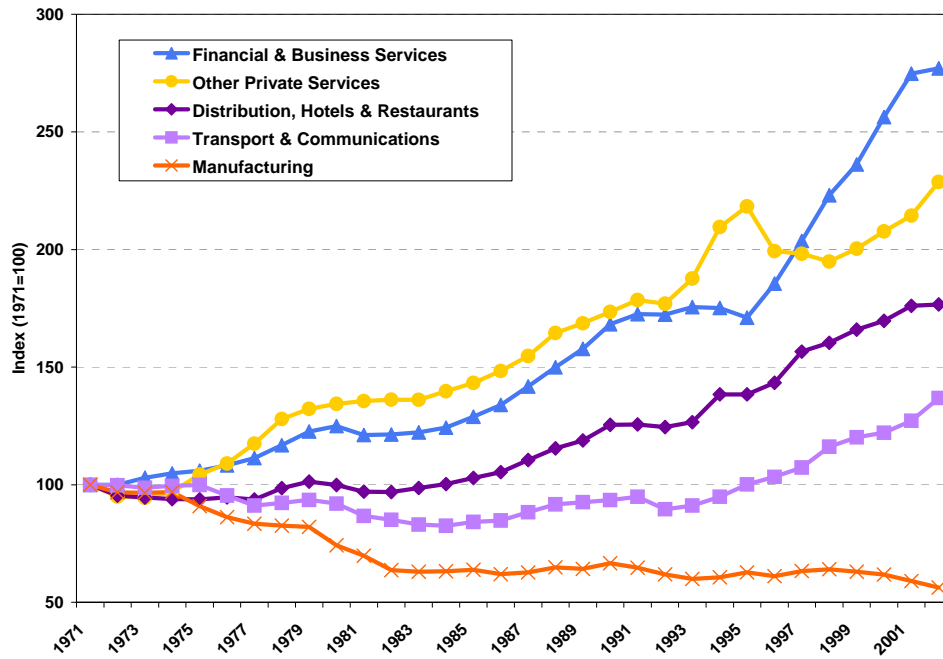
## **Financial and Business Services**

Financial and Business Services was also the fastest growing sector with employment growing at a rapid 3.3% per annum over three decades. Although employment growth in Financial and Business Services has been a little faster than in GB it has not been nearly enough to reverse the large degree of under-representation in this sector. Each of the major branches of private services experienced faster employment growth in Northern Ireland than in GB. The gap was largest in those services most dependent on local markets, i.e. Distribution, and Transport and Telecommunications. As we will see this was large enough to cause almost complete catch-up from a position of significant under-representation.

## Accelerations in Growth

Employment growth has been faster over the 1990's than previously in most branches of private services. This is particularly the case in Financial and Business Services in which growth accelerated rapidly following the paramilitary cease-fires beginning in August 1994 (Figure 5.2iii). Many of the extra jobs were in call centres. Although one or two call

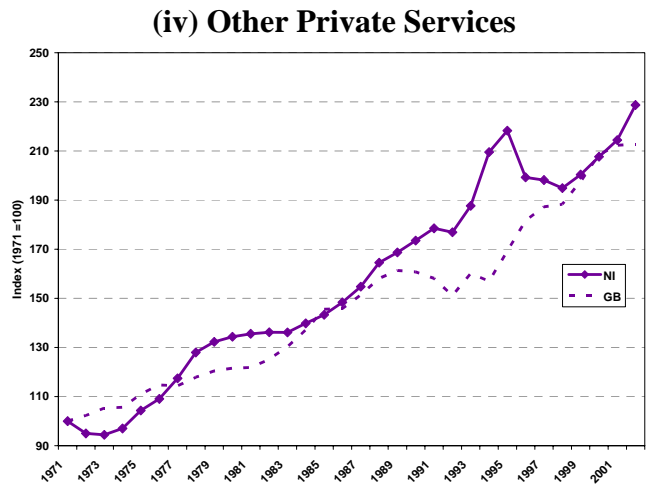
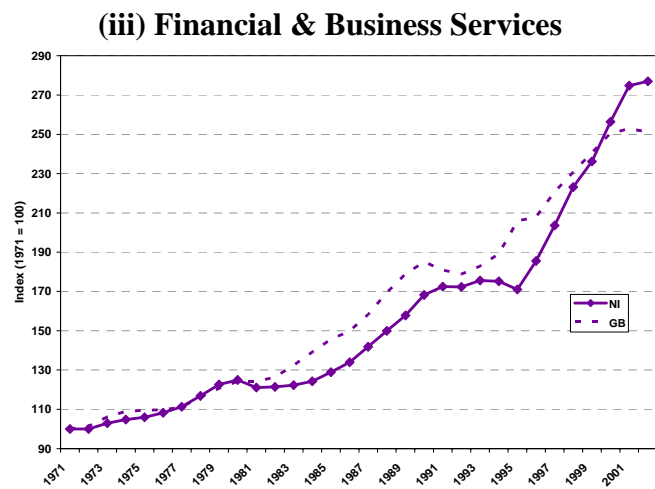
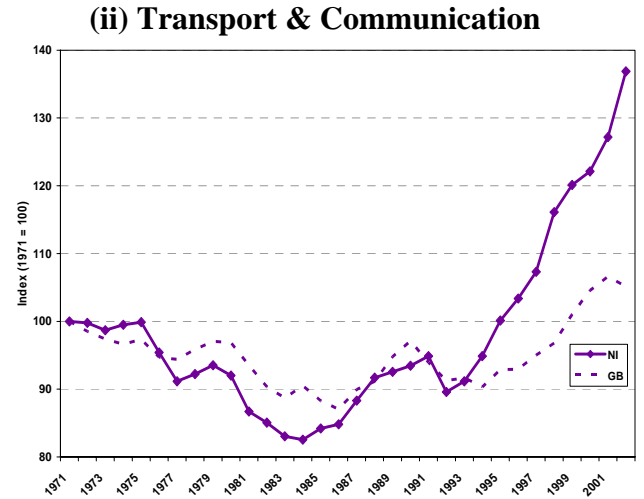
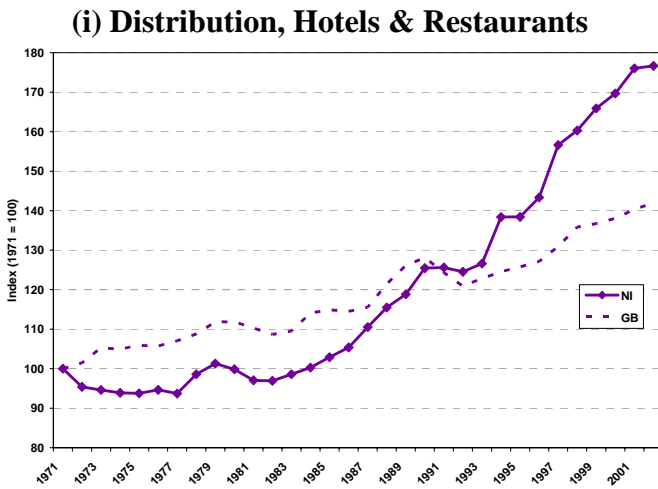
**Figure 5.1 Total Employment in Northern Ireland by sector (1971=100)**



Source: DETI Quarterly Employment Survey

centres had located in Northern Ireland before 1994, in the early years of the national call centre boom, many were deterred by the risk of disruption from bombing and other paramilitary violence. Once this danger receded, Northern Ireland became an attractive location with available labour at relatively low wage rates by UK and EU standards. As labour came to be in particularly short supply in many parts of GB towards the end of the 1990's the relative attraction increased. A significant number of new call centres are still approaching Invest NI, but the data suggests a slowdown in job creation in the Financial and Business Services Sector as a whole.

Figure 5.2: Total Employment



Source: DETI Quarterly Employment Survey, ABI, Labour Market Trends

## ***Distribution, Hotels and Restaurants***

There were also accelerations in employment growth in the other branches of private services. These appear less related specifically to the cease-fires but may reflect a generally improving political situation from the mid 1980's onwards, and faster growth in total employment from the late 1970's. Employment in Distribution, Hotels and Restaurants began to grow faster than in GB from 1985, and has grown much faster since 1990 (Figure 5.2i). As we will see later in this chapter much of this represents a catch-up after a decade in the 1970's in which little new development occurred in retailing and some companies moved wholesale depots out of Northern Ireland, and the tourist trade declined to a low level. The catch-up over the 1990's occurred mainly in Retailing and in Hotels and Restaurants (Annex 8). The boom in new business-oriented hotels in Belfast and Londonderry began before the cease-fires with financial incentives, but received a powerful boost from the cease-fires after 1994.

There is some evidence that the growth gap between Northern Ireland and GB may be widening more slowly as Northern Ireland becomes less under-shopped than in the past. However, the recent arrival of the Matalan chain and on-going expansions in Next and the Lidl supermarket chains, among others, suggest that the catch-up is not yet complete.

## ***Transport and Communications***

The pattern has been similar in Transport and Telecommunications, with some acceleration ahead of GB in the mid 1980's. However, in this sector the recent spurt in relative growth began in 1992 (Figure 5.2ii). Employment expanded rapidly in all sub-sectors of Transport over the 1990's, but appears have ceased in sea and air transport since 2000 (Annex 8). Northern Ireland's employment grew much faster than GB throughout the 1990's in air transport, where privatisation of the two Belfast airports and the arrival of the low cost airlines have both helped to stimulate air travel and to more than double employment. It also grew faster in road transport throughout the decade beginning in 1993 (Annex 8).

## ***Other Private Services***

The 'Other' Private services category experienced a different pattern of employment change over time. Although the general trend has been upward, with employment more than doubling since 1978, there was a mini boom in the early 1990's followed by decline in the years 1995-8. Since then growth has resumed with an acceleration in 2002 (Figure 5.2 iv).

The decline has mainly occurred among charitable and other organisations. These lost a quarter of their jobs between 1995 and 1999, in the context of a growing trend in GB

(Annex 8). Many of these received government financial assistance, much of it from EU funds. A change in EU funding arrangements in 1994 may have been one factor in the decline. It is less likely that the paramilitary cease-fires had a direct effect at this early date. Employment in sewage and waste disposal also fell sharply in 1995, but this is a small sector. The entertainment, cultural activities and sports sub-sector has grown steadily since the mid-1980's, with a 30% expansion in jobs since 1995.

## **Key Growth Sectors**

The three largest generators of additional employee jobs over the last quarter century have been:

- Retail Distribution (40,600)
- Other Business Activities (29,500)
- Hotels, Restaurants (28,900)

Together these three sectors created close to 100,000 jobs in 24 years, almost three-quarters of the total of job creation in the private services (Table 5.2). In the case of Retail Distribution the large job creation reflected the large size of the sector rather than particularly rapid growth by private services standards. However, Other Business Activities and Hotels and Restaurants were fast growing sectors. In both cases employment expanded by a huge average of 5.5% per annum over 24 years. Both sectors also grew much faster than their GB counterparts (Table 5.3). In both cases this reflected a large initial under-representation. A second factor has been faster growth of population, and hence consumer demand, over the whole of this period. The importance of faster growing demand is reflected in the fact that numbers of employees grew faster in Northern Ireland than GB in 17 out of the 21 '2 digit' sub-sectors in private services (Table 5.3)

The rapid growth in Hotels and Restaurants and in Other Business Services requires further analysis. In the former case much is connected with the state of tourism in Northern Ireland, and the next section deals with this. The specialist professional and business services in 'Other Business Services' are particularly important because they contain several of the services sub-sectors with greatest 'export' potential. We thus also devote the next two chapters to examining these in detail.

**Table 5.2: Change in Employees in Employment, NI 1978-2002**

	000's	% pa
Vehicle Repairs etc.	4.3	1.4
Wholesale	2.3	0.5
Retail	40.6	3.1
Hotels, Restaurants	28.9	5.5
Land Transport	4.0	1.7
Sea Transport	0.0	0.1
Air Transport	0.2	0.9
Transport Support	1.8	1.8
Communications	0.7	0.3
Banking	3.6	1.7
Insurance	-0.5	-0.8
Other Finance	1.9	4.3
Real Estate Activities	2.3	4.2
Renting of Machinery etc.	0.8	1.8
Computer Services	5.2	10.5
Research & Development	0.9	2.9
Other Business Services	29.5	5.5
Waste Disposal	1.6	3.6
Charities etc.	2.6	1.7
Entertainment, Culture, Sport	6.3	2.4
Other Services	0.6	0.7
<b>Total Private Service</b>	<b>137.3</b>	<b>2.8</b>

Source: National Statistics, DETI Quarterly Employment Survey, ABI, Labour Market Trends

**Table 5.3: Change in Employees in Employment, 1991-2002**

	NI % pa	GB % pa
Vehicle Repairs etc.	2.1	0.7
Wholesale	1.4	1.3
Retail	3.8	1.9
Hotels, Restaurants	5.4	2.1
Land Transport	2.8	-0.2
Sea Transport	7.8	-6.2
Air Transport	4.1	2.2
Transport Support	2.3	2.9
Telecommunications	1.3	0.7
Banking	2.0	-0.7
Insurance	-2.4	-0.8
Other Finance	3.6	2.5
Real Estate Activities	3.9	5.5
Renting of Machinery etc.	0.8	2.1
Computer Services	15.4	10.1
Research & Development	2.8	2.5
Other Business Services	5.8	3.4
Waste Disposal	3.0	4.0
Charities etc.	-0.1	3.4
Entertainment, Culture, Sport	2.7	2.1
Other Services	0.2	3.6
Total Private Services	2.8	2.1

Source: National Statistics, DETI Quarterly Employment Survey, ABI, Labour Market Trends

## Chapter 6: Tourism in Northern Ireland

### Chapter Summary

- Although numbers of visitors to NI has been growing steadily the Tourism sector remains under-developed compared with other parts of the UK or with the Republic of Ireland.
- A much lower proportion of NI's visitors are holiday-makers compared to these other areas.
- The economic contribution of externally-based holiday-makers is consequently only 0.2% of GDP, a much lower level than for Scotland, Wales or the ROI.
- The negative impact of NI's political instability and violent image has been and remains huge. We estimate that the number of visitors to NI might be five or six times greater had it not been for the 'troubles'.
- The potential for future growth under benign conditions is correspondingly large. The restoration of a normal image for NI could lead to a tripling in visitor numbers within ten years.

*The following section on the tourism industry in Northern Ireland is an edited and updated version of a section in a report, involving an author of this study, on 'Air Services in Northern Ireland' for the Department of Regional Development.*

In 2002, overseas visitor numbers to Northern Ireland totalled 1.7 million, with visiting friends and relatives being the single main reason given for the majority of trips. As Table 6.1 shows, Northern Ireland lags far behind Scotland, Wales and the Republic both in the overall number of visitors and in the number of visitors per head of population. However, Scotland and Wales no doubt benefit from the ease of access of sharing the land border with England.

Best available estimates<sup>4</sup> suggest that, given the size of the population of Northern Ireland, the numbers visiting friends and relatives (VFR) are similar to the Republic of Ireland and higher than for Scotland (although they are lower than for Wales). Similarly, the number of business visitors in relation to the size of the Northern Irish economy is similar to that for both the Republic and Scotland (although again lower than for Wales). The shortfall of visitors to Northern Ireland is predominantly due to the low number of holiday-makers. In 2002, just 285,000 visitors stated that their main purpose for visiting was for a holiday: measured relative to the resident population, this was only 20% of the number of holiday-makers visiting the Republic and 13% of the number visiting Scotland. Consequently, holiday-makers account for just 16% of visitors to Northern Ireland, far below the proportions recorded elsewhere (Table 6.2).

<sup>4</sup> As noted in the notes to Table.1.14, the total figure for visitor numbers to Scotland excludes Scottish visitors, but the split according to purpose of visit is based on total visitor numbers including Scottish visitors. The same applies to Wales.

**Table 6.1: 'Out-of-State' Visitors by Purpose of Visit, 2002**

	Northern Ireland	Scotland	Wales	Republic of Ireland
<b>Total (000's)</b>	1741	10900	12761	6065
<i>of which:</i>				
<b>Holidays</b>	285	6845	9093	3242
Business	518	1695	1155	906
VFR	817	2074	2205	1603
Other	121	286	307	314
Visitors as % of population	103	215	438	154
<i>of which:</i>				
<b>Holidays</b>	17	136	340	83
Business	31	34	40	23
VFR	48	41	76	41
Other	7	6	11	8
Business visitors per £mn GDP	26.1	23.6	33.6	11.7

Source: Tourist boards of Northern Ireland, Scotland, Wales and the Republic of Ireland, OEF.

Notes: Total figure for Scotland excludes Scottish visitors, but percentage split is based on total visitor numbers including Scottish visitors. The same applies to Wales.

**Table 6.2 ‘Out-of-State’ Visitors by Purpose of Visit, 2002 (% of total)**

	Northern Ireland	Scotland	Wales	Republic of Ireland
<b>Total</b>	100	100	100	100
<i>of which:</i>				
<b>Holidays</b>	16	65	71	53
Business	30	15	9	15
VFR	47	18	17	26
Other	7	3	2	5

Source: Tourist boards of Northern Ireland, Scotland, Wales and the Republic of Ireland, OEF.

The shortfall of holiday-makers subtracts significantly from GDP. In 2002, spending by out-of-state holiday-makers to Northern Ireland amounted to £42 million, equivalent to just 0.2% of GDP and significantly below the range of 1.8% to 4.4% reported in the other countries (Table 6.3).

**Table 6.3: ‘Out-of-State’ Visitor Spending, 2002**

	Northern Ireland	Scotland	Wales	Republic of Ireland
<b>Total, £bn</b>	274	3118	1795	2862
<i>of which:</i>				
<b>Holidays</b>	41	1957	1269	1594
Business	104	677	222	418
VFR	110	402	250	634
Other	19	82	55	216
<b>% of GDP</b>	1.5	4.9	6.2	3.2
<i>of which:</i>				
<b>Holidays</b>	0.2	3.1	4.4	1.8
Business	0.6	1.1	0.9	0.5
VFR	0.6	0.6	0.7	0.7
Other	0.1	0.1	0.2	0.2

Source: Tourist boards of Northern Ireland, Scotland, Wales and the Republic of Ireland. GDP figures are OEF estimates based on ONS Regional Accounts data.

The low number of holiday-makers visiting Northern Ireland is the major factor behind the overall low level of spending in tourism. Out-of-state holiday-makers to Northern Ireland on average stay for a similar number of nights as those in Scotland or Wales (although lower than in the Republic and Scotland), while the average spend per night in Northern Ireland is in line with that in the Republic (but again lower than in Scotland). Although there is scope for Northern Ireland to increase the average length of stay and the average spend per night, the key negative factor is the lack of throughput of holiday-makers. This is best demonstrated by Wales, which has a similar average length of stay and spend per night, but translates these into far higher spending figures by attracting almost 9 million holiday-makers per year – over 30 times as many per head of its population than in Northern Ireland.

**Table 6.4: ‘Out-of-State’ Holidaymaker Spending, 2000**

	Northern Ireland	Scotland	Wales	Republic of Ireland
Nights (millions)	8.5	52.3	46.4	46.7
Nights per holidaymaker	4.9	4.8	3.6	7.7
Spending per night (£)	32.2	59.6	38.7	61.2
Spending per holiday-maker (£)	157	286	140	471.2

Source: Tourist boards of Northern Ireland, Scotland, Wales and the Republic of Ireland, OEF calculations.

### **The Potential for Overseas Visitors to Northern Ireland**

Northern Ireland has under-performed both the UK as a whole and the Republic of Ireland as a tourist destination largely because of the troubled political situation. In the early 1970s the number of out-of-state visitors rapidly halved as the ‘troubles’ intensified, with the 1968 peak of 1.14 million visitors - which was little different to the number of out-of-state visitors to the Republic at that time - not surpassed until 1990 (Figure 6.1).

A visitor satisfaction survey conducted in the summer of 2000 by PricewaterhouseCoopers for the Northern Irish Tourist Board found that holiday-makers visiting Northern Ireland were as satisfied as those visiting either Scotland or the Republic of Ireland and as likely to recommend the destination to friends. The survey also found that the main appeal of Northern Ireland to holiday-makers lay in its ‘natural’ strengths of beautiful scenery and very friendly people, although facilities for tourists were somewhat under developed.

This survey suggests that there is substantial upside potential to holiday-maker numbers arriving in Northern Ireland. One way to illustrate the scale of this is by asking: 'what if visitor numbers had developed over the last 35 years in line with the trend in the rest of the UK or the Republic of Ireland?'

In 1967, out-of-state visitor numbers to Northern Ireland totalled 1.08 million. If this figure had grown in line with the growth of visitor numbers in the UK as a whole, visitor numbers in Northern Ireland in 2000 would have been about 6.35 million, significantly above the 1.7 million visitors actually recorded. This is illustrated by the 'what if UK' line on Figure 6.1. (Note that the time series for the UK includes 'overseas' visitors only).

The experience of the Republic illustrates that out-of-state visitor numbers can increase extremely rapidly. Between 1967 and the mid-1980s visitor numbers to the Republic grew at a relatively modest rate, under-performing the UK. However, between 1986 and 1994 the number of out-of-state visitors doubled and in the following six years rose a further 68% to total over 6.7 million in 2000. If Northern Ireland were to follow the Republic's growth example, it could be attracting 3.75 million visitors' pa by 2010. This is illustrated by the 'what if Ireland' line on Figure 6.1.

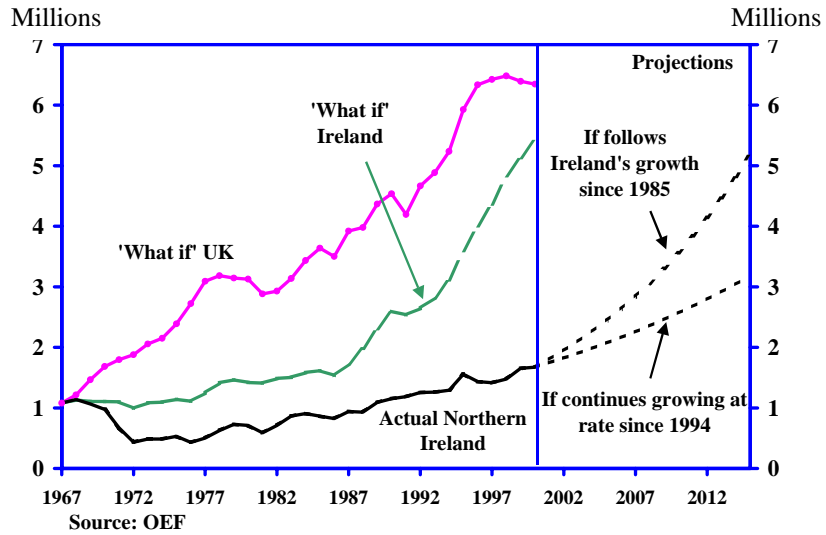
The projections from 2000 to 2015 in Figure 6.1 are based on two alternative scenarios. The lower line projects year-2000 visitor numbers forward assuming a continuation of Northern Ireland's average growth rate from 1994 to 2000, while the upper line applies the average growth rate of Ireland from 1985 to 2000. They show that:

- If visitor numbers to Northern Ireland were to continue to grow at their recent rate, they would total 2.6 million in 2010 and 3.2 million in 2015. But if Northern Ireland could emulate the recent experience of the Republic, visitor numbers would reach 3.6 million in 2010 and 5.2 million by 2015.

On a per capita basis, these projections would result in Northern Ireland having about the same number of visitors in 2010 as the Republic of Ireland had in 2000. The Northern Ireland Tourist Board's (NITB) target is average annual growth in visitors of 7% per annum for the period 2004 – 07 which, if sustained over an 8 year period from 2002, would imply 3.0 million visitors by 2010 and 4.2 million by 2015.

A number of factors will determine whether such growth can indeed be achieved and sustained in Northern Ireland. These include visitors' perceptions of the political situation, the extent to which the tourism infrastructure is improved, the level of the exchange rate, and ease of access to the region by air and other modes of transport. The task will not be easy unless Northern Ireland's external image improves dramatically. The scale of the problem can be seen in the fact that the number of holiday visitors to Northern Ireland actually fell by 7% between 1999 and 2002. However, a recovery may be underway since provisional figures for 2003 suggest an 11% increase in total visitor numbers and a 15% increase in numbers of holiday visitors.

Figure 6.1 Northern Ireland 'potential' 'Out-of-State' Visitor Numbers



## Chapter 7: Tradable Business Services

### Chapter Summary

- Tradable business service sub-sectors are identified with reference to their distribution across GB counties. Insurance, non-bank financial activities, R&D, market research and advertising are the chief sectors in which most activity is tradable.
- NI's finance sub-sectors have experienced little growth other than from two major call-centre investments. Insurance has been the worst performer with the loss of almost a thousand jobs since 1995.
- Business services, in contrast, has had a strong record of recent growth. Almost every sub-sector has grown faster in NI than in GB in some cases by large margins.
- Excluding recruitment agencies, which is a special case, business services has created over 2,000 additional jobs per year since 1995.

An important sub-set of services are those which can easily be traded across regional boundaries and thus form part of the economic base in the sense of bringing income into the region from outside. The Standard Industrial Classification is not designed to make a clear distinction between tradable and non-tradable activities, and most sectors include some of both. Where sectors include both categories it is usually only a few areas which have substantial tradable activity. For instance in financial intermediation (i.e. banking, factoring, investment trusts, venture capital etc), activity in most regions is dominated by retail banking and building societies. In a few areas, notably London and to a lesser extent Edinburgh, wholesale and investment banking, financial brokers and dealers are very important. Similarly, in legal services, most regions, including Northern Ireland, have criminal and civil law services for local communities. Only in London, and to a lesser extent major Northern cities including Leeds and Manchester, do corporate law specialists serve national and international markets.

However, many sectors are mainly either tradable or non-tradable. For this report we have classified services into tradable and non-tradable categories on the basis of their distribution across counties in GB. Those activities in which most counties have a share of GB employment in proportion to their share of GB population can be regarded as mainly serving local demand. Other activities are much more concentrated. In these sub-sectors a few counties have a large share in relation to their population while most counties are under-represented in the activity. These geographically concentrated services are those that are being supplied from relatively few locations.

The main services in this ‘tradable’ category are:

- Sea Transport
- Air Transport
  
- Insurance
- Other finance
  
- Research and Development
  
- Market Research
- Advertising

Others partially concentrated in a few areas, but less concentrated than the activities listed above, are:

- Transport Support
- Banking
- Computing
- Security

## **Transport**

We propose to say little here about the transport services. In regions with major ports and airports these activities can be significant earners of income from outside the region. Northern Ireland because of its geography is largely self-sufficient in sea-transport, However ferry companies preferred to locate staff at the other end of ferry routes during the ‘troubles’ period. Since 1995 there has been an acceleration in the growth of employment at Northern Ireland ports. There has at times also been extra-region trade because Belfast Port has been more efficient and hence cheaper than Dublin- its main competitor on the island. However, the worst of the inefficiencies at Dublin port have been addressed and competitiveness is now more balanced.

Air travel from Northern Ireland largely originates from its own three airports and similarly inbound traffic largely arrives at the same airports. Although some travellers arrive or depart from Dublin, this is a minority, and is dominated by border areas where the distances are similar to both Belfast and Dublin. Where Northern Ireland loses business is in the lack of scheduled (as opposed to charter) flights. Other UK hubs, especially at London, dominate international travel. International travel on scheduled flights involves Northern Ireland in only the short-haul section of the journey. This is already changing however with the introduction during 2004 of scheduled flights to four destinations in France and Spain plus Brussels and Prague in addition to the existing flights to Amsterdam.

Belfast International Airport claims that the loss of business to Belfast City airport reduces their size in the eyes of international airline operators who organise flights on the basis of airport size. Others in Northern Ireland contest this view. However the fact remains that Northern Ireland has been strongly under-represented in direct international flights compared with the Republic of Ireland. Dublin airport has many more direct international flights in proportion to its population than the whole of Northern Ireland, even with the new flights. One important factor is the small size of Northern Ireland's tourism industry compared with that in the Republic. In the Republic's case almost three-quarters of tourists arrive by air, giving an important additional source of demand for international flights.

Road transport has expanded strongly over the last ten years. One important factor has been the recovery of the retail sector from the low levels of the 'troubles' years. Industrial production has also expanded faster than in GB, generating extra demand for road freight businesses, but the volume of goods distributed to consumers is much greater. Relatively little freight from Northern Ireland goes by air. Even some of the relatively small volume of air freight leaves Northern Ireland by road and sea on route to air freight hubs in GB. Although road freight operators have a higher burden of fuel and vehicle tax than in the Republic, regulations prevent the registration of Northern Ireland freight operators in the Republic. There is little evidence that jobs have been diverted across the border.

## **Finance**

Northern Ireland's worst performing sector among the tradable sectors has been insurance. It has declined steadily since 1995, losing almost a thousand jobs (Table 7.1). Despite the difficulties faced by the sector since September 11 2001, employment has been on a slow upward trajectory in GB. Northern Ireland has relatively little export activity in the sector, and may be suffering from rationalisation among the largely externally-owned companies in, what for them, is a very small market. However, further research would be needed to establish the precise reasons.

**Table 7.1 Changes in Employees in Financial Services (1995-2001 )**

	NI		GB
	000's	%pa	%pa
Banking	2.3	2.3	-1.1
Insurance	-0.8	-3.7	1.1
Other Finance	0.6	4.1	4.0
Total Financial Services	2.1	2.5	0.4

*Source: Annual Census of Employment GB and NI*

Financial intermediation has, in contrast grown faster than in GB and gained several thousand jobs since 1995 (Table 7.1). Part of this represents growth in the consumer market, but part is due to the influx of call centres serving banks notably the Halifax call centre in Belfast's Gasworks site. Auxiliary Financial Activities includes fund administration, but there is little of this in Northern Ireland. Instead, in Northern Ireland this sector is dominated by the administration of pension funds and has grown recently at a similar rate to that in GB.

## Specialist Business Services

It is the Business Service sector that has grown fastest in recent years and provided most additional full-time jobs, especially those at high rates of pay. Several of these are potentially important export sectors, although as we show in the next section these are generally well under-represented in Northern Ireland. In this section we focus on the facts of the recent growth record as measured by employment.

What is striking about Business Services in Northern Ireland is that virtually every sub-sector has grown faster than in GB (Table 7.2). Growth has also been consistently more favourable than in GB, with faster growth in most individual years (see charts in Annex 9).

Most of these activities serve local demand, and the faster expansion of population in Northern Ireland compared with GB has been an important factor. It is noticeable that two of four sub-sectors identified above as regionally 'tradable' are the only sectors to have expanded less rapidly than in GB. In one of these, the small market research sub-sector, employment actually fell. In security services, slower growth in Northern Ireland was to be expected following the paramilitary cease-fires. Of the 'tradable' sub-sectors, only computing and advertising grew faster than in GB. In Computing, growth has been spectacular, at almost 30% per annum since 1995, albeit from a low base and with a degree of government support. Advertising has also grown rapidly, again from a very low base, which ten years ago included no copy writing, with local firms acting mainly as agents for London companies.

**Table 7.2 Change in Employees in Specialist Business Services (1995-2001)**

	NI		GB
	000's	%pa	%pa
Computer Services	4.5	29.4	12.8
Research & Development	0.4	4.8	4.6
Legal Services	1.0	4.0	1.1
Accounting	1.0	5.6	4.3
Market Research	0.1	-0.7	9.2
Consultancy	1.1	14.0	5.6
Architecture	1.5	6.3	-1.8
Advertising	0.4	10.8	4.6
Recruitment	6.6	21.3	11.7
Security Services	0.4	2.1	7.2
Industrial Cleaning	2.2	5.2	-5.5
Other Business Services	1.1	10.2	6.9
Total	23.1	9.6	4.4

Source: DETI Quarterly Employment Survey, ABI

The small consultancy sector has also grown rapidly, and three times faster than in GB since 1995. A range of businesses are involved here, with much of their work serving the Northern Ireland public sector. However, the Northern Ireland branches of the large national business consultancies have also been undertaking work in GB over recent years, acting as suppliers or sub-contractors to their offices in London or elsewhere in GB.

Most of the other business and professional services serve local needs. These include legal services, accountancy, architects and engineering services. Relatively little of this activity involves work for clients outside Northern Ireland, and part of it is for domestic rather than business clients. These three services added 4,500 additional jobs between 1995 and 2001, in each case growing faster than their counterparts in GB (Table 7.2Check).

Industrial cleaning added a further 2,500 additional jobs, although these were largely part-time jobs for females and unlikely to be well paid. Finally, the recorded 6,600 increase in jobs under the recruitment agency includes many of the temporary staff supplied to employers by such agencies. The majority of staff are female and approximately half are part-time workers. We do not know what sectors they were

employed in, and these sectors are likely to be disparate and probably include the public as well as the private sector.

The business services sector turns out to be the largest component in Northern Ireland's under-representation of private services compared with both GB and with the rest of the European Union and the USA. The issue of under-representation is perhaps the most important in this report. In the next chapter we examine the international context, followed in chapter nine by a detailed consideration of under-representation compared to other regions within the economic and monetary union that is the UK.

## Chapter 8: The International Context

### Chapter Summary

- Northern Ireland has a lower proportion of its employment in private services than any other EU country and a very much lower proportion than the USA.
- However, the UK has a proportionately larger private services sector than any EU nation other than Luxemburg, and is closer to the USA level than any large EU country.
- Northern Ireland gains from aspects of the UK system including a high level of consumers spending and a well developed financial system. However, NI's private services suffer from the under-development of business services, telecommunications and air transport.
- Northern Ireland is second only to Portugal for the small size of its business service sector. It is also third to Portugal and Greece in the small size of its transport and telecommunications sector.

### ***Private Services in International Economies***

Previous sections have shown that Northern Ireland has the smallest private services sector of any UK region. This is the case whether measured in terms of employment or GVA. In this section we adopt a wider horizon and examine whether the same is true of Northern Ireland compared with other European countries and the USA. For reasons of data comparability, we focus on employment, including the self-employed, and define private services to include sections G-K of the Standard Industrial classification.

This differs from the definitions used in previous sections in that 'Other Services' are excluded. 'Other Services' is a relatively small sector that includes entertainment, culture, sport, waste management and charitable and similar organisations. Sector definitions are common across Europe. For the USA we have adjusted definitions to maintain comparability as far as possible (for instance, including postal services within Communications rather than within Government). The data for 2001 is expressed as full-time equivalent employees, in order to diminish differences between countries and sectors in average hours worked.

What is striking about the comparison is the high percentage of private services employment in the UK compared with almost all European countries, although not with the USA (Table 8.1). Just over 41% of full-time equivalent employment in the UK was in private services in 2001, compared with an EU15 average of under 37%. All EU countries, with the minor exception of Luxemburg, had a lower percentage of employment in private services.

**Table 8.1 Private Services Employment: percentage of Total Employment**

Country	Employment		FTE Emp. 2001
	1996	2001	
Northern Ireland	30.1	33.5	33.2
UK	39.9	42.0	41.3
EU15	35.7	37.2	36.9
USA	40.1	46.2	46.6
Germany	33.0	35.1	34.3
France	34.9	36.0	36.2
Italy	35.4	35.4	35.2
Spain	37.3	38.0	38.1
Other EU	36.0	37.3	37.8
Of which: ROI	34.4	39.7	38.8
Other W. Europe	n.a.	39.7	38.8

Source, DETI, EuroStat, America Bureau of Labour Statistics

Notes: 1: Unweighted average

2: Unweighted average of Iceland, Norway, Switzerland

The high proportion of private services in the UK partly reflects the exceptional position of London with its global significance in financial and business services. In London over 60% of employment is in private services. However, this is not the only factor, since the rest of the UK, excluding London, has a higher percentage of employment in private services than all other West European countries other than the Netherlands and Switzerland (and Luxemburg).

In general, the percentage working in the service sectors rises with labour productivity. Richer countries thus tend to have higher percentages of employees in the service sectors, just as richer regions within the UK also have higher percentages. This is borne out by the high percentage of US employment that is in private services. Across Western Europe, where living standards are relatively similar, this broad relationship is interrupted by other factors. Small countries with large tourism sectors, for instance tend to have larger private services sectors than might be suggested by their level of per capita GDP. The Republic of Ireland is above the EU15 average chiefly for this reason, along with Austria, Greece and Spain.

High productivity in production sectors permits the release of labour which is generally absorbed in the service sectors. Some countries that still have low productivity in agriculture, like Portugal and Greece, have correspondingly smaller private services

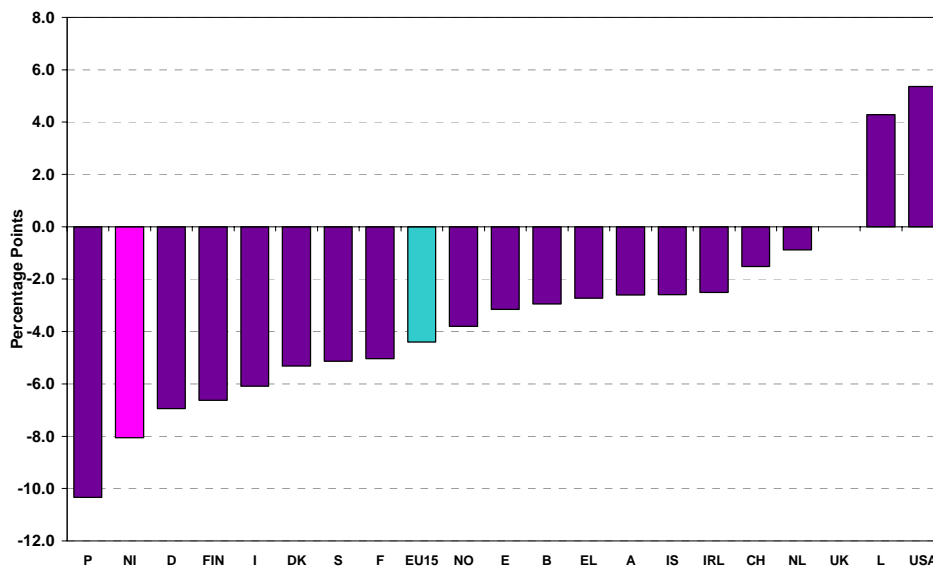
sectors than would otherwise be the case. In other countries, the pattern of economic development has led to large export sectors in production but not in services. Germany developed an economic system with great strengths in industrial production, but without the imperial and trading history of the UK or the Netherlands, has not developed a similarly strong export sector in business and professional services. Similarly, Denmark's traditional strengths in agricultural production support high standards of living without the need for exports in financial or business services.

Another strong influence on the level of employment in private services is the size of the public sector. Large public sector employment, mainly in the Scandinavian and Benelux countries, but also in France, is associated with high taxation and low consumers expenditure. As a result, employment in distribution, hotels, restaurants and financial services tends to be low in these countries.

### ***Northern Ireland in an International Context***

We have already seen that Northern Ireland has a small proportion of its employment in private services compared with the EU or US averages (Table 8.1). In this section we compare Northern Ireland with all Western European countries and the USA, in each of the major private services sectors. As before, employment includes the self-employed and is measured in full-time equivalent jobs. Countries are compared in Figures 8.1-8.6 which show the percentage of total employment in each sector in 2001 expressed as a difference from the UK average. The UK thus has a value of zero in each Figure. Northern Ireland has a value of -8.1 for private services employment in Figure 8.1, indicating that its percentage of employment was 8.1% below the UK average in 2001.

**Figure 8.1 Percentage Employment in Private Services (difference from UK average), 2001**

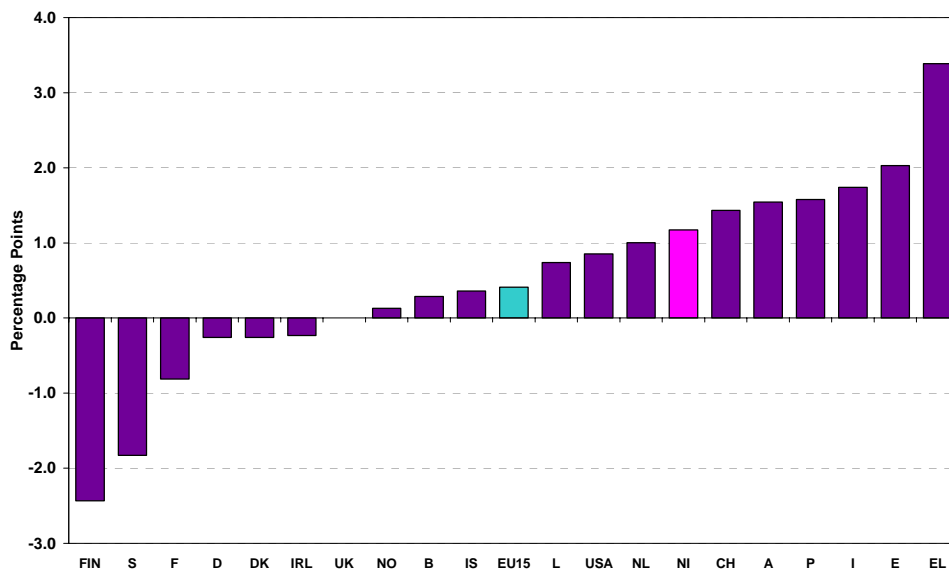


Source, DETI, EuroStat, America Bureau of Labour Statistics

Northern Ireland had a lower percentage of employment in private services than every Western European except Portugal (Figure 8.1). Like Portugal (and Greece) Northern Ireland has a very low proportion of employment in business services, and in both cases this accounts for most of the low percentage in private services as a whole.

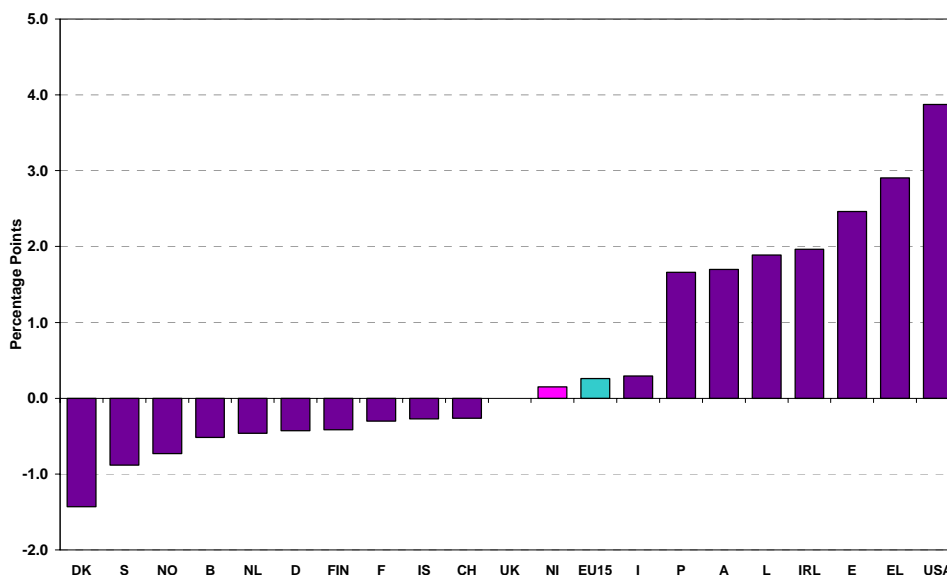
Although Northern Ireland was also well below the EU15 average for private services as a whole, it was only slightly below the levels of Germany and several Scandinavian countries. In the latter cases a large public sector was a significant factor in crowding out private services. These countries had a lower proportion of employment in distribution, hotels and restaurants than Northern Ireland (Figures 8.2 & 8.3), but were much better represented than Northern Ireland in the important business services sector (Figure 8.6).

**Figure 8.2 Percentage Employment in Distribution (difference from UK average), 2001**



Source, DETI, EuroStat, America Bureau of Labour Statistics

**Figure 8.3 Percentage Employment in Hotels and Restaurants (difference from UK average), 2001**



Source, DETI, EuroStat, America Bureau of Labour Statistics

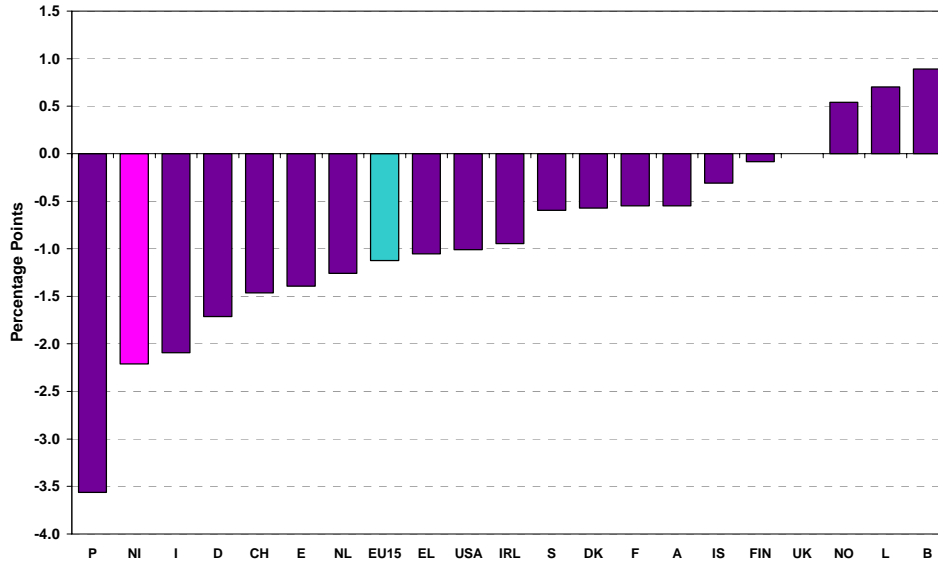
Although a large public sector reduces the size of the private services at national level, the same cannot be so easily argued for Northern Ireland. At national level, high public expenditure is largely balanced by high taxation in a way that is not true for Northern Ireland. Inter-regional fiscal flows within the UK means that high regional public expenditure need have no direct consequences for private services. There could in principle be indirect consequences due to ‘crowding-out’ in the labour market. Although this has occasionally been argued it has yet to be proved. Generally, high unemployment in Northern Ireland has meant that labour shortages have not been important except for specific skills in limited periods. However, as private sector wages in Northern Ireland have diverged further from the UK average, the gap between these and nationally uniform public sector pay has widened. At anecdotal level it is clear that higher public sector wages in Northern Ireland are attracting graduate staff from private sector firms. To what extent this undermines the growth or competitiveness of the private sector is however unknown.

Northern Ireland’s distribution sector employs proportionately more people than either the UK or EU15 averages, although the difference is small (Figure 8.2). Most countries with proportionately larger distribution sectors are either Mediterranean or Alpine states with large tourism industries. Northern Ireland is also close to the EU15 average in the proportionate size of its hotels and restaurants sector (Figure 8.3). Once again it is countries with well developed tourism sectors that have proportionately more employment in this sector than Northern Ireland.

It is in the remaining private service sectors that Northern Ireland falls behind. These include transport and communications, finance and especially business services. Northern Ireland has a lower proportion of employment in transport and communications than any

Western European country except Portugal (Figure 8.4). However, it is only a little below Germany and Italy in this respect and cannot be considered very deficient.

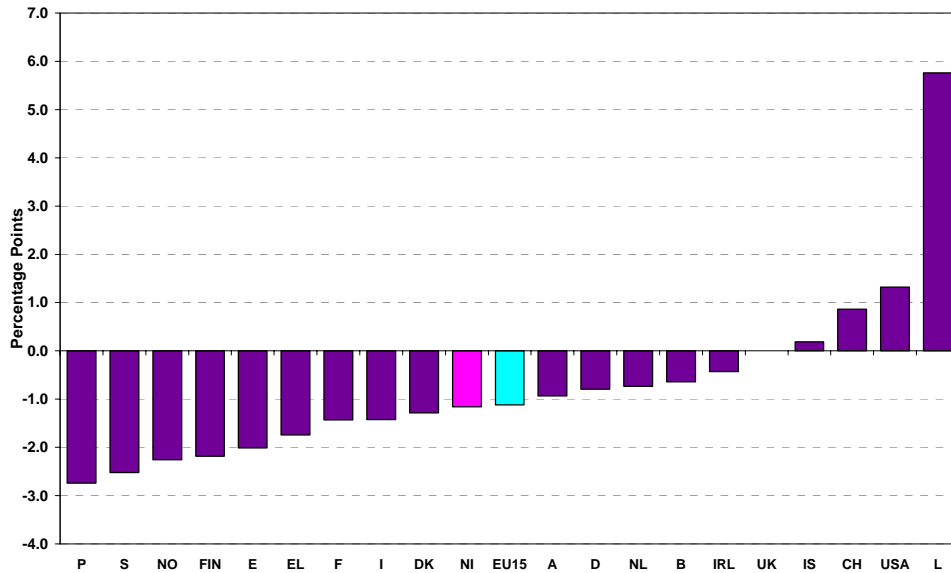
**Figure 8.4 Percentage Employment in Transport & Communications (difference from UK average), 2001**



Source, DETI, EuroStat, America Bureau of Labour Statistics

Although Northern Ireland has a low level of employment in financial services by UK standards, it stands higher in the European league table (Figure 8.5). This reflects the well developed financial system throughout the UK, in common with much of northern Europe and the USA. In much of southern Europe financial services are less well developed, and hence most of these countries have lower proportions of employment in financial services than Northern Ireland.

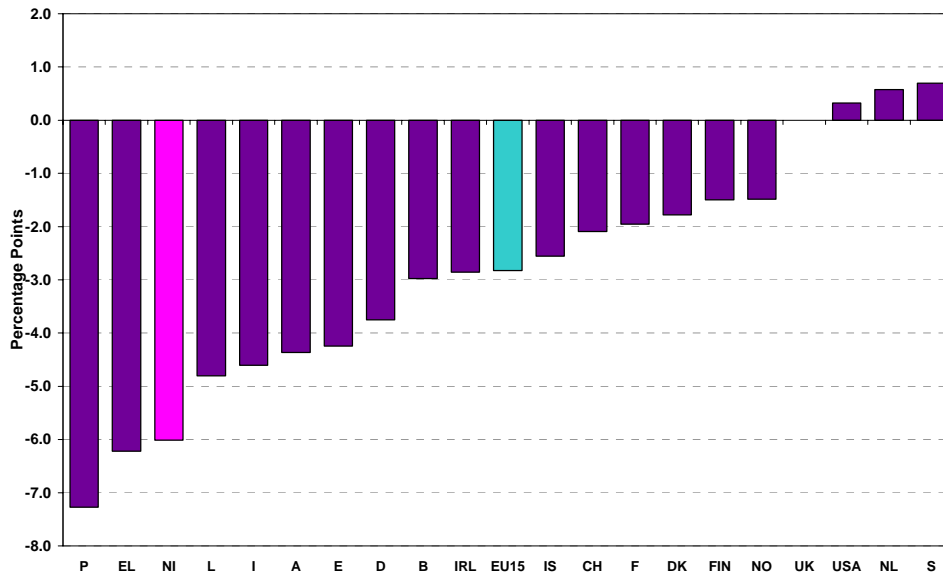
**Figure 8.5 Percentage Employment in Financial Services (difference from UK average), 2001**



Source, DETI, EuroStat, America Bureau of Labour Statistics

It is the large business services sector that has most influence on overall employment disparities in private services. This is partly due to its large level of employment, but also because employment levels are very variable across Europe. As already noted, Northern Ireland has a lower level of employment in business services than any Western European country except Portugal. Other than the UK, with its long experience of international trade, it tends to be richer countries with large graduate populations that have the largest business service sectors. These include the USA, Netherlands and Scandinavia (Figure 8.6). Although Northern Ireland has a successful education system by UK standards, it has not been able to retain sufficient graduates to make it a well educated area by European standards. Without a tradition of sophisticated business service providers, able to export services to other regions or countries, it has not been possible to provide sufficient jobs in order to retain a high proportion of its graduates. As a result, the percentage of employment in business services is closer to that of Southern Europe than Northern Europe. We should notice that it is also three percentage points lower than in the Republic of Ireland.

**Figure 8.6 Percentage Employment in Business Services (difference from UK average), 2001**



Source, DETI, EuroStat, America Bureau of Labour Statistics

## Conclusion

The size of the private services sector in Northern Ireland is boosted by several aspects of the UK economic system. These include a relatively low level of taxation and hence high consumers' expenditure. It also includes the well developed financial system throughout the UK. However, in other respects Northern Ireland falls well behind the rest of Western Europe and the USA. A still under-developed tourism sector is one factor. The largest influence is however the small size of Northern Ireland's professional and business services, and it is this that requires most policy attention in the future.

## Chapter 9: Under-representation of Private Services in Northern Ireland

### Chapter Summary

- Private services remain greatly under-represented in Northern Ireland. The sector employs 40% of full-time equivalent employment in Northern Ireland compared with 53% in GB. In terms of GVA the percentages are 34% in Northern Ireland and 47% in GB.
- The shortfall is even greater in relation to population. Northern Ireland's employment in private services is 31% less than would be the case if NI had the same ratio of private services employment to population as in GB.
- One reason for the small size of the private sector in Northern Ireland is the relatively large size of the public sector. However this only accounts for a minor part of the gap between Northern Ireland and GB. The more important reason is the lack of private sector companies producing services that can be exported to other regions and countries.
- The largest degree of under-representation in a single major sector is in Financial and Business Services. This sector has only half as many employees as the average for GB. The Distribution sector is closest to the UK average, with an under-representation of 15%. The other major private services sectors are under-represented by about 25%.
- Only 2 out of 30 sub-sectors within private services are not under-represented. One of these is Sea Transport, where geography is one factor, but a competitive position vis a vis Dublin port is another. The other is 'Membership Organisations' reflecting the large number of government supported charities and similar organisations in Northern Ireland.
- Northern Ireland is not unique within the UK in its degree of under-representation in private services. Other regions with similarly low levels of GVA per capita also have small private services sectors. In particular, Wales and North East England have private services sectors proportionately as small as in Northern Ireland. Not all peripheral regions share this characteristic. Scotland has a much larger private services sector due to its large Financial and Business and Tourist sectors.
- Northern Ireland compares well with Wales and the North East in Distribution but has proportionately lower employment in Hotels and Catering due to its small Tourism sector.
- Unlike Wales and the North East, Northern Ireland has been improving its representation in private services over the 1990's relative to the UK average. In Wales and the North East under-representation has increased as London and the South East of England have become even more dominant in private services over the 1990's.
- The question now is whether Northern Ireland will overtake Wales and the North East thus detaching itself from the poorest performers or whether all three regions have reached a new, joint, low level equilibrium in private services.

The final issue addressed in this chapter is the degree of under-representation remaining among private services sectors after several years, sometimes decades, of employment growth faster than in GB. Our measure of representation is 'Northern Ireland's share of UK employment in each sector as a percentage of its share of UK population. This measure is sometimes called a 'Location Quotient' (LQ)<sup>5</sup>.

If the value of the LQ is less than unity, the sector is under-represented in Northern Ireland. If it greater than unity, the sector is over-represented. If it is precisely unity then the Northern Ireland share in that sector is the same as the UK, and it is neither under- nor over-represented.

Using this measure of representation we can see that Northern Ireland is heavily under-represented in private services employment. It is also under-represented in each of the major branches of private services (Table 9.1). The overall degree of under-representation is 31%. That is Northern Ireland has 31% fewer jobs in private services than might be expected on the basis of a comparison with GB.

The greatest degree of under-representation is in Financial Services and in Business Services. In both cases Northern Ireland's representation is around half the GB average (Table 9.1). Only Distribution is close to the GB average, at only 10% below. The other major sectors are all close to three-quarters of the UK average.

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<sup>5</sup> A Location Quotient is represented symbolically as;

$$e/p / E/P$$

where; *e* represents employment including the self-employed, and  
*p* represents population

*lower case letters represent a region, in our case Northern Ireland, and  
upper case letters represent the UK as a whole.*

*When the LQ has a value of unity, then Northern sector is as large as that in the UK as a whole, in proportion to population. To maintain a value of unity, (or indeed any fixed value), employment in a Northern Ireland sector has to grow at the rate of employment growth in the UK multiplied by the growth rate of Northern Ireland's share of UK population. Again in symbols:*

$$\%e = \%E * \%(p/P)$$

*where % in front of a symbol represents a growth rate.*

**Table 9.1 Measures of Under Representation in Employment for Northern Ireland and Comparator Regions, 2002 (GB = 100, location quotients)**

	Northern Ireland	Scotland	Wales	NE England
Retail & Distribution	90	92	80	77
Hotels & Restaurants	76	116	86	86
Transport & Communications	69	94	67	78
Financial Services	53	112	52	53
Business Services	48	83	47	62
Other Private Services	70	98	78	76
Total Private Services	69	94	69	71

Source: DETI & NI employment survey

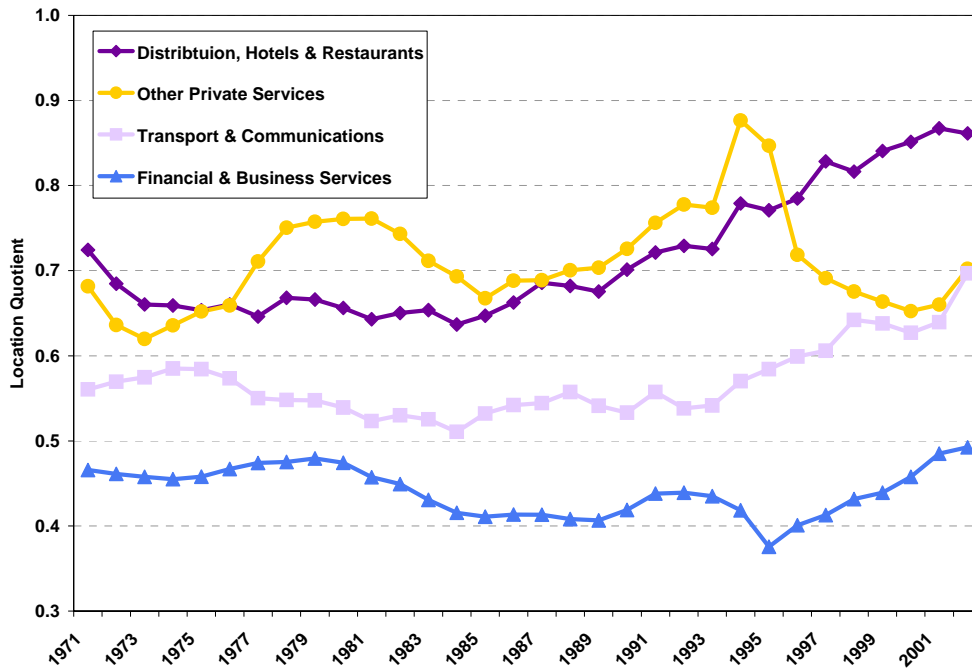
Note: Location quotients are a regions share of GB employment expressed as a % of that regions share of GB population

Although all of these values are low by the standards of a UK region, they are not unique. In fact Northern Ireland is now one of a group of UK regions with similarly under-developed economies. Each has a level of aggregate GVA per Head about 20% below the UK average. Each also has a similar degree of under-representation in private services employment (Table 9.1). In particular, each has a similar low level of employment in Finance and in Business Services, and to a lesser extent also in Transport and Telecommunications.

Northern Ireland has a lower level of employment in Hotels and Restaurants than either Wales or the North East, and much lower than Scotland. The main reason here is Northern Ireland's under-developed tourism industry. It is also a little lower in Other Private Services. However, Northern Ireland now has a higher level of employment than Wales or the North East in Distribution. It is also close to the Scottish level in Distribution. Northern Ireland has a similar level of consumer's expenditure per head as in Wales or the North East, but lower than Scotland. Northern Ireland may be helped by the need to hold stocks and the greater difficulty in shopping elsewhere than in the region itself.

Where Northern Ireland differs from Wales and the North East is in the trend in under-representation. Northern Ireland has become less under-represented over the 1990's in each of its major private services sectors except for Other Private Services (Figure 9.1). In Wales and the North East, in contrast, the level of representation has been falling over the 1990's in most sectors other than Hotels and Restaurants.

Figure 9.1 Employment in Private Services Location Quotients, 1971 - 2002



Source: DETI Quarterly Employment Survey

Under-representation is described at a more detailed sectoral level for 2002 in Tables 9.2 and 9.3, with trends over the period 1991-2002 shown in the charts in Annex 10. These show that in Northern Ireland, only two out of 30 separately identified sectors are not under-represented. These are sea transport, where geography plays a key role, but also competitiveness relative to Dublin and other ports in the Republic of Ireland. The other is 'Membership Organisations', (SIC 91). This involves a high level of direct government support in Northern Ireland and much less in GB.

**Table 9.2 Under-Representation in Employment (Location Quotients) 2002**

	Location Quotient
Vehicle Repairs etc.	0.85
Wholesale	0.69
Retail	0.90
Hotels, Restaurants	0.76
Land Transport	0.74
Sea Transport	1.14
Air Transport	0.33
Transport Support	0.46
Communications	0.62
Banking	0.62
Insurance	0.35
Other Finance	0.42
Real Estate Activities	0.34
Renting of Machinery etc.	0.45
Computer Services	0.38
Research & Development	0.55
Other Business Services	0.51
Waste Disposal	0.92
Charities etc.	1.28
Entertainment, Culture, Sport	0.70
Other Services	0.47
Total Private Services	0.69

Source: DETI Quarterly Employment Survey

In thirteen of the 30 sectors in Tables 9.2 and 9.3 Northern Ireland’s employment level is less than half that in GB. These include air transport and activities in support of transport reflecting both low incomes in Northern Ireland and the low level of direct international flights.

Employment in insurance is only a third of the UK average and, as noted above, has been declining. The lack of many indigenous businesses, as opposed to branch offices of national or international companies, appears to have been associated with rationalisation and work undertaken in GB. Auxiliary financial activities, including pensions, also have less than half the UK average employment.

Much of Business Services also has very low levels of representation. Lowest of all are most of the detailed activities identified previously as ‘tradable’ across regional boundaries. In market research, advertising, and consulting Northern Ireland’s employment level is only a little over a quarter of the GB average (Table 9.3). In each case the service can be organised at a distance even if some work inside Northern Ireland is also required.

**Table 9.3 Under-Representation in Employment in Business Services Employment (Location Quotients), 2001**

	Location Quotient
Legal Services	0.64
Accounting	0.63
Market Research	0.27
Consultancy	0.31
Architecture	0.55
Advertising	0.25
Recruitment	0.46
Security Services	0.77
Industrial Cleaning	0.68
Other Business Services	0.27

*Source: DETI Quarterly Employment Survey*

Under-representation of most private services sectors is clearly a long established characteristic of the Northern Ireland economy. The important question now is whether this situation will continue in future. To address this question in the following chapter we turn our attention to forecasts for employment in private services, both for Northern Ireland and for the rest of the UK.

## **Chapter 10: Forecasts of Employment in Private Services**

### **Chapter Summary**

- Forecasts are presented for the period 2003-13 based on published forecasts for major private service sectors in Northern Ireland and the UK as a whole. The forecasts are consistent with existing macro-economic forecasts for the UK and international economies.
- The overall forecast is for 54,000 additional jobs to be created by 2013 in private services in Northern Ireland. This is expected to account for most of the total of additional jobs in NI over the period.
- The majority of these extra jobs are projected to be generated in hotels and restaurants and particularly in business services. Employment growth in distribution is expected to be slower than in recent years.
- Within business services computer services (including software), accountancy, consulting, architects and engineering services are all expected to expand rapidly. Industrial and office cleaning and recruitment agencies should also continue to expand.
- Even so, the projection is that Northern Ireland will still be significantly under-represented in these activities in ten years time. Our estimate is that there is considerable scope for NI to develop larger specialisms in some of these sub-sectors, but that this will be difficult and will require strong government backing.

### **Overview**

This chapter presents a series of ten year forecasts for employment in individual private services sectors. The forecasts are based upon the Autumn 2003 Regional Economic Outlook published by Regional Forecasts in conjunction with Oxford Economic Forecasting. The forecasts are consistent with the overarching UK macro and industry forecast produced by OEF in Autumn 2003.

The Regional Economic Outlook forecasts are at broad sector level. The disaggregated sub-sectoral forecasts in this chapter have been produced specifically for this project. In all cases the forecasts are consistent with the aggregate sectoral forecasts. Annex 11 sets out an overview of the forecast approach.

## Broad Sectoral Forecasts

Private services are projected to be the main source of employment growth over the next decade (Table 10.1).

**Table 10.1: Projected employee growth 2003-2013: Northern Ireland**

Sector	Employment: 2003 (000's)	Projected employment change: 2003-2013 (000's)	Projected employment growth: 2003-2013 (%)
Manufacturing	91.2	-14.3	-15.7
Private Services	290.6	53.3	18.4
Public Services	238.2	15.0	6.3
Other	54.2	-0.1	-0.1
<b>Total employment</b>	<b>674.2</b>	<b>54.0</b>	<b>8.0</b>

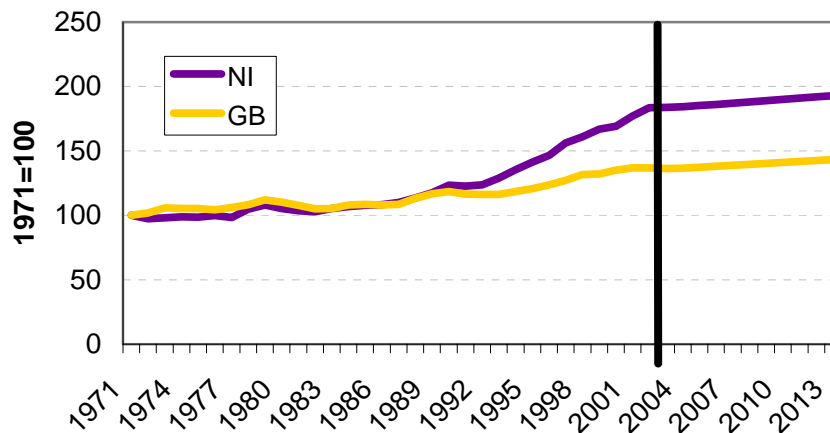
Source: DETI, Regional Forecasts

Note: Other includes agriculture, mining, utilities & construction

Most of the increase in jobs is projected to occur in private services which account for 53,000 out of the total of 54,000 projected additional jobs. The public sector is also expected to contribute to the net expansion in employment, but manufacturing and other industrial sectors are projected to continue losing jobs.

## Retail and Distribution

**Figure 10.1: Retail and Distribution Forecasts: Northern Ireland and Great Britain**



Source: DETI, National Statistics, Regional Forecasts

As the chart depicts, employment in this sector has expanded rapidly over the last decade in Northern Ireland with a 50% increase and almost 40,000 additional jobs. This remarkable growth represents a 'catch-up' from a long standing level of under

representation (expressed relative to population, or consumers expenditure). The main factors have included:

- **Rising population:** As the Northern Ireland population has expanded there is a ‘natural’ creation of retail jobs to meet the rising demand drive by more consumers.
- **Increasing wealth:** In real terms Northern Ireland wealth has been increasing over the last decade as a result of the favourable path of interest rates and rising house prices coupled with a large, relatively well paid, public sector. It is worth noting however, that wages remain low in a UK context.
- **Political stability:** The improving political stability is likely to have encouraged, or at least supported growth, though the employment expansion began well before any ceasefires were announced.
- **Expansion by UK retailers:** Major UK retail firms, particularly in the food and clothing sectors, began moving into Northern Ireland from the 1980’s once the worst of political violence began to fall.
- **Success of UK firms:** The success of the ‘pioneering’ UK firms entering the Northern Ireland market encouraged other similar firms into the market. The food retailers, of which Iceland was the first major investor, followed by Tesco’s, Sainsbury’s, Safeway and most recently the German firm Lidl all followed this pattern with Asda the only notable absentee. Marks and Spencers also began to expand from their single Belfast store in the 1980s. Other clothing retailers have followed, most recently Matalan.
- **Out of town development:** Tight planning constraints on large out of town retail developments have made Northern Ireland more attractive to major retail chains.

The forecast for retail employment is rather more modest as the sector is close to approaching the levels that might be expected given population and expenditure levels. Only 6,000 net additional jobs are forecast over the coming decade, almost half the level created since 2000. There are a number of risks to this forecast which should be considered:

*Upside risks:*

- **Rising wealth:** Northern Ireland earnings remain below the GB average by approximately 15%. Further increases in wealth may lead to increased spending levels in Northern Ireland.
- **Spreading prosperity:** The retail boom has occurred throughout Northern Ireland but the majority of major retail expansions have occurred in the Greater Belfast region. Developments in other areas such as Newry and Derry may provide further stimulus for the sector.
- **High value added sub-sector:** A growing number of ‘upmarket’ retailers have been attracted to the Belfast area as a result of rising wealth. Recent announcements such as House of Fraser are evidence of this trend, which may continue into the forecast period.

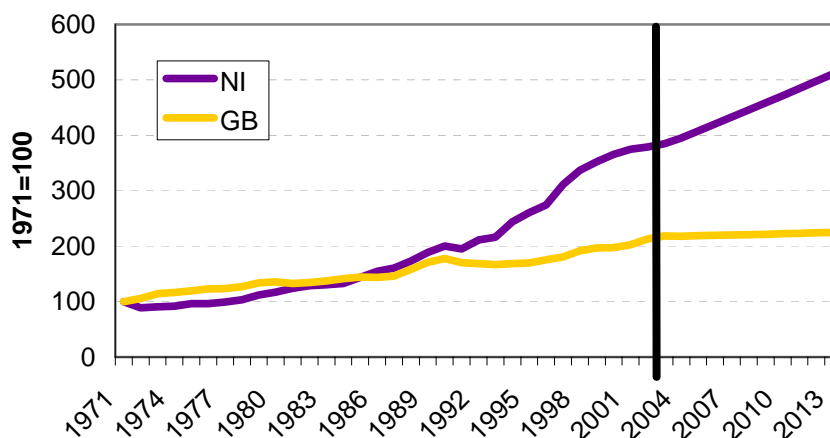
**Downside risks:**

- **Spending levels:** The majority of retail spending is driven by consumer spending levels and the outlook is rather less optimistic than previously. With interest rates on an up-ward trend and consumer debt at record levels the prospect of a slow-down in spending is very possible. An increase in interest rates is built into the forecasts but a larger than expected rise would have a direct impact on employment levels in retail.
- **Saturation:** At present demand for commercial space remains robust. However if firms have over-estimated the level of potential demand or under-estimated the degree of competition some cut-backs in employment may occur.

## Hotels and Restaurants

Northern Ireland has steadily outstripped UK levels of growth in hotels and catering for 15 years, as reflected in the figure below:

**Figure 10.2: Hotels and Restaurants Forecasts: Northern Ireland and Great Britain**



Source: DETI, National Statistics, Regional Forecasts

Over 17,000 net additional jobs have been created in the last decade, a growth of almost 75% and well above the corresponding GB growth of 26%. The growth has been supported by a steady although not spectacular recovery in tourism reflecting improving political stability and a reduced threat of violence. The sector has expanded in a number of ways, including:

- **Hotel employment:** Driven mainly by both an increasing business clientele, the hotel sector, has expanded rapidly in and around Belfast. Major hotels by, amongst others, the Hilton, the Armada, Days and Jury's have significantly increased employment in the sector.
- **Restaurant employment:** As a result of the rising wealth levels in Northern Ireland, spending on eating out has increased steadily resulting in rising

employment in restaurants and bars. Again much of this growth is concentrated in the Belfast area.

The outlook for the sector remains positive with employment growth of around 17,000 projected over the next decade, a similar figure to the last decade. This forecast is underpinned by a number of key assumptions:

- **Ongoing stability:** The political climate remains stable and there is no return to historical levels of unrest and violence.
- **Growing private sector:** The private sector continues to expand, driving further demand for business travel
- **Wealth levels:** There is no marked contraction in real wealth, either through significantly higher interest rates, or falling house prices.
- **Steady expansion of Tourism:** This should expand the sector beyond Greater Belfast where the hotel sector remains very under-represented for an area with major tourism potential.

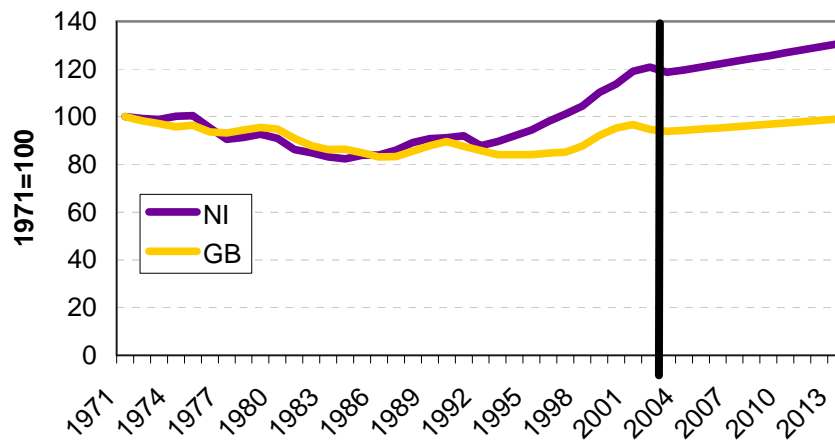
### **Transport and Communications**

This sector is unlike other private service sectors for two main reasons:

- **Similarity to manufacturing:** Many of the telecommunications firms have a similar profile to firms in the manufacturing sector, with a similarly high level of capital expenditure. Correspondingly, productivity increases have been larger in transport and communications than other private services sectors and employment gains less.
- **Public activities:** The postal sector in Northern Ireland is a largely public sector activity in contrast to the rest of the private service sector.

Levels of employment growth have been low by private service sector standards. In future, further growth is projected but only at a slow pace.

**Figure 10.3: Transport and Communications Forecasts: Northern Ireland and Great Britain**



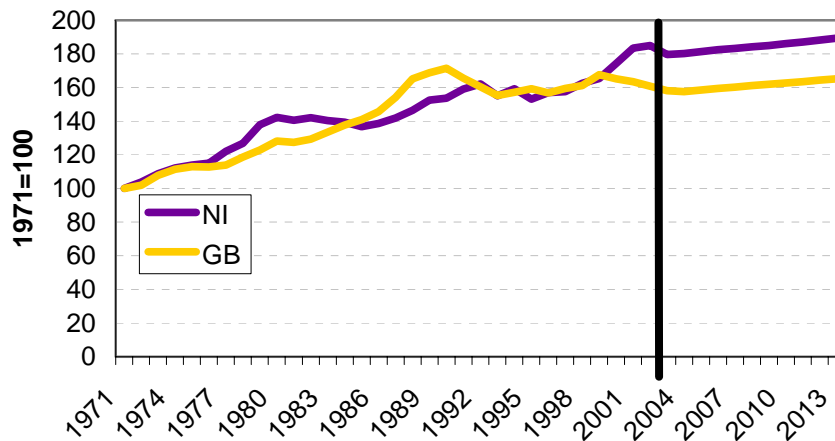
Source: DETI, National Statistics, Regional Forecasts

As the chart depicts, growth was steady throughout the 1990's but has stalled since the turn of the decade, largely as a result of problems in the global telecommunications market. This pattern was similar to that in the UK, albeit with faster growth in the 1990's as Northern Ireland reduced its degree of under-representation in this sector. Northern Ireland remains under-represented in this sector, but has caught up with Wales and is not far behind North East England. We thus forecast no further catch-up with GB. Instead growth is projected at close to UK average levels. Growth of just over 2,000 jobs is forecast over the next decade.

## Financial Services

The financial services sector has undergone significant rationalisation in the UK with employment lower in 2002 than in 1991. Regional bank branches have been closed across GB and major financial firms have rationalised their operations. Northern Ireland has somewhat bucked the trend with consistent employment growth over the last 3 decades reflecting its above average population growth.

**Figure 10.4: Financial Services Forecasts: Northern Ireland and Great Britain**



Source: DETI, National Statistics, Regional Forecasts

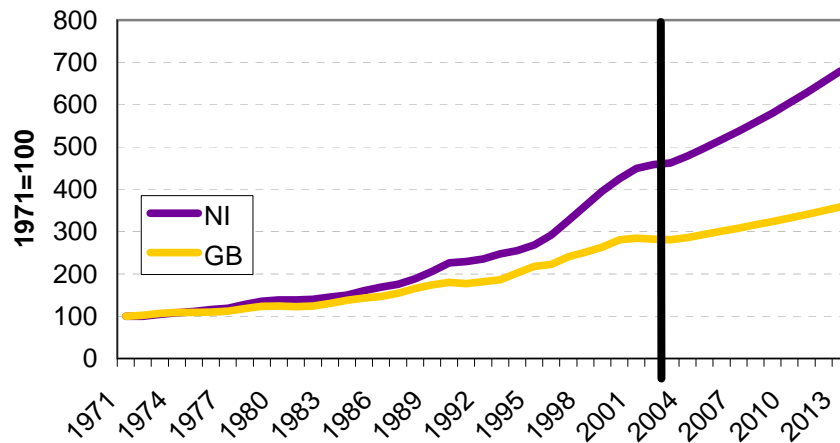
Employment growth stalled in Northern Ireland during much of the 1990's. Nevertheless Northern Ireland's record in financial services is relatively strong in a UK context with 14% employment growth over the last 10 years, this translates to 2,000 jobs.

The outlook for financial services is rather modest. Less than 800 net additional jobs are forecast in the base scenario. It is likely that this will be largely due to call centre growth. Forecasts here may be affected by statistical classification. The new SIC 2003 classifications call centre activities have a specific SIC code (74.86) which is in business services. Major employers such as Prudential and Halifax may, therefore, be coded in business services and not financial services. It is unclear whether these call centres are currently coded in financial services - recent employment growth would suggest they are.

## Business Services

Along with the retail sector, business services has been the main source of employment growth over the last decade, with almost 100% growth since 1992, and 27,000 net additional jobs.

**Figure 10.5: Business Services Forecasts: Northern Ireland and Great Britain**



Source: DETI, National Statistics, Regional Forecasts

The rapid growth has outstripped the overall GB growth rate, which has also been strong over the last 3 decades. In GB growth has stalled in business services since 2000 as a result of weakening global demand from financial, telecommunications and technology sectors. In Northern Ireland, although a slow down is apparent, no sustained job loss has yet been experienced.

The forecasts for the sector remain bullish for GB, and even more so for Northern Ireland with 22,000 net jobs forecast over the next decade, making it the fastest growing sector in the economy. This strong forecast is underpinned by the fact that in relative terms Northern Ireland still has an underdeveloped business services sector. Our forecast predicts further catch-up, but we expect a permanent low level of employment by UK standards unless government policy becomes radically more effective in promoting this sector. Our views are influenced by the fact that relative levels of representation have been falling in several comparator regions in GB.

**Table 10.2: Relative size of Business Services sector: UK regions**

Region	Share of total employees (%)	Share of working age population (%)
South East	19	14
Greater London	25	20
Eastern	16	11
South West	12	8
West Midlands	13	9
East Midlands	12	8
Yorkshire and Humber	11	8
North West	13	9
North East	11	7
Wales	9	5
Scotland	12	9
Northern Ireland	8	5

Source: DETI, National Statistics, Regional Forecasts

There are however some downside risks to the bullish business services forecast which should not be overlooked, these include:

- **Weakening manufacturing base:** Although business services do not entirely depend upon local demand, the declining manufacturing sector in Northern Ireland may lead to a contraction of spend in areas such as accountancy, marketing and advertising.
- **Low cost competition:** This is often considered a pressure only in the manufacturing sector; however it is increasingly emerging as an economy wide factor. The call centre section of business services (as per SIC 2003) which employs around 8,000 in Northern Ireland currently, is one area facing such pressures from other non EU locations, particularly in India. We expect some low skilled jobs to be relocated out of Northern Ireland, with others up-graded to higher skill levels.
- **Skills:** Business services has many high value added sub-sectors requiring relatively highly qualified labour. Northern Ireland's problems in retaining graduates may present some difficulties in this respect unless the downward drift in wages relative to GB is halted.

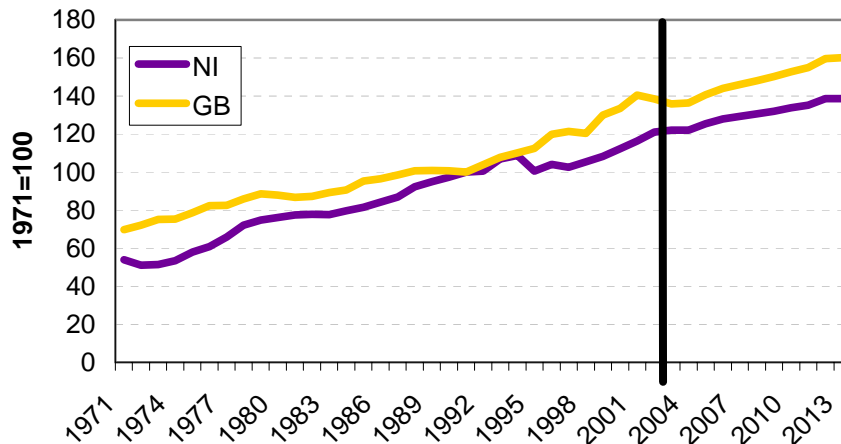
Perhaps the greatest challenge in sustaining expansion in the private services sector is to generate sufficient exports in the sector, reducing dependency on the limited local demand. We return to this issue in our policy recommendations.

Business services attracts most published attention and research, due to its export and growth potential. As such the sub-sectoral 4 digit forecasts are of particular interest, and these are analysed in the section entitled sub-sectoral forecasts below.

## Other Private Services

An often overlooked section of private services, this sector has grown rapidly in the last decade with Northern Ireland gaining over 5,000 net additional jobs. Rather unusually Northern Ireland's growth in this section of private services has been less than the corresponding GB rate (Figure 10.6).

**Figure 10.6: Other Private Services Forecasts: Northern Ireland and Great Britain**



Source: DETI, National Statistics, Regional Forecasts

Northern Ireland's growth in the sector was rather curtailed in the mid 1990's with employment not recovering to the 1994 level until 2000. This is a rather difficult factor to explain but may be related to data problems as the long term trend remains steadily upwards. Since 1999 growth has been steady and is projected to continue to do so thorough the forecast period at a rate similar to that in the GB. The largest sub-sector is recreational and cultural activities, which tend to be luxury spending activities. It is noticeable that GB employment has fallen in 2002 and 2003 in this sector as economic conditions have worsened. This risk to growth is an important caveat to bear in mind when considering the projected net 5,000 additional jobs in Northern Ireland over the next decade.

## Summary

The table below summarises the job growth projections over the decade ahead for Northern Ireland across the private services sector, it also lists the size and share of the components of the sector.

**Table 10.3: Size, Share and Projected Growth of Private Services Sectors in NI 2003-2013**

Sector	Employment: 2003 (000's)	Share of private services (%)	Projected employment growth: 2003-2013 (000's)
Retail & Distribution	120	41	6
Hotels & Restaurants	41	14	13
Transport & Communications	28	10	3
Financial Services	16	5	1
Business Services	55	19	26
Other Private Services	31	11	4
<b>Private Services</b>	<b>291</b>	<b>100</b>	<b>53</b>

Source: DETI, Regional Forecasts

The table raises a number of important points about the high level forecasts:

- **Retail the largest sector:** The retail sector is by far the largest private services sector, with over twice the employees of any other private services sector.
- **Positive outlook:** All of the sectors have a positive employment forecast for the decade ahead, with a total of 53,000 net additional jobs projected.
- **Business services and hotels/restaurants most bullish:** The key forecast sectors are business services and hotels and restaurants which contain almost three quarters of the overall projected growth over the next decade.

The forecasts suggest that, in job terms, the sectors which warrant most attention from a policy perspective are business services, hotels and catering and perhaps retail.

## Sub-Sectoral Forecasts

### Overview

The development of sub-sectoral forecasts requires additional analysis to disaggregate from the sectoral level forecasts. This work has been carried out specifically for this project and represents a first step in developing detailed private service sector forecasts for Northern Ireland. Further research would be required to build in the level of

sophistication required to produce and explore detailed scenario projections. This type of research may include additional variables such as wages and involve more detailed feedback effects than are built into the results presented in this chapter. The methodology used to produce the forecasts set out below are presented in Annex 11.

## Sub-Sectoral Results

The forecasts for the sub-sectors are set out in the table below:

**Table 10.4: ‘Two digit’ Projections for Northern Ireland**

	Current employment: 2003 (000's)	Jobs projected: 2003-2013
<b>RETAIL &amp; DISTRIBUTION</b>	<b>119.8</b>	<b>5.9</b>
Vehicle Repairs etc.	15.7	-0.5
Wholesale	22.9	-2.5
Retail	81.2	8.9
<b>HOTELS &amp; RESTAURANTS</b>	<b>41.0</b>	<b>13.5</b>
<b>TRANSPORT &amp; COMMUNICATION</b>	<b>28.0</b>	<b>2.8</b>
Land Transport	11.8	0.7
Sea Transport	0.6	0.2
Air Transport	0.7	0.2
Transport Support	5.3	0.5
Communications	9.6	1.1
<b>FINANCIAL SERVICES</b>	<b>15.7</b>	<b>0.8</b>
Banking	10.8	0.6
Insurance	2.1	-0.4
Other Finance	2.9	0.6
<b>BUSINESS SERVICES</b>	<b>55.5</b>	<b>26.1</b>
Real Estate Activities	3.5	0.1
Renting of Machinery etc.	2.0	-2.1
Computer Services	5.5	6.3
Research & Development	1.4	-0.2
Other Business Services	43.0	22.1
<b>OTHER PERSONAL SERVICES</b>	<b>30.7</b>	<b>4.2</b>
Waste Disposal	3.0	1.2
Charities etc.	8.0	0.8
Entertainment, Culture, Sport	15.4	1.3
Other Services	4.4	1.1

Source: DETI, Regional Forecasts

The table provides an interesting assessment of the sub-sectors which are projected to create the jobs in the decade ahead. A survey of the main findings under each sector is set out below:

- **Retail and Distribution:** Within the distribution sector the retail sub-sector provides most of the projected job gains, 9,000 compared to a total of 6,000. Sales and repair of vehicles has grown only modestly over the last decade, and wholesale distribution is unlikely to expand greatly for a number of reasons:
  - manufacturing output is likely to expand only slowly,
  - Northern Ireland's peripherally both in UK and EU terms makes it unlikely to require any employment in this sub-sector other than to serve the local market.
- **Transport and Communications:** Land transport is the most dominant sub-sector within transport and communications (accounting for 43% of total employment in the sector), however, the slow growing manufacturing output is likely to have some negative impact upon the haulage industry. However, retail trade has boosted the sector in recent years and this is likely to provide some stability over the forecast period. Air, rail and sea transport will receive some boost from rising tourism but their growth is likely to be relatively modest unless tourism demand accelerates from recent trends. The communication sub-sector has the most buoyant outlook, accounting for almost two fifths of overall growth.
- **Financial Services:** Much of the financial services sector is expected to expand only modestly with 800 jobs forecast across the sector. Financial intermediation is the dominant sub-sector accounting for 68% of employment. Although it is suspected that some call centres may currently be coded within this subsector, as the growth of approximately 1,500 jobs over the last 4 years is hard to justify otherwise, it is likely that this will be an area of investment under extreme pressure from other low cost locations.
- **Business Services:** Within business services the most bullish forecasts are in computer related activities and other business services. Computer activities has expanded in Northern Ireland but remains very modest in size by UK standards. Growth of 6,300 jobs is predicted over the next decade, this constitutes a pick up from 2002-2004 where growth is expected to stall in this industry as a result of global pressures.

## Detailed Business Services Forecasts

This sector is diverse and is covered in more detail. The table below sets out the (4 digit) components of this sub-sector.

**Table 10.5: ‘Four-digit’ Projections of Other Business Services for NI**

	<b>Current employment: 2003 (000's)</b>	<b>Jobs projected: 2003-2013</b>
Legal Activities	5.0	1.0
Accounting	4.1	2.3
Market Research	0.4	0.3
Consultancy Activities	1.9	2.6
Management Activities	0.4	0.2
Architectural/Engineering	5.3	3.7
Technical Testing and Analysis	0.2	0.1
Advertising	0.8	0.7
Recruitment	10.2	4.2
Investigation & Security Services	3.2	-0.9
Industrial Cleaning	8.9	5.2
Photographic Activities	0.3	-0.3
Packaging Activities	1.1	1.4
Secretarial/Translation Activities	0.1	0.0
Other Business Activities nec	1.2	1.6

Source: DETI, Regional Forecasts

- **Labour Recruitment** has been the fastest growing sector for some time, gaining 7,000 jobs, 233% since 1995. This is a difficult sector to examine in detail as it is not clear what sectors the agency staff are employed in. In some cases it simply represents a form of casual labour. The forecasts for the sector remain relatively strong with 4,200 jobs predicted over the next decade but from an economic perspective this sub-sector is arguably not a “professional service” as most other sub-sectors are.
- **Industrial Cleaning a major sub-sector:** This sub-sector, again arguably not a professional service, is a major component of the other business services sector, though it has declined significantly in recent years in GB. In Northern Ireland, however the sector has continued to expand and is projected to generate a further 5,200 jobs over the next decade. Despite declining manufacturing employment the growing private services sectors provides a growing market for office cleaning.
- **Professional Services expanding:** although none of the professional services is projected to ‘take-off’ in Northern Ireland growth prospects are good, though the numbers of jobs involved is not large. Architecture/engineering is most positive, 3,700 jobs with strong forecasts also for consultancy (2,600 jobs) and accountancy (2,300 jobs).

The brief summary of the sub-sectoral forecasts provided above provides an introduction to this area of research, annex 12 sets out graphs of the sub-sectoral forecasts in both Northern Ireland and GB for comparison.

## **Understanding Potential Employment Levels**

Looking at the base forecasts and the under-representation of private services in Northern Ireland it is clear that the current projections will not significantly raise Northern Ireland's relative employment levels. In order to explore potential levels of employment in Northern Ireland it is important to understand which private services industries have export potential through selling services outside Northern Ireland.

This question has been addressed by examining location quotients (LQ's) for the counties in the UK and comparing these to the Northern Ireland LQ in 2001 (the last date for which 4 digit employment is available for GB counties). LQ's present the relative concentration of employment in a given sector; a value of '1.0' means a concentration equal to the GB average. A value of 0.5 indicates an employment level at half the UK average, and so on.

To establish an aspirational 'target' for Northern Ireland we take the average LQ for the top 10% of counties (excluding Greater London and any outliers) in each sub-sector. This average LQ is then multiplied by UK employment in the sub-sector, adjusted for Northern Ireland's share of UK population. The table below sets out the average LQ's for the top 6 counties excluding London and outliers. Sub-sectors with higher values for the LQ are those that are most concentrated in a few individual counties. These are the sub-sectors that can be considered to be most potentially footloose and hence have potential for further development within Northern Ireland.

**Table 10.6: ‘Two Digit’ LQ’s in ‘Top’ GB Countries**

	<b>Specialism Location Quotients</b>
Vehicle repairs etc.	1.4
<b>Wholesale</b>	<b>1.5</b>
Retail	1.3
<b>Hotels, restaurants</b>	<b>1.8</b>
Land transport	1.4
<b>Water transport</b>	<b>2.0</b>
<b>Air transport</b>	<b>2.0</b>
<b>Transport support</b>	<b>2.0</b>
Post and telecommunications	1.4
<b>Banking</b>	<b>2.0</b>
<b>Insurance</b>	<b>2.5</b>
<b>Other finance</b>	<b>2.1</b>
<b>Real estate activities</b>	<b>1.6</b>
<b>Renting of machinery etc.</b>	<b>1.5</b>
<b>Computer services</b>	<b>2.1</b>
<b>Research and development</b>	<b>2.5</b>
Other business services	*
<b>Waste disposal</b>	<b>2.8</b>
<b>Charities etc.</b>	<b>1.8</b>
<b>Entertainment, culture, sport</b>	<b>1.5</b>
Other services	1.4

Source: National Statistics, Regional Forecasts

Note: \* Other business activities sub sectors set out below

**Table 10.7: ‘4 –digit’ LQ’s in Business Services Sub- Sectors**

	Specialism Location Quotients
<b>Legal Activities</b>	<b>1.6</b>
<b>Accounting</b>	<b>1.5</b>
<b>Market Research</b>	<b>1.7</b>
<b>Consultancy Activities</b>	<b>2.4</b>
<b>Management Activities</b>	<b>2.0</b>
<b>Architectural/Engineering</b>	<b>2.1</b>
<b>Technical Testing and Analysis</b>	<b>3.0</b>
<b>Advertising</b>	<b>2.0</b>
<b>Recruitment</b>	<b>1.5</b>
<b>Investigation &amp; Security Services</b>	<b>2.0</b>
Industrial Cleaning	1.4
<b>Photographic Activities</b>	<b>1.8</b>
<b>Packaging Activities</b>	<b>2.3</b>
<b>Secretarial/Translation Activities</b>	<b>1.9</b>
<b>Other Business Activities nec</b>	<b>1.6</b>

Source: National Statistics, Regional Forecasts

The table indicates that a significant proportion of private services and in particular professional services has footloose employment. Taking these ‘target’ location quotient levels and applying them to Northern Ireland total employment in 2013 provides an estimate of how many people *could* be employed in the sector in Northern Ireland if it were to become as competitive in these sub-sectors as the average for the top ten counties in GB. Also presented is the number of jobs projected if the location quotient was to move to 1.0 in 2013, that is, if employment was to reach a UK average level.

**Table 10.8: Potential Employment in Private Services**

Sub-sector	Current employment (2001)	Jobs Projected 03-13	Additional jobs, LQ = 1	Additional jobs, LQ = specialism
Vehicle Repairs etc.	14.7	-0.5	-1.5	3.3
Wholesale	22.9	-2.5	11.0	25.7
Retail	77.9	8.9	-6.9	15.5
Hotels, Restaurants	39.9	13.5	-5.8	30.2
Land Transport	11.9	0.7	1.7	7.0
Water Transport	0.5	0.2	-0.6	-0.4
Air Transport	0.8	0.2	1.7	4.2
Transport Support	5.2	0.5	5.4	16.3
Post and Communications	9.6	1.1	2.6	7.6
Banking	10.9	0.6	2.6	15.7
Insurance	2.2	-0.4	3.7	11.4
Other Finance	3.0	0.6	4.5	13.1
Real Estate Activities	3.7	0.1	8.5	15.5
Renting of Machinery etc.	2.1	-2.1	3.9	5.8
Computer Services	5.7	6.3	14.3	42.3
Research and Development	1.8	-0.2	1.1	4.2
Other Business Services	40.7	22.1	*	*
Waste Disposal	2.8	0.6	-0.5	4.4
Charities etc.	7.7	-1.2	0.1	4.9
Entertainment, Culture, Sport	14.4	4.5	-0.1	8.8
Other Services	4.4	0.3	7.0	11.5

Source: DETI, Regional Forecasts

Note: \* Other business activities sub sectors set out below

**Table 10.9: Potential Employment in Business Services**

	Current employment (2001)	Jobs Projected 03-13	Additional jobs, LQ = 1	Additional jobs, LQ = specialism
Legal Activities	4.9	1.0	-0.5	2.4
Accounting	3.8	2.3	-1.6	0.5
Market Research	0.4	0.3	1.0	2.2
Consultancy Activities	1.7	2.6	3.4	14.0
Management Activities	0.3	0.2	0.8	2.2
Architectural/Engineering	4.9	3.7	-1.7	5.4
Technical Testing and Analysis	0.1	0.1	0.2	1.1
Advertising	0.7	0.7	1.7	4.7
Recruitment	9.8	4.2	9.7	21.3
Investigation & Security Services	3.3	-0.9	2.8	7.7
Industrial Cleaning	8.3	5.2	-4.5	-1.3
Photographic Activities	0.4	-0.3	0.5	0.9
Packaging Activities	0.9	1.4	-2.1	-1.9
Secretarial/Translation Activities	0.1	0.0	0.3	0.6
Other Business Activities nec	1.0	1.6	11.3	19.7

Source: DETI's, Regional Forecasts

This type of analysis should not be considered a scenario as few parts of GB are able to reach target levels in each sub-sector. More likely is the development of a specialism in a few sub-sectors. Nevertheless, some interesting points can be drawn from the table:

- **Considerable potential:** There is considerable scope for increased employment in many private services sectors. Even if the number of jobs may be individually small the value added may be significantly higher as many private services are relatively high wage sectors.
- **Real Estate and Computers notable:** with an additional 48,600 jobs possible within computers and 15,600 jobs in real estate, these represent significant job opportunities for Northern Ireland. However, commercial property management activities may be difficult to organise from Northern Ireland to serve external markets.
- **Consultancy offers potential:** Consultancy services also provide significant opportunity with over 10,000 jobs potentially able to be supported.

## **Conclusion**

This forecast section has provided an initial examination of the projected employment for the sectors, and sub-sectors of private services. A number of important conclusions can be drawn:

- **Historically Retail and Business Services crucial:** Retail distribution and business services have been the sectors which have provided by far the largest contribution to overall employment growth in Northern Ireland. Retail growth is expected to slow in future but business services should continue to be a major source of new jobs.
- **Strong outlook for Hotels and Restaurants:** A steady expansion of tourism combined with a growing tendency towards eating out underpins a strong expected performance creating a thousand extra jobs each year.
- **Sub-sectoral analysis important:** The performance of individual business services is likely to be uneven. A few sub-sectors are likely to create most jobs. In the forecasts above computing, accounting, consultancy, architects and engineering services are most likely to create substantial volumes of professional jobs.
- **Specialism provides further scope for expansion:** Ten years hence Northern Ireland is still likely to have only half the UK average employment share in many business services. Northern Ireland will need to develop export specialisms in selected sub-sectors if this situation is to be changed. Our view is that change is difficult and is unlikely to occur without focussed policy assistance.

If Northern Ireland's under-representation in private services is unlikely to change significantly under the current policy regime, the final important question for this review is how policy might change in order to improve the situation. In our view there is no direct or unequivocal link between analysis of under-representation and suggestions for how it might be improved. Even so, we have views on how the current policy framework and its delivery might adapt to move in a direction favouring faster growth especially in high value tradable services. These are outlined in the following chapter alongside a brief review of policy and delivery agencies.

## Chapter 11: Government Policy for Private Services in Northern Ireland

### Chapter Summary

#### Stimulating Demand For Local Services

- We suggest that the Northern Ireland Assembly, or Direct Rule Administration promote privatisation of appropriate organisations still in the public sector.
- An audit of large companies in Northern Ireland could be undertaken to establish the nature and extent of demand for financial and business services. This should include an assessment of the potential for local companies to replace external suppliers of sophisticated services.
- We suggest that Invest NI work with sub-sectors within financial and business services to identify potential markets in GB and the ROI including identification of advantages in costs and service quality.
- We suggest that an audit be undertaken of public sector activities which could reasonably be undertaken by new or existing local companies, and steps then be taken to privatise these activities to local companies with the ability and ambition to develop these activities for sale beyond Northern Ireland.

#### Developing Indigenous Suppliers of Tradable Services

- An audit could be undertaken by the Government Purchasing Agency (GPA) of its own and other regulatory frameworks with the aim of making it easier for small businesses to win government contracts. This should include restraints on legal advice outside NI.
- DETI and Invest NI could work up proposals for a relaxation of EU State Aid rules to equalise assistance per job for different types of firm and should lobby the UK government and EU Commission to effect changes.
- Current eligibility rules could be clarified throughout Invest NI and the Local Enterprise Agencies.
- Invest NI could establish a unit specifically to promote growth in professional services sectors other than network services and software.
- Invest NI could consider a programme of assistance specifically targeted at companies, partnerships etc providing services rather than developing products. This should include assistance for product/service development.
- An audit of existing assistance Invest NI programmes could be undertaken to examine the possibility of making them more accessible to tradable service providers.
- Invest NI could consider a scheme akin to the 'Making It Back Home' programme to induce potential entrepreneurs with relevant expertise to return to NI.
- A specialised E-commerce unit could thus be established within Invest NI to maximise the potential for Northern Ireland companies to extend their wholesale or retail operations to markets outside Northern Ireland.

#### High Quality Support Services

- Invest NI currently works closely with the universities to promote R&D in high technology. Similar support could be considered for a wider range of tradable services activities.

## **Introduction**

Northern Ireland has no formal overall policy on the development of private services in Northern Ireland although DETI/Invest NI policies contribute to the development of the private services sector, for example through the targeting of certain tradable service activities by Invest NI. In addition, the Economic Development Forum has a target for the growth of 'knowledge-based tradable services' which is endorsed by the Department of Enterprise, Trade and Investment. The sector is defined as telecommunications plus most of financial and business services. The EDF envisages that the sector should grow from 10.2% of total employment to 12.5% by 2010.

The EDF targets appear to have superseded the major policy development exercise supported by DETI culminating in the publication of Strategy 2010 in March 1999. This contained a large number of wide ranging, although often generalised, recommendations. The main 2010 Report had no recommendations directed specifically at tradable services other than the bed and breakfast sector within tourism,( although the establishment of the EDF was itself a 2010 recommendation). However, the Strategy 2010 sector report on tradable services did do so.

The sector report identified a number of strengths and weaknesses of the sector as a preliminary to setting an employment target with policy recommendations for attaining those targets. The strengths and weaknesses identified, were:

### **Strengths**

*English language  
Well-educated, young workforce  
Excellent telecoms. Structure  
Low cost base*

### **Weaknesses**

*Lack of corporation tax incentive  
Troubles deterred investors  
Lack of company HQ's  
Lack of tradable services including clusters  
Lack of emphasis on TS within ID policy  
Lack of premises in the right location*

The employment target envisaged a 20,000 increase in jobs over the 14 years from 1998 to 2012, equivalent to 1,500 jobs per annum. The policy recommendations aimed at achieving this target were organised under three separate headings, each addressed at a different size of company:

- Large Companies/inward investments
  - Large proactive Invest NI team to market tradable services, software & telecommunications starting with companies that already know Northern Ireland.
  - Individually tailored incentive package for each tradable services sector
  - Clear criteria to select high quality jobs within call centre sector
  - De-rating for tradable services
  - Available property for inward investors in tradable services
  - 10/15 year period of exceptional support measures
  
- Mid-indigenous companies
  - Identify sectors of greatest potential including consulting, software
  - Grants to broaden company skill ranges
  - IDB/LEDU operation to encourage export/import substitution
  - Encourage clusters
  
- Programmes & Structures
  - Joint advisory board for tradable services, software & telecommunications.
  - Government purchasing to organise fair competition
  - Education/training establishments advised to produce relevant skills
  - Innovative marketing techniques to attract companies to Northern Ireland
  - Establish a federation for tradable services firms
  - Campaign to inform public of importance of tradable services

## **Current Invest NI Practice**

Several of the main recommendations of the Strategy 2010 Tradable Services sub-group have not been acted upon. In some cases this was because the recommendation was politically difficult (e.g. de-rating, exceptional support measures), or too imprecise to be helpful ( e.g. encouraging clusters). In other cases recommendations have been acted upon, (e.g. criteria for identifying high quality call-centre jobs, identify sectors of greatest potential).

Whether due to recommendations, or to the growing importance of services, it is clear that Invest NI is more focussed on tradable services than hitherto. Indeed this is inevitable as the flow of manufacturing inward investors has largely dried up due to competition from lower cost locations in Eastern Europe and elsewhere. (Invest NI data shows that only 15% of the 3,714 jobs promoted in Northern Ireland in the four years up

to 2003 were in manufacturing). For this reason and because of the rising importance of private sector services within the economy, tradable services has become a major source of job generation within the Invest NI client base (Table 11.1).

**Table 11.1 IDB Financial Assistance to Client Firms 1997-2002**

	MFG	Tradable services
Total Assistance 1997 - 02 (£m)	620	107
No. of jobs promoted 1997 - 02 (000's)	27.4	14.4
Jobs promoted per project	82	160
Investment per project (£m)	8.5	3.3
Assistance per job promoted (£m)	21.3	8.2
Assistance per project (£m)	1.7	1.3
IDB contribution (% of investment 1996 - 02)	18.8	35.8

Source: Invest NI

It is clear that the attention of IDB and, more recently Invest NI, to tradable services has been associated with an acceleration of growth of employment in financial and business services. Indeed the acceleration has been such that the EDF target of 20,000 additional jobs by 2012 has already been attained by 2003 if the self-employed are included. Since a marked acceleration in financial and business sector job creation began in 1996, following the paramilitary cease-fires, we take the view that much of this reflects more peaceful conditions. Some 6,000 of the additional jobs are in call/contact centres. These are less likely to have moved to Northern Ireland while the danger of terrorist disruption to computer or telecommunications systems remained a real possibility. It appears that the removal of the main threat of disruption allowed firms to take advantage of Northern Ireland's advantages of relatively low wage costs, available skilled labour and grant assistance.

Invest NI, and its predecessor LEDU, have a long record in supporting tradable service companies. However, the numbers are small, only 10% of the total client base in 2000, with a total employment of 3,000. Although the experience built up in providing such support is valuable, much of it is concentrated on activities which produce products analogous to those in manufacturing, rather than true services. Hence, in 2000 almost half of the client firms in tradable services were in software (Table 11.2).

**Table 11.2 LEDU Clients in Tradable Services, 2000**

	No. of Companies	Employment (000's)	Sales £M
Software	83	0.9	19.1
Multimedia	12	0.2	13.3
TV/Video	16	0.1	2.0
Back office	6	0.2	2.9
Specialist services	72	1.6	39.3
Total tradable services	189	3.0	76.6
Total client base (2002)	1880	111.1	10802

Source: Invest NI

## EU State Aid Rules

Nonetheless, it is also clear that the great majority of Invest NI resources have been directed towards manufacturing companies over the last few years. It is also the case that grant assistance per employee is still twice as high for manufacturing firms as for those in tradable services. The main reason for this is the constraint set by EU State Aids rules which restrict assistance to a maximum of 40% of project capital expenditure. This rule allows capital intensive industrial projects to attract larger amounts of assistance per employee than service sector projects with little capital expenditure. This rule is obviously perverse in that it pushes Invest NI into spending almost 90% of its budget promoting jobs in the manufacturing sector, with its declining employment, and little over 10% on the fast growing tradable services sector.

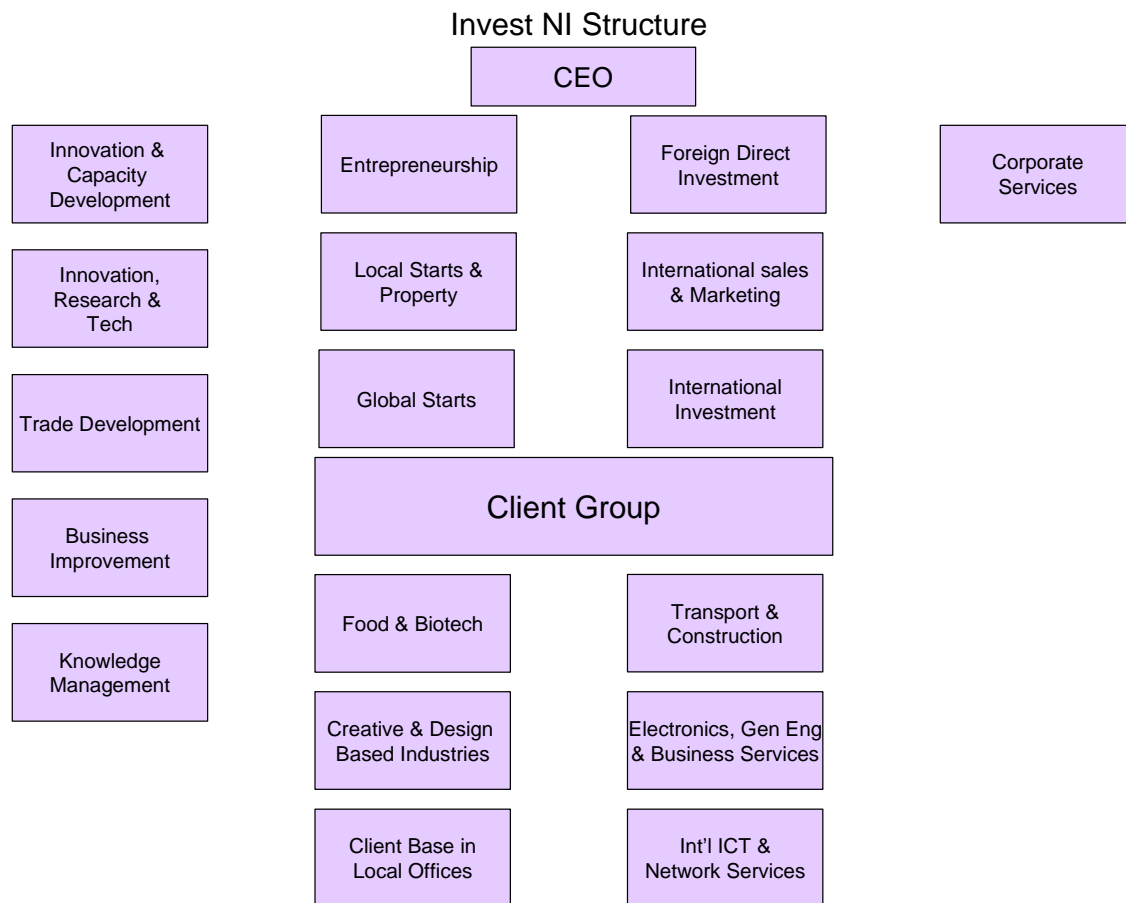
Under EU rules an alternative to the 40% of capital investment rule is a rule that instead allows 40% of the first two years wage bill. In principle this should be more favourable to labour intensive service sector projects. In practice however it does little to raise the maximum permissible grant for service sector projects. If applied to manufacturing projects it would in many cases reduce the actual grant payable, but there is little point in doing so in Northern Ireland.

In practice Invest NI officials must juggle both EU and Treasury cost per job rules to raise levels of assistance to service sector projects. Table 11.1 demonstrates that over the period since 1995, grants to service sector projects have been close to the maximum limit of 40% of capital spend, but even so have been under half of the level of assistance per employee for manufacturing projects.

## Structure of Invest NI

In the past the IDB, LEDU and IRTU were largely focussed on manufacturing projects but under the recent re-organisation to form Invest NI have become more focussed on tradable services. The new structure contains two main groups (Figure 11.1). One deals with inward investment and international sales and marketing. The other covers new start ups. Connected to both are six ‘client’ or sector groups. These deal with existing firms, both large and small, but also cover sectoral issues connected with inward investment and start-ups. Finally, these front line divisions are supported by divisions advising on innovation, R&D, trade development, business improvement (i.e. the company development programme), and knowledge management.

**Figure 11.1 Invest NI Organisation Chart**



Source: Invest NI

The six client groups listed in Figure 11.1 show some recognition of the importance and distinctiveness of tradable services, although only one of the six is wholly devoted to tradable services. This is ‘International ICT and Network services’. Other business and creative services are included either with Engineering or with textiles and clothing in Creative and Design Based Industries. This mixing of services with manufacturing may

not encourage the specialisation we believe is necessary to understand the complexities of diverse tradable service sub-sectors.

In practice it looks as though most of Invest NI efforts under the heading of tradable services are targeted towards inward investing call/contact centres and software. Less attention appears to be devoted to the rest of financial, business or creative sectors.

## **Financial Assistance and Technical/Business Advice**

Although Northern Ireland's financial assistance and advisory/support services have adapted to changing conditions, the broad structure has remained similar for many years (Table 11.3). Grants can be awarded under a wide range of headings, but all are part of Selective Financial Assistance (SFA). However a particular package is composed, the total level of assistance is subject to the EU State Aid and HM Treasury cost per job rules. There are no specific grant programmes tailored to the needs of service sector companies, and as we have seen, service sector firms are, in practice, eligible for lower maximum levels of assistance per employee than firms in manufacturing.

Research grants, under the Compete and Start schemes were traditionally aimed at technical innovations in industry. In recent years software companies have gained a significant share of this support, but few other tradable services have either applied for funding or been successful. (IRTU Annual Report and Accounts 2001-02).

**Table 11.3 Invest NI Financial Assistance, Advice and Tax Incentives for NI Business**

Type	Amount
Grants Capital grants Pre-empl. training grants Property development scheme R & D grants Compete Start New radiance Link Revenue grants Employment grants Rent grants Marketing support Consultancy support International tendering fund Company development scheme Business improvement agent Connections E business grants	Sum of grants must be less than: 40% of eligible investment costs on new projects } or 40% of first two years wage bill. Subject to HMT cos per jobs limits
Equity and loans	
Tax incentives	Tax relief on capital grants Zero property tax on manufacturing property Write off of all R & D spend against income
Advice/Assistance	Marketing advice Technical advice Design group Business improvement service E - Business advice term Business information services Identify partners Scientific services

Source: Invest NI

Tax incentives are similarly biased towards manufacturing firms since capital and depreciation allowances favour activities with high levels of capital expenditure. The main incentive specific to Northern Ireland, zero rates of property taxes, is also specific to manufacturing. Most tradable services firms excluded. However the likelihood is the

property tax exemptions will be abolished within a few years, and this levelling down will restore a greater degree of equity between manufacturing and service sector firms.

Invest NI support services are, in principle, available to any firm involved in exporting from Northern Ireland, or substituting for imports. Advisory services cover a wide range of issues including marketing, strategic development, business improvement, technical problems, design, e-business, intellectual property rights, and identifying business partners. Some of these are generic to business as a whole, but others seem focussed on production rather than services.

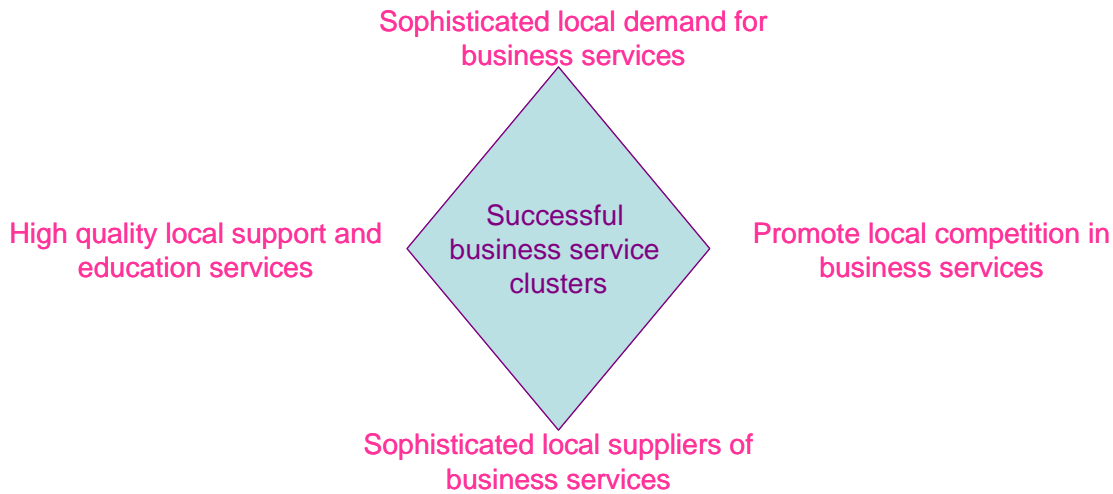
## **A Porter Approach to Policy**

Professor Michael Porter's theory of clusters provides a good organising principle for economic development policy aimed at the private services. Porter's ideas are frequently misunderstood in local economic development practice. In our view they have limited application to manufacturing in the UK, where most of the traditional industrial clusters have long been in decline. However, they have a strong relevance to business services where clustering is common and important, especially in London. Central London, for instance, contains a series of financial and business service clusters. These include commercial law and commercial property management as well as a variety of financial clusters like venture capital and hedge funds in addition to investment banking, bond dealing etc.

Other services that are tightly clustered in Central London include television programme making and other aspects of entertainment including, of course theatre. Outside London cartoon making is organised in a cluster in Cardiff. Legal services are concentrated in several northern conurbations including corporate law in Leeds, based on the West Yorkshire tradition of building societies. Financial services outside London tend to be clustered in larger cities but particularly in Scotland. Edinburgh has maintained its independence as a significant European banking centre, and the major Edinburgh-based banks have strengthened their commercial position in recent years. Glasgow is still an important centre for life insurance.

Porter's explanation of the reasons why clusters remain competitive are usually summarised in his famous 'diamond' (Figure 11.2). He views competitiveness as being built through continuous interaction and competition between sophisticated customers and sophisticated suppliers, aided by local training and other support services. Sophisticated customers continually demand innovations and improvements from their suppliers. Suppliers in turn are able to respond through improvements in quality and service innovations. Local education and training organisations, property developers and transport authorities are all important in supporting the cluster's competitiveness.

Figure 11.2 Porters Diamond



In practice, individual isolated firms can also become competitive. There are examples of these in a range of financial and business services across Northern Ireland. In these cases individual entrepreneurs use their own experience to build a company and interaction with sophisticated customers occurs at a distance, e.g. over the internet. A cluster of similar service businesses, however, appears to help individual firms to grow large, and assists a collection of smaller firms to remain competitive. Important mechanisms appear to be the interchange of specialised staff, and the local exchange of technical and market information.

No-one should have illusions about the difficulty of developing clusters in new locations like Northern Ireland. Existing service sector clusters within the UK usually have either deep historic roots or exceptional circumstances. London's financial services clusters have roots going back to the medieval period, and certainly to the foundation of the bank of England and Lloyd's insurance market in the 17<sup>th</sup> century. Similarly, West Yorkshire's building societies and Edinburgh's banks have roots in the late 18<sup>th</sup> century.

However, the factors that maintain clusters have a relevance to economic development more generally. They need to be taken into account in most attempts to develop strong indigenous financial and service sectors. The alternative is, of course to rely largely on inward investment, but experience suggests that this does not easily lead to permanent or embedded development.

## **A Focus on Indigenous Export Services**

We recognise the Invest NI already has a well developed strategy for attracting network services, including call and contact centres and back offices. Its record in attracting such activities has been good since the paramilitary cease-fires of 1995. Invest NI also has a well developed strategy for the software sector, and again this has grown rapidly since 1995, although it is still proportionately much smaller than the equivalent sector in the Republic of Ireland.

Where Northern Ireland has less developed strategy is in building successful indigenous export businesses in the rest of the financial, business and creative services sectors. Our assessment is that there are a large number of potentially footloose jobs in a range of UK business and creative sectors in addition to network services and software. Table 11.4 lists the major sectors with an estimated 50,000 or more footloose jobs outside London.<sup>6</sup> While computer services, including software development, is in first place, network services is only sixth. Large numbers of other potentially footloose jobs were identified in such sub-sectors as accountancy, law, business consultancy, architects/engineering consultancy and research and development. However, Canadian research on footloose services warns that many ostensibly footloose services can prove to be difficult to relocate in practice.

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<sup>6</sup> *These estimates were constructed by examining employment in each detailed financial and business sub-sector across every GB county. For each sub-sector a minimum local ratio of employment to population was identified for counties with major cities ( i.e. omitting rural counties with small populations). This minimum was then taken to apply to all counties, and all employment above the minimum was defined as footloose. Across GB as a whole 2 million footloose jobs were identified in financial and business services in 2001. Of these, 800,000 were in London, leaving 1.2 million across the rest of GB.*

**Table 11.4 ‘Footloose’ Jobs in UK Financial and Business Sectors Outside London**

	<b>GB excluding GL</b>
Computer and Related Activities	172
Banking	158
Insurance	142
Architectural/Engineering	92
Research and Development	85
Other Business Activities nec	80
Other Financial Activities	79
Consultancy Activities	76
Legal Activities	59
Accounting	53
Property Agents	52

*Source: National Statistics, Regional Forecasts*

Our view is that a distinction should be made between globally footloose services and locally footloose services. The former category, which includes call-centres, can be relocated since their skills are easily transferable. They are attracted by low costs and available labour. The latter are more difficult to relocate due to less easily transferable skills and experience. This includes clusters of linked firms, partnerships and small businesses in which the knowledge of the principals is the key commercial advantage.

Some GB cities and counties nevertheless have many times more activity than others in several of these activities. Leicestershire for example has seven times as much employment in advertising as the Grampian region in Scotland. The small industrial town of Loughborough has as many advertising firms as Aberdeen. We need to understand why this is, and to transfer the lessons to Northern Ireland.

Our policy discussion thus focuses on footloose financial and business services other than network services and software. It should be said that no other development agency that we know of has been notably successful in this respect. There is thus no ready made role model for Invest NI to follow, and we have already noted that progress is unlikely to be easy. What we notice from work in GB is that the more successful cities have high proportions of graduates in their workforce, and are residentially attractive. The worst placed cities are former industrial or port cities with low proportions of graduates. Examples include Stoke on Trent, Hull and West Bromwich.

Northern Ireland is intermediate in this spectrum. Belfast developed as a 19<sup>th</sup> century industrial and port city with only limited development of financial and business services with export potential. Although much of Northern Ireland is residentially attractive, its main towns and cities are not nationally renowned in this respect and the ‘troubles’ have cast a long shadow over the province’s reputation as a good place to live. However, Northern Ireland’s education system is strong, producing a high proportion of graduates, many of whom would choose to work locally if suitable opportunities were available.

## **Policy Implications**

Our discussion of policy implications follows Porter's outline in focussing separately on the developing demand for local services, assisting the development of local service suppliers and, finally, local support for service companies. There is often no direct connection between analyses of a problem and the implications for action. This is because problems can often be addressed in a variety of different ways. The discussion below thus makes a number of suggestions for action but does not relate these directly to the analyses of previous chapters.

For instance our recommendation that further privatisations in Northern Ireland could increase local demand for professional services cannot be said to follow directly from research that identifies the small size of the professional services sector in Northern Ireland. This is merely one way of proceeding, and one that will appeal to some and not to others. Many policy recommendations would require targeted research to evaluate their potential effectiveness and to guide implementation. We thus make this point here and not in relation to individual policy recommendations.

## **Stimulating Demand for Local Services**

- Privatisation of Major Organisations

Northern Ireland has only a handful of PLCs and this limits demand for sophisticated financial and business services from local firms. Many of Northern Ireland's major companies are branch plants or subsidiaries of national or international firms with headquarters elsewhere. Although these companies make some use of local services, this is less than would be the case for local PLCs. Several major activities that have been privatised in GB are still in the public sector in Northern Ireland. These include Belfast Port, the Water service and The Northern Ireland Transport Holding Company. In at least some of these examples opposition to privatisation does not appear to have a sound economic basis.

**We suggest that the Northern Ireland Assembly, or Direct Rule Administration, promote privatisation of appropriate organisations still in the public sector.**

- Invest NI Audit of Service demand in Major Companies

**An audit of large companies in Northern Ireland could be undertaken to establish the nature and extent of demand for financial and business services. This should include an assessment of the potential for local companies to replace external suppliers of sophisticated services.**

- Invest NI to Help Identify Potential Markets Outside Northern Ireland

Many businesses and partnerships in Northern Ireland could undertake more work for clients outside Northern Ireland, although they would need some advantage of lower costs or differentiated service to compensate for the greater distance from clients compared to suppliers closer to external markets.

**We suggest that Invest NI work with sub-sectors within financial and business services to identify potential markets in GB and the ROI including identification of advantages in costs and service quality.**

- Survey of Public Sector Activities With Potential For Privatisation

Many activities currently undertaken within the public sector could alternatively be supplied by the private sector. One considerable advantage of private over public sector provision is that competition leads private companies to develop the service, to search for efficiency savings, and to find additional markets into which the same services can be sold. Public sector activities might be privatised to local companies which undertake to develop the activity in such a way as to extend Northern Ireland's exports.

**We suggest that an audit be undertaken of public sector activities which could reasonably be undertaken by new or existing local companies, and steps then be taken to privatise these activities to local companies with the ability and ambition to develop these activities for sale beyond Northern Ireland.**

## **Developing Indigenous Suppliers of Tradable Services**

Invest NI is actively involved with companies and sub-sectors within financial and business services other than network services and software, but more can and should be done in this difficult but potentially fruitful area. The following recommendations are mainly issues that we believe could extend Invest NI's performance in dealing with these sub-sectors. However, the first two recommendations are relevant to other Northern Ireland government departments.

- Reduce the burden of regulation for tradable services

**An audit could be undertaken by the Government Purchasing Agency (GPA) of its own and other regulatory frameworks with the aim of making it easier for small businesses to win government contracts.**

Within Northern Ireland, any unnecessarily restrictive regulations on purchasing and similar matters should be reviewed. Administrative convenience or internal cost reduction should be assessed in the context of potential restraints on trade.

- Lobby For a Reform of State Aids rules to Assist Tradable Services

Current EU State Aid rules allow Invest NI to provide only half as much financial assistance per job for tradable services firms as for manufacturing businesses. This perversely induces Invest NI to spend more of its funds on a sector with declining job prospects than on the fast growing tradable services sector.

**DETI, Invest NI, EPU and DFP could work up proposals for a relaxation of EU State Aid rules to ensure that service sector firms are not disadvantaged in terms of assistance per job and should lobby the UK government and EU Commission to effect changes.**

- Clarify eligibility criteria for Invest NI grants

Our understanding is that all businesses with an actual or potential significant volume of sales outside Northern Ireland should be eligible for Invest NI assistance. It is not clear that this is understood throughout the organisation where earlier rules may still apply. **Current eligibility rules could be clarified throughout Invest NI and the Local Enterprise Agencies.**

- Invest NI Professional Services Unit

The current reorganisation of Invest NI does not, in our view, differentiate professional services from other private services with sufficient clarity to ensure success in dealing with the challenges posed in supporting this diverse and complex sector. The brigading of tradable services with engineering and of creative services with textiles and clothing is, in our view, unhelpful.

**Invest NI could establish a unit specifically to promote growth in professional services sectors other than network services and software.**

This unit should work with the various sub-sectors of professional services to:

- Understand the nature of changes in that sub-sector
- Learn to work with partnerships/consultants in niche sectors

- Work with local professional services companies to identify potential markets for high value in GB, the ROI and the EU.

The complexity and individuality of these sub-sectors means that it will be helpful for Invest NI to be supported by research on the various activities. It would be DETI's responsibility to organise this.

- An Invest NI Assistance Programme Specifically For Tradable Services.

Although professional services companies are in theory eligible for the range of Invest NI grants, many have been designed with manufacturing firms or similar producers of 'products' in mind. Firms whose *raison d'être* is service provision appear to have difficulty in applying for some assistance. Within Invest NI an aim appears to be to convert consultants into producers of service 'products'. While this is appropriate for software, it is less applicable to specialisms like corporate law, accountancy or business consultancy. **Invest NI could consider a programme of assistance specifically targeted at companies, partnerships etc providing services rather than developing products. This should include assistance for product/service development.**

**An audit of existing assistance Invest NI programmes could be undertaken to examine the possibility of making them more accessible to tradable service providers.**

- A Programme for Bringing Experienced Service Sector Entrepreneurs Back to Northern Ireland.

The real competitive advantage of many tradable service providers lies in the expertise and experience of the owners and senior staff. Much experience in tradable services is being developed by those currently working in London and other GB cities but born and bred in Northern Ireland. Some of these people will be considering setting up their own businesses and might be induced to do so in Northern Ireland if the risks of going alone can be substantially reduced in doing so.

**Invest NI could consider a scheme to induce potential entrepreneurs with relevant expertise to return to Northern Ireland.**

An analogous scheme to the 'Making It Back Home' programme, developed by DED agencies in the 1990's, could be re-evaluated to learn lessons on how best to deliver a programme of this type.

- A Specialised Invest NI E-Commerce Unit Should be Established.

The recommendations above are targeted mainly at businesses in financial and business services. It is generally assumed that the large wholesale and retail distribution sector serves only local demand and is not involved in exports or import substitution. With internet sales rising rapidly this assumption is no longer as secure as in the past.

**A specialised E-commerce unit could thus be established within Invest NI to maximise the potential for Northern Ireland companies to extend their wholesale or retail operations to markets outside Northern Ireland.**

## **High Quality Support Services**

- Support For R & D in Professional and Creative Services

**Invest NI currently works closely with the universities to promote R&D in high technology. Similar support could be considered for a wider range of tradable services activities.**

This might include working with the universities to develop specialist courses and research in areas such as corporate law, accountancy, economic, business, architectural and engineering consultancy, commercial property management or advertising. In each case an emphasis should be on the commercialisation of knowledge for markets outside Northern Ireland

## Chapter 12: Conclusions

The private services sector has been easily the most important source of jobs in Northern Ireland over each of the last three decades. The same is forecast to be the case over the next ten years with a projected addition of over 50,000 extra jobs by 2013. Much the same is true of the UK as a whole, for most EU economies and for the USA. Private services are strongly associated with economic success. The richest regions and countries tend to have high proportions of private services in their economies.

Within the private services the sectors of most importance for regional economic development are the so-called 'tradable' services. These are sectors in which services are tradable across regional boundaries and thus capable of bringing income into a region in much the same way as exports of goods. Examples of tradable services exist in almost all sectors, but the key tradable sectors are financial, business and creative services and tourism.

Although each of these tradable sectors has grown rapidly over the last decade, and most are projected to continue expanding over the next ten years, it is also true that Northern Ireland is very under-represented in all of them. The degree of under-representation in private services as a whole is so marked that it would require over 100,000-150,000 extra jobs to bring Northern Ireland up to the current average for private service employment in the UK. Since the UK average is also a fast moving target, it would require 150,000-200,000 additional jobs for Northern Ireland to catch up by 2013. Most of this under-representation is in tradable services and hence most of the additional jobs would need to be created in these sectors.

Under-representation in tradable services is a major economic disadvantage. To have a low representation in what are the fastest growing sectors in most western countries condemns a regional economy to an uphill task to keep pace in overall economic growth. This disadvantage is only circumvented if a region has some offsetting strong competitive advantages which attract high levels of investment.

In Northern Ireland's case overall economic growth is maintained largely because of rapid expansion in population, and hence local demand for services. This is underpinned by highly subsidised export sectors, and importantly by a large public sector supported by external subvention. While these advantages have driven a rapid expansion in distribution hotels and catering, and have led to growth in local demand for financial and business services, they have not been sufficient to end the under-representation in private services, nor to generate the high wages that typically accompany a large financial and business sector.

The successful economies of the future are likely to be those that are most competitive in tradable services. The UK's most successful region, the South East, has steadily restructured its economic base away from manufacturing and towards financial and business services. Thirty years ago these services in the South East employed half as

many as manufacturing. Today they employ almost four times as many. In Northern Ireland the financial and business services sector is still smaller than manufacturing. Indeed Northern Ireland has, proportionately, the smallest financial and business sector of any UK region.

Despite this Invest NI continue to spend over 85% of its funds in support of manufacturing. Although the organisation ‘promotes’ 4,000 jobs a year in manufacturing, total employment in manufacturing declines steadily, losing 1,000 jobs a year over the last ten years. In our view it will continue to do so. Supporting manufacturing employment is thus rather like running up a down escalator. However, the importance of manufacturing is wider than employment. GVA in manufacturing has risen in real terms by an average of 3.7% over the last two decades. The wage component of GVA, much of which remains within Northern Ireland in the first instance, has also been relatively stable in real terms since 1971. Manufacturing thus generates large amounts of income that underpin consumer and other spending in Northern Ireland.

Having said this, Invest NI has well developed strategies for supporting parts of the tradable service sector, notably network services and software. NITB has similarly a well developed strategy for tourism although real success in that sector depends most on improving Northern Ireland’s external image. Network services are the chief source of inward investment now that Northern Ireland has become an uncompetitive location for footloose industrial investments relative to Eastern Europe or the Far East. Software is also strongly supported, and has grown rapidly since the mid 1990’s. These sectors are, however, the ‘low hanging fruit’ of service sector development. They also account for only one sixth of the shortfall in Northern Ireland’s financial and business sector employment.

The challenge facing policy-makers now is how to address the under-representation in the professional services which form the majority of the business service sector. These activities include accountancy, business consultancy, legal services, architecture and engineering services, research and development, property sales and property development, market research, advertising and other smaller niche activities. All of these activities are growing and all have a high proportion of well paid full time jobs. These are the activities that increasingly provide the export base for successful regions.

Although Invest NI has a small number of client companies in these sectors, it is clear that economic development policy in Northern Ireland is not geared up to support professional services. Nor do EU State Aid rules make it easy to do so. Invest NI remains predominantly an organisation focussed on supporting companies that produce tangible products such as software. There is anecdotal evidence to suggest that where professional services are supported by Invest NI the aim is often to convert a consultancy-type business into one that produces a recognisable/tangible product. We have investigated the reasons for this orientation but suggest that it may stem from the experience and expertise built up within Invest NI. This has traditionally focussed on products as a means of generating company profits, rather than on professional services as a means of generating fees and income.

While support for product-based services is an important part of a balanced portfolio of assistance, it is also important to recognise that much of what high level financial and business services do is to provide consultancy, advice and other non-tangible services. This, after all, is what the prosperity of Central London is built on. Invest NI should, in our view, begin to develop strategies for supporting the complex world of professional services. This may involve analysis of how their organisation should be structured to meet this challenge. Professional services needs to have a clear section or unit devoted to it. At present, tradable services are brigaded with engineering, and creative services are with textiles and clothing. This may benefit from change. A new programme of support may also be needed to meet the unique needs of professional services.

Developing a successful tradable service sector is a difficult task. There are few role models to emulate. It is also obvious within GB that residentially attractive areas with well educated populations have the largest tradable service sectors. Success is also built on the back of long traditions, most obviously in Central London but also in areas like West Yorkshire with building societies, or Central Scotland with banking and life assurance.

Northern Ireland lacks equivalent traditions. Despite its environmental advantages it is not a residential location of choice for those not born here, and despite its favourable education system its population is not well educated by UK standards. It also lacks major public companies and headquarters organisations. These disadvantages mean that Invest NI cannot reverse the tide of under-representation on its own. A wider effort is needed. In our view, this should include the encouragement of privatisation to help both to create a local market for sophisticated business services and to increase the number of private sector suppliers. Whole organisations should be privatised, but equally individual government activities could be hived off to the private sector to a greater extent than at present.

We have no illusions about the difficulty of supporting professional services, but we take the view that Invest NI should take up this challenge with vigour. The task will require a detailed knowledge of a wide range of niche activities both in Northern Ireland and in GB. This will need further research to support the work of Invest NI and we believe that DETI should be proactive in organising such research. DETI should also in our view take a general lead in promoting what would represent a major change in direction for economic development support in Northern Ireland.

## **Annexes**

### **Annex 1: Definitions of the Private Service Sector**

For this study we see little reason not to use traditional definitions of private services. The breakdown of private services into individual sectors and sub-sectors is largely dictated by the Standard Industrial Classification, and by the availability of data. The sector in this study thus includes:

- **RETAIL AND DISTRIBUTION**
  - Vehicle Repairs
  - Wholesale
  - Retail
  
- **HOTELS AND RESTAURANTS**
  
- **TRANSPORT AND TELECOMMUNICATIONS**
  - Land Transport
  - Sea Transport
  - Air Transport
  - Transport Support
  - Telecommunications
  
- **FINANCIAL SERVICES**
  - Banking
  - Insurance
  - Other Financial Services
  
- **BUSINESS SERVICES**
  - Real Estate
  - Renting Machinery etc.
  - Computer Services
  - Research and Development
  - Other Business Activities including:
    - Legal Activities
    - Accounting
    - Market Research
    - Consultancy Activities
    - Management Activities
    - Architectural/Engineering
    - Technical Testing and Analysis
    - Advertising
    - Recruitment

- Investigation Security Services
  - Industrial Cleaning
  - Photographic Activities
  - Packaging Activities
  - Secretarial/Translation Activities
  - Other Business Activities nec
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- OTHER PRIVATE SERVICES
    - Waste Disposal
    - Entertainment, Sports and Culture
    - Charities
    - Other Services

In this definition private services correspond broadly with sections G-K plus O of the 1992 Standard Industrial Classification except that postal services are excluded since most of these remain in the public sector. The exclusion of postal services can, however, only be achieved for employment. In the case of GVA and productivity analyses it is included within the private sector. Telecommunications is consistently included throughout the period of analysis because the sector has been in the private sector in the UK, including Northern Ireland, for over a decade now.

Sections L-N (Public Administration, Health and Education) are excluded because only a very small, and difficult to identify, part of these sectors are in the private sector in Northern Ireland. Hence, some private sector activities, in private schools and clinics, and increasingly in pre-school childcare, are excluded from the private sector data in this study.

In the rest of this chapter the public sector is defined as public administration, education and health (sections L, M and N). The rest of the private sector is defined as sections A-F i.e. Agriculture, Forestry, Fishing, Mining and Quarrying, Manufacturing, Energy and Water and Construction.

## Annex 2: Literature Review on Business Services

### Productivity

The most accessible work on the core propositions about productivity is by Rowthorn (Rowthorn and Wells (1987), Rowthorn and Ramaswamy (1997), (1999)). The context for this work is the discussion of cross-country patterns of “de-industrialisation”, the shift from manufacturing to services (in employment and output) which has taken place across all industrialised economies over the last forty years<sup>7</sup>. The main conclusion from the most recent study (which used panel data on 18 industrial countries over the period 1963 to 1994) was,

“... deindustrialization is explained mainly by factors that are internal to the advanced economies – i.e. as a result of the interactions among changing preference patterns between manufactures and services, the faster growth of productivity in manufacturing compared to services, and the associated relative decline in the price of manufactures”  
Rowthorn and Ramaswamy (1999, p34)

Among the notable features of this work is the estimates given of the level of per capita GDP at which a country begins to experience de-industrialisation – when the share of manufacturing employment in total employment begins to fall (see Rowthorn and Ramaswamy (1999, Table 5, p28)) – and how well this accords with the experience of some of the more recently industrialised East Asian countries (for example, Taiwan and South Korea, where this happened in the late 1980’s (for a Figure 1. displaying the data see Rowthorn and Ramaswamy (1997, Figure 1. 4, p16)).

Of course, these are *empirical* findings. There is though some *a priori* logic underlying the argument about the slower growth of productivity in service activities which is generally traced back to a paper by Baumol (1967) (later developed in Baumol, Bateman and Wolff (1985) and at book length in Baumol, Bateman and Wolff (1989)). To take the simplest example: what scope for productivity growth is there in the performance of a string quartet? Of course, though, not all service activities have that character, and a distinction was introduced between *stagnant* or more precisely *asymptotically stagnant* service activities (where the string quartet is the limiting case, and medical procedures performed by a surgeon might be similar), and *progressive* services, like data processing, where more rapid productivity growth is possible. After an examination of post-war US data (up to 1980) Baumol, Bateman and Wolff conclude,

“...in output terms the ‘rising share of services’ turns out to be deceptive. The output shares of the progressive and stagnant sectors of the economy have in fact remained

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<sup>7</sup> Service employment trends from 1960 to 1985 at SIC section level for seven of the largest OECD economies are documented in a useful paper by Elfring (1989).

fairly constant in the postwar period, so that, just as the cost disease leads us to expect, with rising relative prices, the share of total expenditures on the (stagnant) services and their share of the labor force have risen dramatically.” (1989, p141)

The “cost disease” referred to here (introduced in Baumol (1967)). So “Baumol’s disease” is in fact the logical chain, set out in section 1(a) above, linking lagging service sector productivity to persistently rising relative costs and prices.

Clearly though, the distinction between “stagnant” and “progressive” service activities means that conclusions about the overall relationship between manufacturing and services will depend now on the composition of services. This distinction sets the stage for one of the more dramatic sounding claims about an empirical finding: according to Triplett and Bosworth (2003), (forthcoming), “Baumol’s disease has been cured”.

“It is now well known that after 1995, labor productivity (LP, or output per hour) in the United States doubled its anaemic 1.3 per cent average annual growth between 1973 and 1995... Labor productivity in the service industries also accelerated after 1995... labor productivity in the service industries after 1995 was a broad acceleration, not just confined to one or two industries ... we showed that fifteen of twenty-two U.S. digit service industries experienced productivity acceleration. Both the rate of LP improvement in services after 1995 and its acceleration equalled the economy-wide average. That is why we said ‘Baumol’s disease has been cured’.” Triplett and Bosworth (2003, p23)

Equally intriguing is their summary of the factors mainly responsible,

“Information Technology (IT) investment played a substantial role in LP growth... Purchased intermediate inputs also made a substantial contribution to labor productivity growth, especially in the service industries that showed the greatest acceleration. This finding reflects the role of ‘contracting out’ in improving efficiency”. (*ibid*, p23)

And, amongst the top 10 labour productivity growth service industries over the 1995 to 2000 period was business services which recorded a rate of 3.5%, almost one percentage point above the economy-wide average of 2.6% (see Triplett and Bosworth (forthcoming, p37, Table 5)).

Of course it would not be wise to attach too much significance to a single set of figures<sup>8</sup> for a five year period for just one country. More important is the fact that these findings serve as a reminder that the propositions about the service sector's relative productivity growth and its implications are empirical and that, just as the classical economists' views about growth were overly coloured by their views about the productivity of land, we should not allow our longer term view of the prospects for growth to be unduly affected by the historically weak productivity performance of the service sector.

It is interesting to notice, though, that the same victory over “Baumol’s Disease” cannot yet be claimed for Europe. In a recent study of the impact of ICT on European economies van Ark, Inklaar and R. MacGuckin (2002) concluded that<sup>9</sup>,

“The key differences between Europe and the US are in the services sector, in particular in intensive ICT-using services. Productivity growth in the US strongly accelerated during the second half of the [1990s], whereas it more or less stalled in the EU.” (2002, p 40)

However, it is probably worth noting from the detail that the productivity growth differential in business services, although small, was in the EU’s favour, the EU lagged most notably in distribution and financial services (see van Ark, Inklaar and MacGuckin (2002, p75 Appendix Table E5).

We can now turn to propositions about the income and price elasticities of the demand for services. Until the 1980s it had generally been assumed that the demand for services was income elastic<sup>10</sup> – as countries became richer the composition of demand switched from goods to services. The latest evidence is provided by Falvey and Gemmell (1996) using 1980 data for 60 countries and a set of eleven service categories (from Phase IV of the International Comparisons Project). Here, as usual, the careful investigation of more than usually disaggregated data produces a richer set of conclusions,

“For services as a whole it appears that a falling real expenditure share as GDP per capita rises is consistent with an income elasticity close to unity and an inelastic price response... *Individual* services clearly display quite different income elasticities suggesting that, if higher income per capita produces a tendency for some services to substitute for commodities, it also appears to produce converse substitutions” Falvey and Gemmell (1996, p 267)

The ‘bottom line’ then is that the share of money spending on services remains broadly constant as income rises (unit income elasticity) rather than rising as had previously been

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<sup>8</sup> For a more detailed treatment of the technical issues surrounding their conclusions see Bosworth and Triplett (2003).

<sup>9</sup> For a brief relatively non-technical summary see van Ark, Inklaar and MacGuckin (2003)

<sup>10</sup> For brief summary of this literature see Gundlach (1994).

accepted. What this means then, in terms of our core propositions, is that if productivity growth in services were typically to be slower than in manufacturing, then its impact on economy-wide growth would proceed more slowly since the composition of demand would not be changing as the economy grew richer.

## **Outsourcing<sup>11</sup>**

Even though the propositions referring to service sector productivity growth and its implications, were initially formulated within a framework where the service activities were components of final demand (essentially consumer demand), a corresponding line of argument can also be applied to purchases of services used as an input to production. Indeed, the improved productivity of service exports emerged as part of Triplett and Bosworth's conclusions. Notice they made explicit mention that business services are a key input in the production of business services. What makes their remark all the more noteworthy is that there seem to have been relatively few published studies which make use of input output data to explore the role and significance of business services. One important contribution to this small literature is the paper by Francois and Reinert (1996) which assembled a 15 country input output dataset to study the role of services in production and trade<sup>12</sup>. Their main conclusions were five "stylised facts",

- (i) Income levels are positively associated with employment shares for intermediate services and with the share of indirect labour in total manufacturing employment.
- (ii) The share of value added originating in services ... is also positively linked to the level of development.
- (iii) Income levels are strongly linked to demand by firms for intermediate or producer services, particularly in manufacturing.
- (iv) While changes in the allocation of non-production (i.e. service) activities between manufacturing and service firms may explain a small share of service sector growth, the basic story seems instead to be one of fundamental changes in the structure of production.
- (v) The importance of services for export performance depends on the level of development. As we move from the middle-income to the upper-income range of our country sample, private services and trade, transport and communications services become the most important

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<sup>11</sup> The literature on the outsourcing under review here focuses just on services, there is a large literature on the "flexibilisation" and/or "fragmentation" of manufacturing production processes where different stages of a *production* operation might be outsourced to local sub-contractors or even to different parts of the world.

<sup>12</sup> There only appears to be one study of the UK economy which has investigated the manufacturing/service linkage using input output data, Barker and Forsell (1992) but this question was only touched quite slightly and, in any event, in the period under examination, 1979 to 1984, British manufacturing was undergoing a severe contraction and was under extreme pressure from import competition.

sectoral elements of exports via inter-industry linkages.”  
Francois and Reinert (1996, p1)

The first two of these are of course familiar<sup>13</sup>, the final three taken together give a first insight into the role of business service as input which improves manufacturing performance and that the demand for this input itself expands more than proportionately as economies progress. Whilst outsourcing by manufacturers of their service divisions may have contributed to the expansion of the business services sector, their growth represents more than just externalisation and, what is more, these services play a role in generating foreign sales<sup>14</sup>.

Raa and Wolff (2001) had the question of outsourcing as their focus but they were using aggregative US input output tables (1947, 1957, 1967, 1977, 1987, 1996) and so their conclusions were necessarily somewhat circumscribed<sup>15</sup>,

“... findings are consistent with the argument that the outsourcing of services was partly responsible for the recovery of ... productivity growth in manufacturing during the 1980s. The results also support the argument that manufacturing industries have been successful at externalizing the slow productivity growth service activities.

It is difficult to say whether the increased service inputs into manufacturing industries were due strictly to outsourcing – that is, the substitution of externally produced output for internally provided inputs – since we have no way of assessing the production of intermediate services within the industry. However, the increase of service inputs within manufacturing during the 1977-1987 period was probably a result of a combination of outsourcing and the substitution of service activities in general for material inputs.” ten Raa and Wolff (2001, p.197)

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<sup>13</sup> Although, as you will appreciate, there might be some conflict between (ii) and the findings of Falvey and Gemmell.

<sup>14</sup> Unfortunately the paper does not provide enough information to compare the value of direct exports of services with the value of the indirect exports of services embodied in manufactured goods.

<sup>15</sup> Fixler and Siegel (1999) used a related dataset and rather more indirect analytical tools to arrive at some rather interesting conclusions about the dynamics of “outsourcing”: the externalisation of services had improved manufacturing productivity but had worsened the productivity performance of the services sector but, they conjectured, once the enthusiasm for outsourcing had run its course, service sector productivity growth would improve. Needless to say, as they admitted (p 192), lacking firm-level data their interpretation of aggregate correlations as evidence of a phenomenon (outsourcing) which they could not directly identify, should be regarded as somewhat speculative.

As Raa and Wolff have admitted input output studies cannot provide much direct evidence on what seems to be known to economic geographers as the “externalisation debate”. So rather than pursuing the macroeconomic account of outsourcing any further (and in any event recent work using European data seems difficult to find<sup>16</sup>) let us turn to some of the case study research. Of course, whilst we gain much in specifics from such material, that specificity means it is difficult to know how representative the findings might be. Again we will be very selective and look at the results of just three studies.

The first is Coffey and Drolet (1996) a paper which looked at the pattern of externalisation (but not whether it was increasing or decreasing). They surveyed around 300 firms demanding business services in Montreal in late 1992 early 1993. Amongst their findings were,

“... it does appear that the most highly externalized services are those that are not firm-specific activities (for example, insurance, financing, legal advice)... Conversely, the more firm-specific functions (which, in addition may deal with confidential information) are among the most highly internalized services (for example, accounting, management expertise, professional computer services).

It is also clear that non-cost factors play a major role in the make or buy decision. This finding ... adds additional weight to the growing body of evidence indicating that pure cost considerations, while not entirely negligible (since outsourcing permits the avoidance of certain risks and fixed costs), are not among the major factors influencing the externalization decision among consumers of producer services. In-house technical limitations and infrequent and/or irregular demand for a service appear to be much more important than cost as a motivation for externalization. In addition, quality is also an issue in that externally provided services provided by specialists are often of a higher quality than could be achieved in-house.”  
Coffey and Drolet (1996, pp 45-46)

By contrast, O’Farrell, Moffat and Hitchens (1993) investigated both the demand for services and changes in the pattern of purchasing (internal to external, external to

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<sup>16</sup> In a chapter of a recent book published by the EC Rubalcaba-Bermejo (1999) presents some evidence derived from OECD input output tables (IOT). However he is quite frank about its limitations: “Much IOT research analyses services used by Industry as intermediate inputs and calls these flows business services. In the empirical part of his IOT section we focus on flows generated by the business service sector... Unfortunately we cannot cover the in-house business services flow produced within manufacturing or service companies nor the flows generated by companies producing business services as secondary activities. The methodology used in IOT sidesteps these concepts, so we are obliged to use the narrowest field of business services.” Rubalcaba-Bermejo (1999, p145, n 39)

internal) over the preceding three years<sup>17</sup>. The results were based on surveys in 1990 of about 400 manufacturing and 400 business service firms in Scotland and the South East of England (conducted in 1990) and they concluded that,

“The evidence of this research is unequivocal: the expansion for the demand for services is the predominant cause of increasing business service output and employment and not a relocation between the manufacturing and service sectors.... [Nor are] in-house business service provision and sub-contracting substitutes; we suggest they are complements in the sense that, as the in-house capability grows, more demands are made upon outside suppliers... both externalization and internalization are occurring simultaneously: indeed, the net balance is consistent with a marginal trend towards vertical integration in manufacturing and a stronger one in business services.” O’Farrell, Moffat and Hitchens (1993, p398)

Some further evidence that externalisation may not be driving the growth in business services is provided by Gorzig and Stephan (2002) in a recent paper using a very large panel of firm level German data covering the last decade,

“... firms .. outsourcing service functions previously provided within the firm, performed worse. In sum, our findings support the view that firms tend to overestimate the benefits accruing from outsourcing of services previously provided internally.” Gorzig and Stephan (2002, p i)

It is universally agreed, and empirically undeniable, that manufacturers in all countries have considerably expanded their purchases of business services. There seems, though, little case study evidence (and the papers reviewed here are representative in this respect) that this has involved a strong increase in, or a marked trend towards, externalisation. Rather it may just be that competitive pressures have led to the adoption of more service-intensive methods of production.<sup>18</sup>

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<sup>17</sup> This is just one of more than a dozen studies of different aspects of business services in Northern Ireland, Republic of Ireland, South East England, Scotland and Wales conducted by Hitchens and O’Farrell with various associates in the first half of the mid-1990s. For an introduction to their research programme see O’Farrell and Hitchens (1990).

<sup>18</sup> Of course some might interpret the increased use of agency staff (“temporary help” in the US) as externalization.

## Location

A useful summary of the state of knowledge about the location of service industries at the beginning of the 1990s is provided by Illeris (1991), a chapter from a volume on “advanced producer services”. He briefly described the “classical theory” of location of services, structured around an economic base of traditional production activities,

“ ... all service activities and incomes depended on money which the ‘basic’ activities brought into the local area. Therefore, local and regional development policies could ignore the services. They would automatically follow, if only the policies aimed at manufacturing growth were successful.” Illeris (1991, p97)

And, in this context, the “local area” would depend on the type of service. Non-specialist services are likely to be very local, more specialised services would likely be bought in from larger towns. The more sophisticated and specialised the service the further up the size and status hierarchy would the service providers be likely to be located.

The “emerging service society” he suggests will require a new “theory” what he suggests is that for some of the most sophisticated services more face-to-face contact will be necessary (encouraging concentration) whilst for others improvements in communication will allow more business to be done remotely (encouraging de-concentration): “there are forces which increase the advantages of agglomeration... and forces which pull in the opposite direction.” Illeris (1991, p104); and he then goes on to suggest that other locational advantages may come into play, factors such as qualified personnel or an attractive physical environment<sup>19</sup>. Again we will look at just a few of the most significant recent contributions to provide an indication of what has been learned over the decade. One is a UK case, the others are Canadian, an investigation of intra-urban industrial location and a rather larger scale study of business services.

In his study of the British computer services industry Coe (1998) investigated the balance between the forces of concentration and de-concentration at two different spatial scales (roughly the county versus the region) in the spatial distribution of a ‘new’ advanced producer service industry. His central conclusion seems to be that the ‘newness’ of the industry notwithstanding, the more familiar, more traditional factors governing industrial location still seem important,

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<sup>19</sup> This may all seem a little inconclusive but a few years later the book (albeit a textbook) by Marshall and Wood (1995), very active researchers in the field of the location of services and its implications, were hardly more definite in their conclusions after two chapters (chapters three and four, though their bibliography is unrivalled).

“... [the] analysis casts doubts on theories of regional economic development based purely upon the agglomeration economies created by close proximity to markets and suppliers... For example, although the M4 corridor is touted as an exemplar of a new industrial space built upon flexible interfirm relations and low transactions costs, the survey evidence suggests that the main factors determining the development of the computer service industry in the Berkshire area are its historical links to the hardware industry and the overall attraction to US software product companies. This growth has been underpinned by the highly qualified labour market, the environmental qualities and transport links of the area and the strong regional market of the South East. Local linkages to other IT companies and producer service firms are fairly limited, and are confined more to the South East region than to any specific local economy.” Coe (1998, p 2065)

Shearmur and Coffey (2002) set out to study the dynamics of urban industrial location and co-location using data for Montreal and comparing 1996 with 1981 at a highly disaggregated (census tract) level, in particular they wished to see where “high-order services” (advanced producer services) were located, with what other industries they were co-located, and whether these locations (relative to the central business district) had changed over a decade and a half. Their investigation revealed that,

- There was no evidence of high-order services (like computer services, engineers or architects) locating close to ‘high-tech’ manufacturing or manufacturing at all
- High-tech manufacturing was often co-located with other manufacturing
- No evidence of clusters of high-order services outside the central business district

Finally, one of the most impressive recent additions to our knowledge of the location of business services is the paper by Wernerheim and Sharpe (2003) which looks at the spatial pattern of change in Canada over the period 1987 to 1999. Not only does this paper have a very clear focus, it asks “How footloose are business services?”; but also it rests on a carefully purpose-built empirical base where sales of services to households and the associated employment have been painstakingly purged from the published data (see Wernerheim and Sharpe (1999), (2001)).<sup>20</sup> The investigation of this ‘purged’ data yields a significant pattern of differences between large and small metropolitan areas, and regression analysis using a standard set of variables measuring, for example, education, population density, spatial concentration produced coefficients of different sizes and with different signs for the two groups,

“The state of competition and spatial concentration arguably combine to influence location. It is doubtful

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<sup>20</sup> It emerged that ‘true’ (business-to-business) producer service employment is for some groupings of services as little as half the published total Wernerheim and Sharpe (2003, p 483).

whether in most cases policy incentives to remote regions can offset the perceived drawbacks for, say, competitive firms relying on venture capital to develop leading edge services in close contact with customers. Our data do not permit any direct assessment of the role of face-to-face contacts. However, we infer from our results that proximity to the ‘client’ does indeed seem to matter. ... given the sophisticated nature of many of these producer services and their eventual technical application, it stands to reason that face-to-face contacts are not readily replaced by other means of communication. This also accords with much anecdotal evidence.” Wernerheim and Sharpe (2003, p 484)

The policy implications of these findings are therefore already quite clear, but lest there be any doubt, the authors make them entirely explicit and unavoidable,

“Our main conclusion is therefore that high order producer service firms locate where they complement the underlying industrial specialisation, whatever that might be. This conclusion is based on the empirical analysis, which suggests that it is unlikely that [business service] firms in the Canadian metropolitan system are in general sufficiently footloose to respond to regional public policy initiatives by creating employment opportunities that attract populations to remain or migrate and settle in peripheral regions. Pressing the case for employment subsidy initiatives further than the evidence will bear is socially inefficient if it retards the adjustment required for the emergence of truly economically sustainable regions.”  
Wernerheim and Sharpe (2003, p 484)

It seems then that the central message of a decade of research is that the “new service economy” foreshadowed by Illeris in 1991 does not yet seem to have given rise to opportunities on a scale which might have allowed the poorer, often more peripheral, regions of the (formerly more) industrialised economies to improve their relative standing.

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**Annex 3: Private services employment in Northern Ireland,  
December 2002 (thousand)**

	Male	Female	Full-time	Part-time	Total
Retail & Distribution	54.8	64.8	63.7	55.9	119.6
Hotels & Restaurants	16.8	23.6	15.0	25.4	40.4
Transport & Communications	16.8	5.9	19.3	3.5	22.7
Financial Services	5.5	10.7	13.1	3.1	16.2
Business Services	27.1	28.0	37.9	17.1	55.0
Other Private Services	14.7	15.7	17.2	13.3	30.5
<b>Total Private Services</b>	135.7	148.7	166.2	118.3	284.4
<b>Public Sector</b>	71.5	166.0	144.6	93.5	238.1
<b>Agriculture, Construction Industry</b>	119.0	31.1	129.7	20.4	150.1
<b>TOTAL</b>	326.2	346.4	440.4	232.2	672.6

Source: DETI Quarterly Employment Survey

Notes: Public sector is defined as public administration, defence, education, health and social plus the postal services i.e sectors L,M and N plus 64.1 of the SIC (1992)

**Annex 4: Average weekly wages. Full time employees 2002 (£)**

	Male		Female	
	Manual	Non Manual	Manual	Non Manual
Retail & Distribution	287.0	427.1	-	244.2
Hotels & Restaurants	248.5	442.4	188.5	265.4
Transport & Communications	346.5	527.4	-	328.0
Financial Services	-	631.1	-	359.7
Business Services	283.3	544.5	-	306.2
Other Private Services	235.0	471.0	264.7	329.7
Public Admin & Defence	330.4	547.2	276.3	323.4
Education	260.8	598.1	228.7	498.7
Health & Social Work	302.1	602.1	214.5	422.5
<b>All services</b>	302.6	534.8	223.4	369.1
<b>Manufacturing</b>	340.6	514.5	243.6	329.6
<b>TOTAL</b>	324.2	532.0	230.2	364.9

Source: New Earnings Survey

**Annex 5: GVA per employee (£ thousands) Regional Accounts  
and the Annual Business Inquiry compared, 2000**

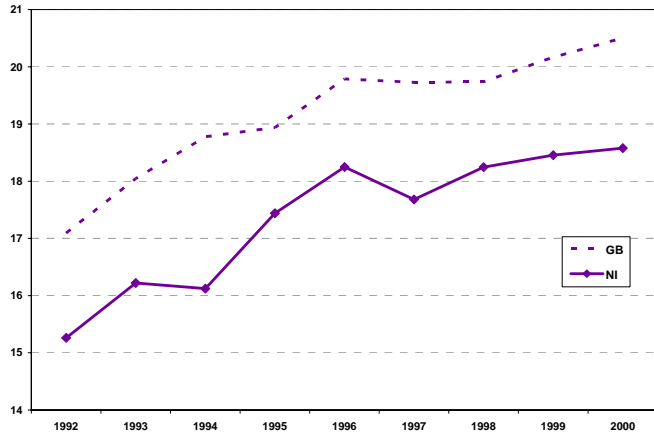
	Regional Accounts			ABI		
	NI	UK	Ratio	NI	UK	Ratio
Retail & Distribution	21.5	23.8	0.90	21.0	23.9	0.88
Hotels & Restaurants				7.2	12.5	0.58
Transport & Communications	33.4	41.3	0.81	37.0	41.6	0.89
Financial & Business Services	24.6	27.6	0.89	26.4	31.0	0.85
Other Private Services	27.3	29.4	0.93	9.6	25.1	0.38
<b>TOTAL</b>	24.3	30.7	0.79	20.6	26.8	0.77

Source: National Statistics Regional Accounts, Quarterly Employment Series, Annual Business Inquiry 2000

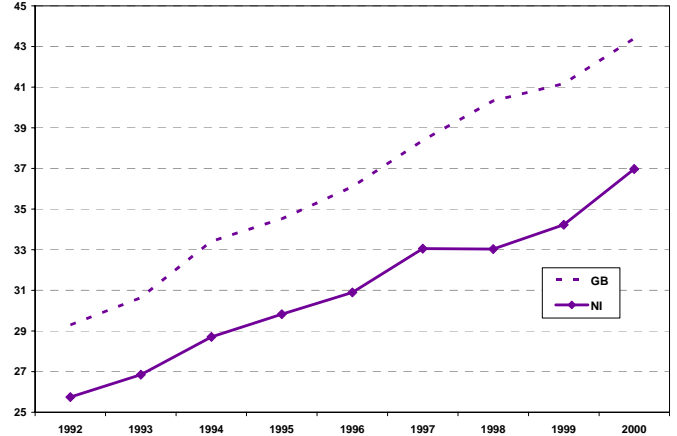
Note: ABI excludes financial services

## Annex 6: GVA per Full-time equivalent (£ thousand)- '2 digit' sectors

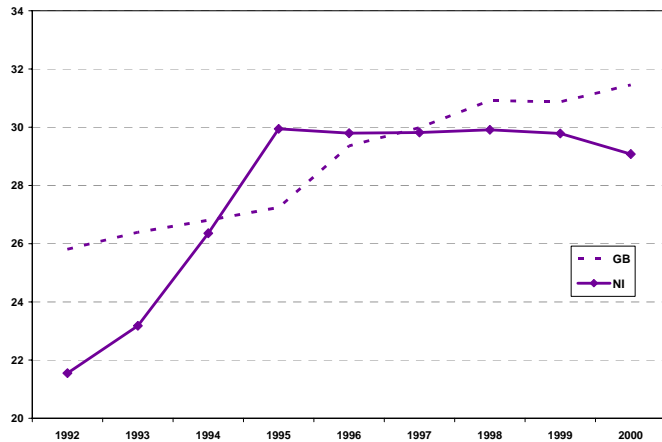
(i) Distribution, Hotels & Restaurants



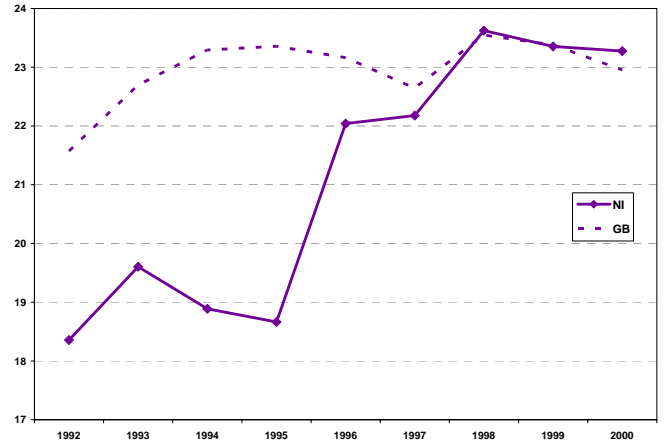
(ii) Transport & Communications



(iii) Financial & Business Services



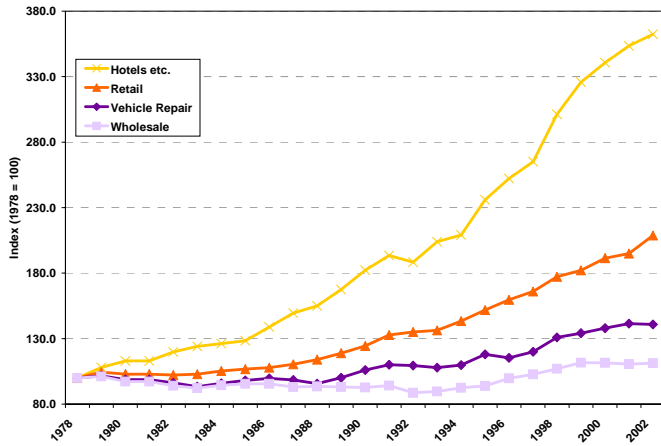
(iv) Other Private Services



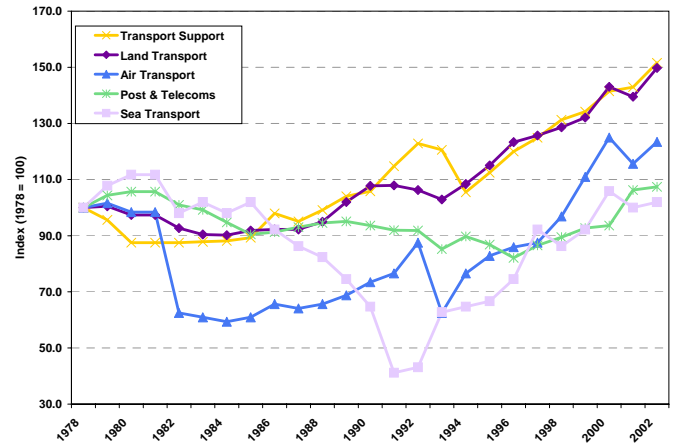
Source: Regional Accounts

## Annex 7: Employees in employment in Northern Ireland– 2 digit sectors

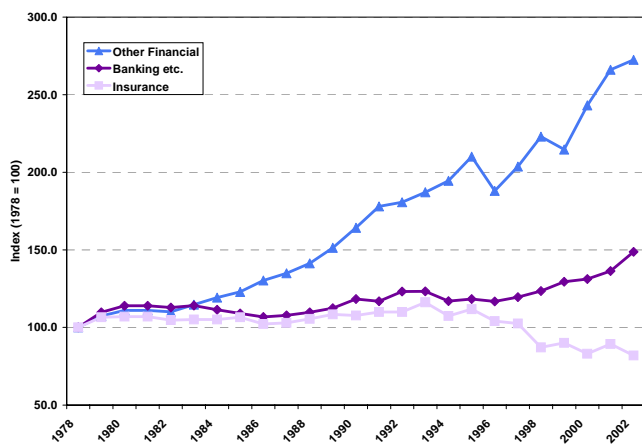
(i) Distribution, Hotels & Restaurants



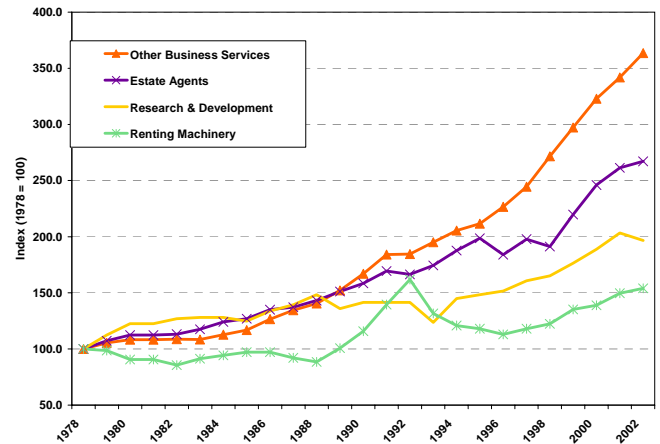
(ii) Transport & Communications



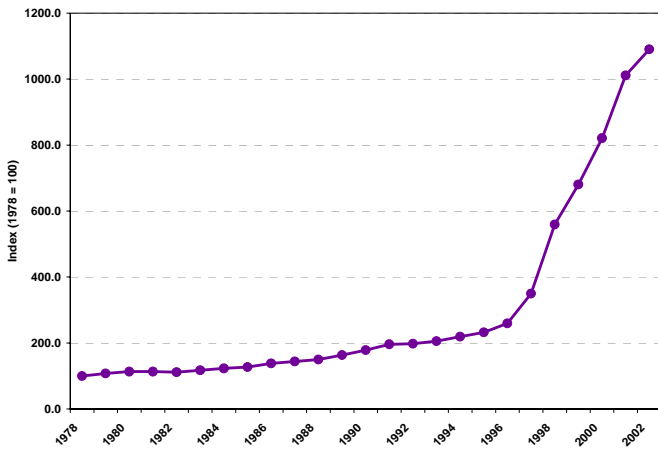
(iii) Financial Services



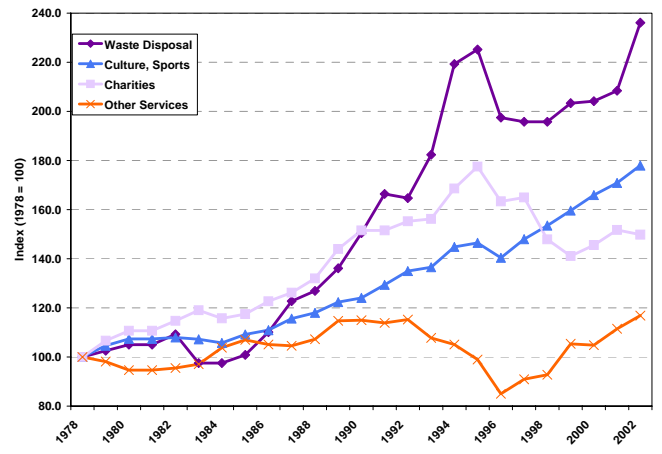
(iv) Business Services



(v) Computer Services



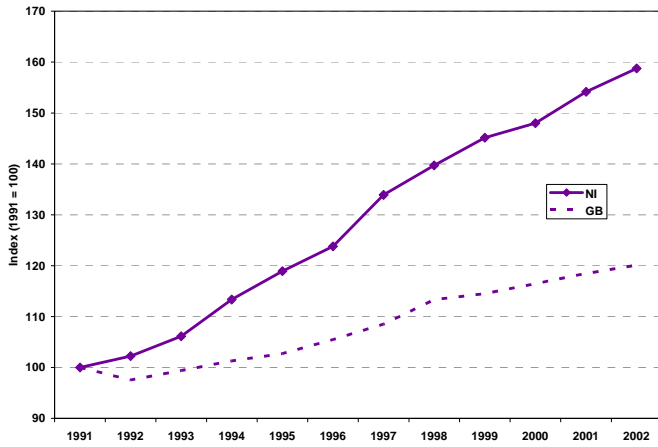
(vi) Other Private Services



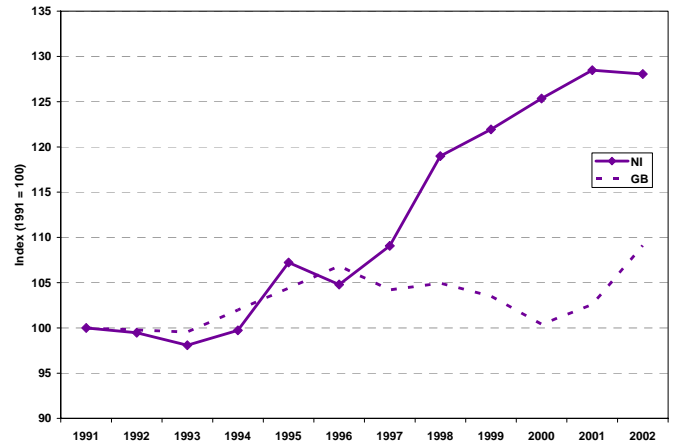
Source: DETI Quarterly Employment Survey

## Annex 8: Employees in employment – ‘2 digit’, NI and GB

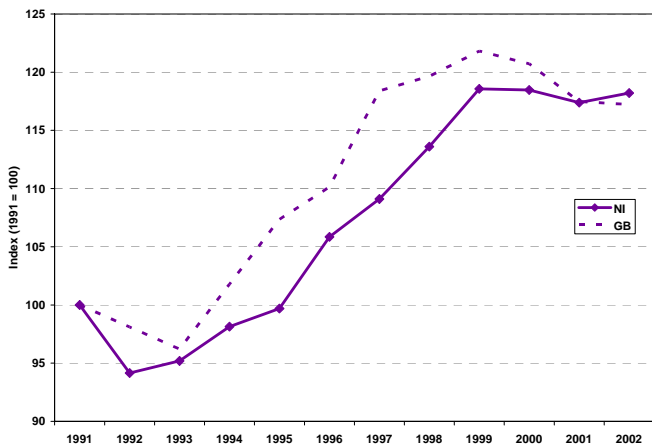
### Distribution, Hotels & Restaurants



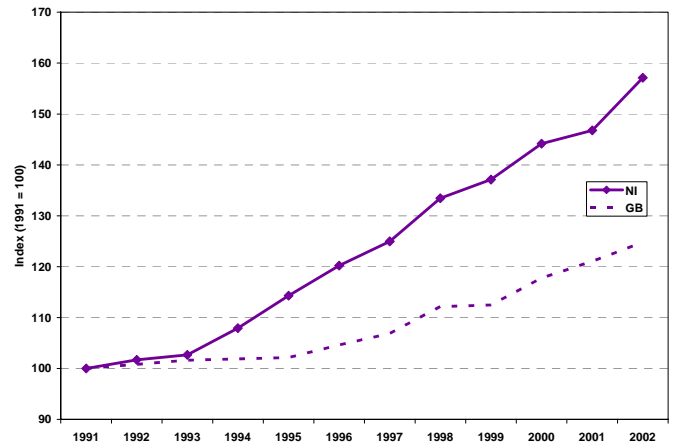
### Vehicle Repairs



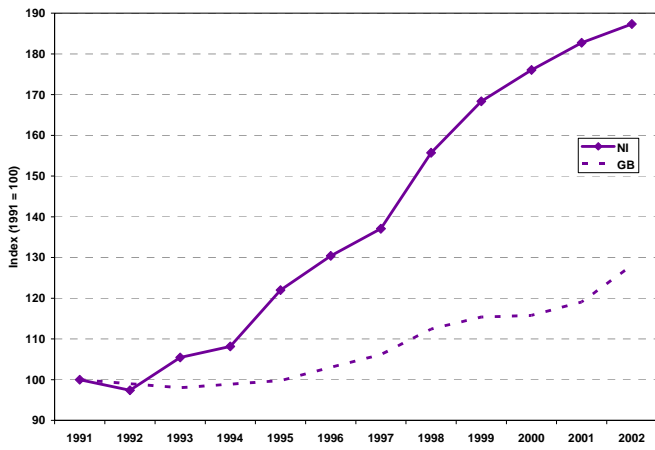
### Wholesale



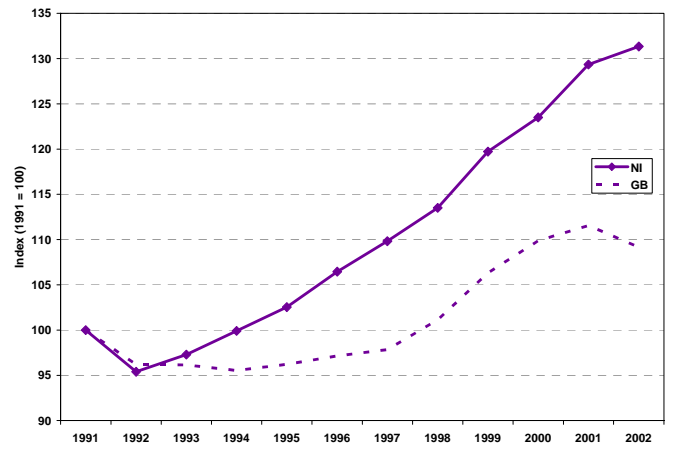
### Retail



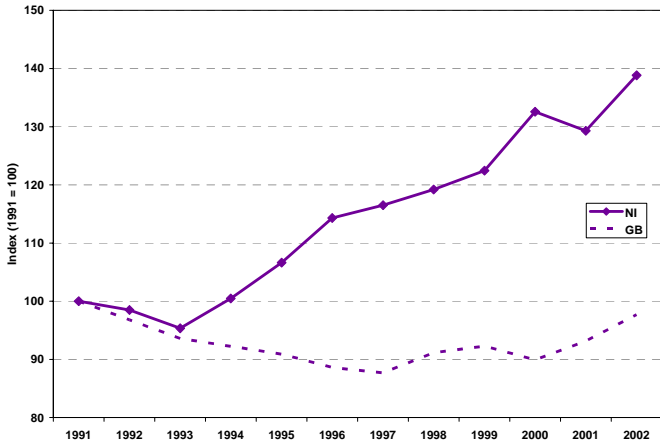
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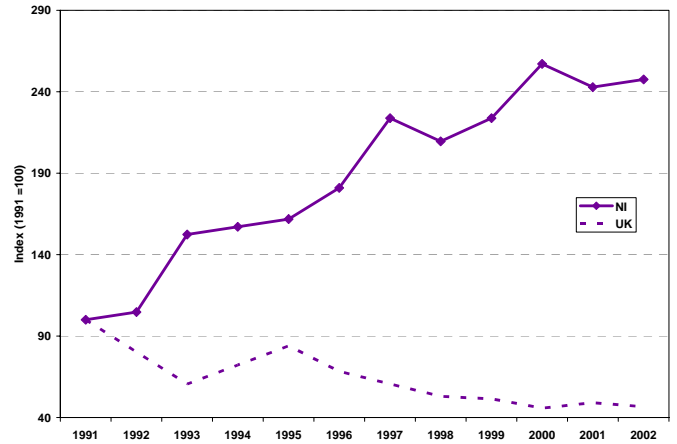
### Transport & Communications



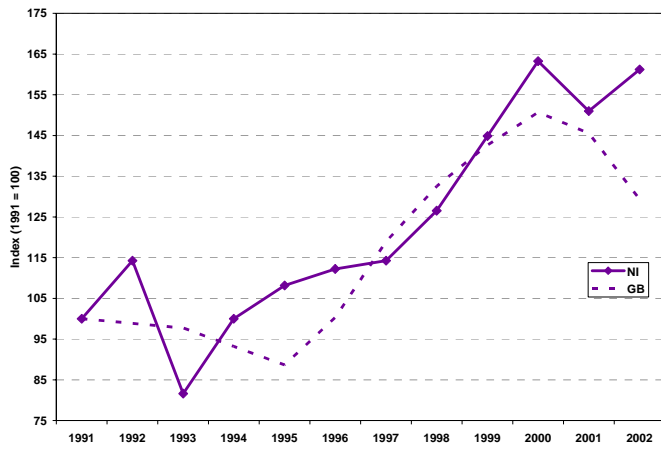
### Land Transport



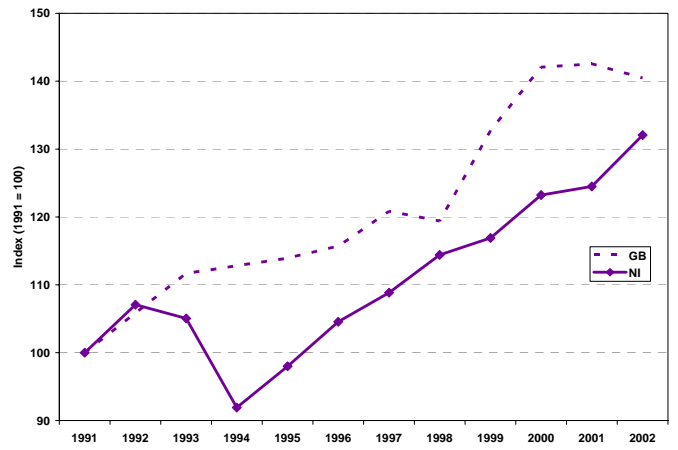
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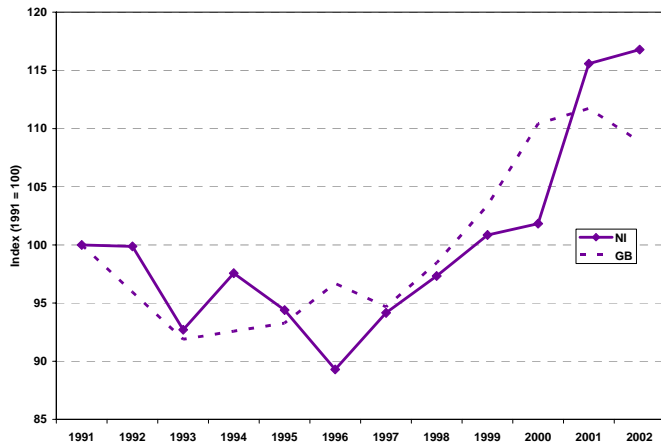
### Sea Transport



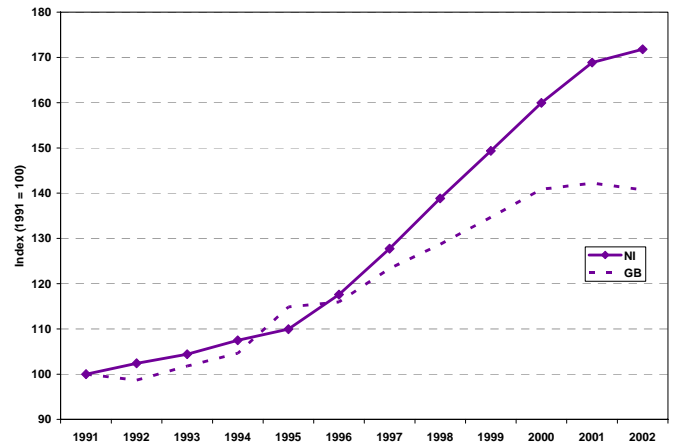
### Supporting Transport



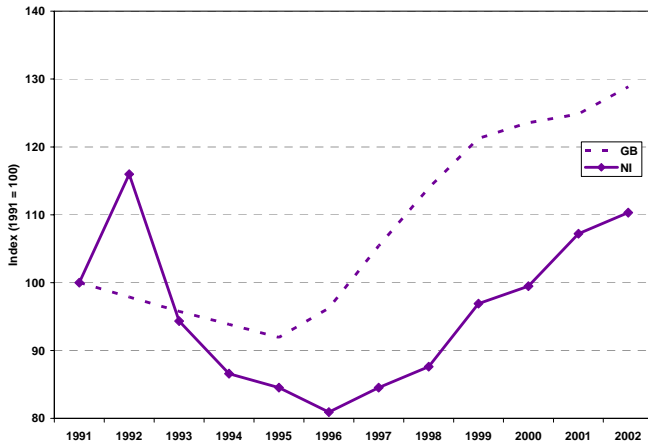
### Post & Communications



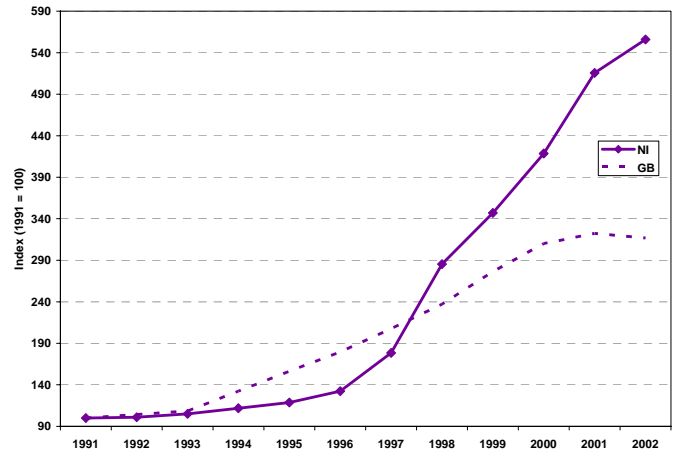
### Financial & Business Services



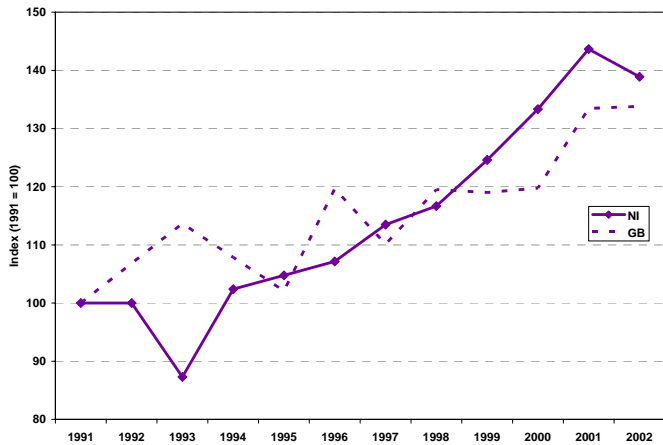
### Renting of Machinery etc.



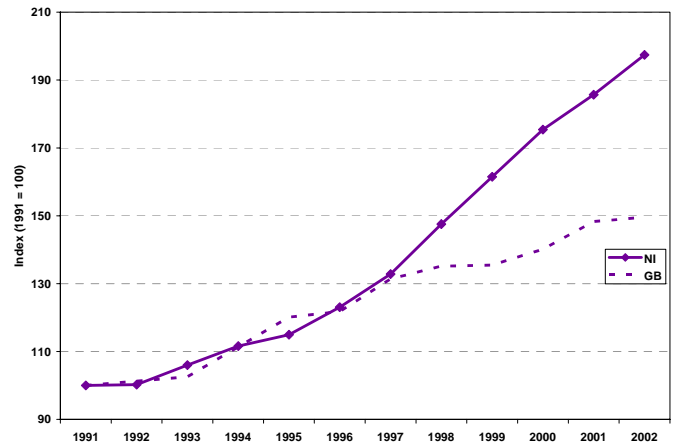
### Computer Services



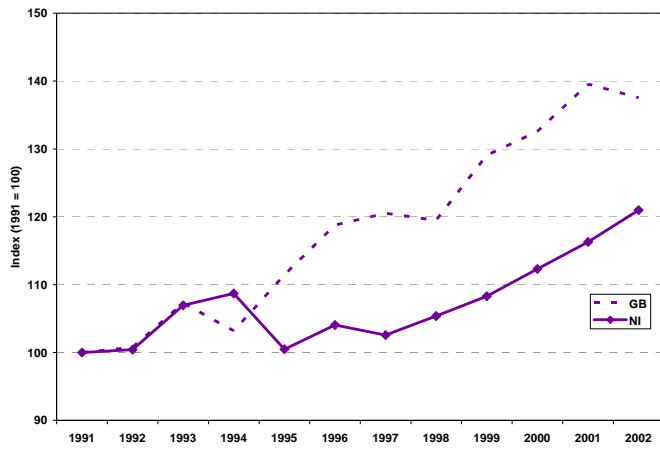
### Research & Development



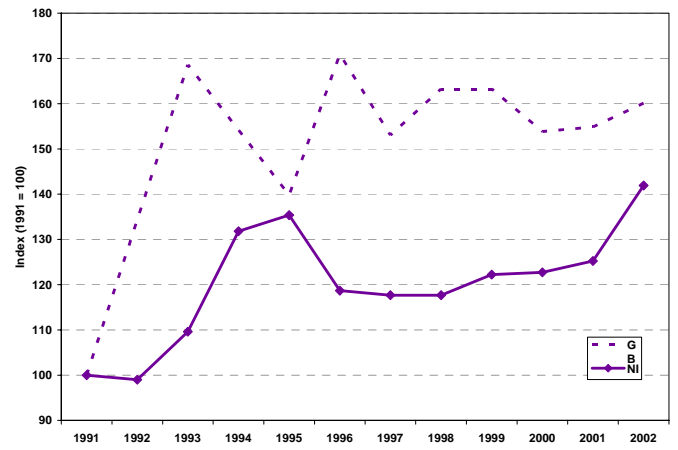
### Other Business Activities



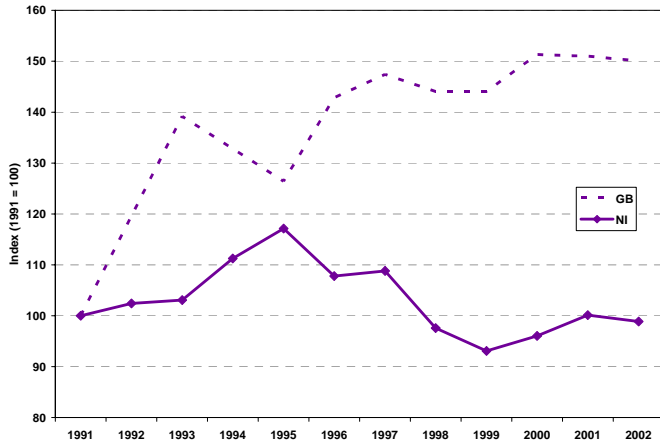
### Other Private Services



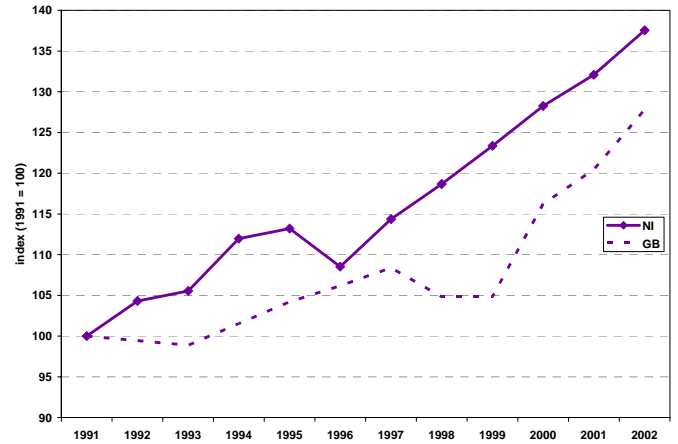
### Waste Disposal



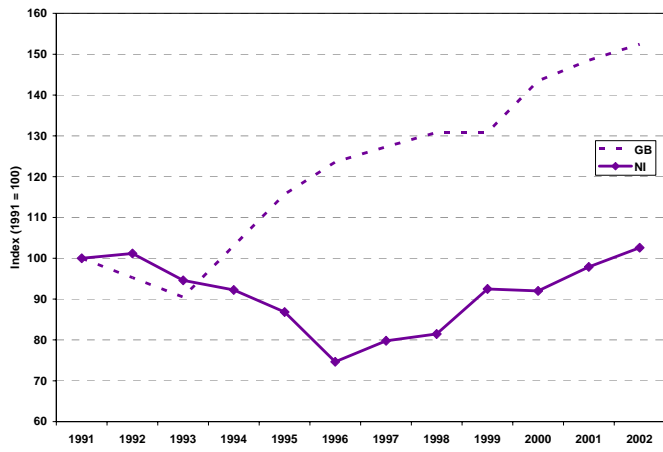
### Charities



### Entertainment, Sports & Culture



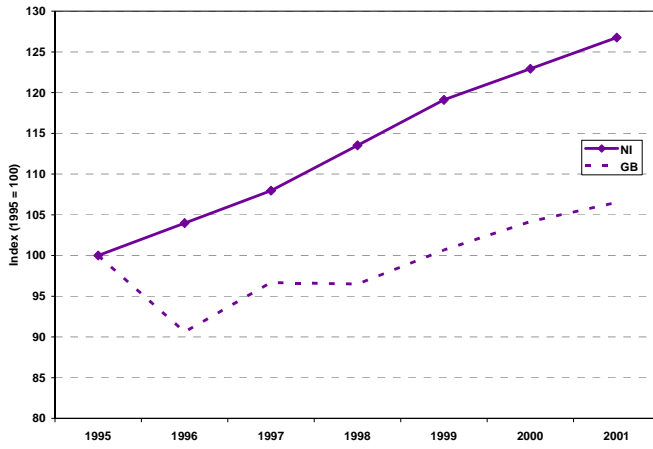
### Other Service Activities



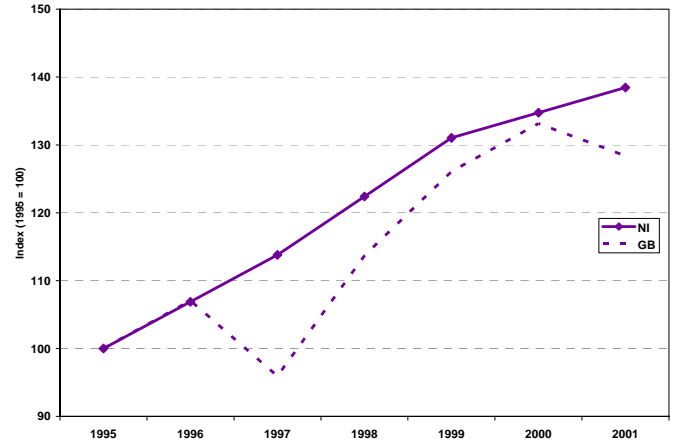
Source: DETI Quarterly Employment Survey

## Annex 9: Employees in employment – ‘4 digit’, NI & GB

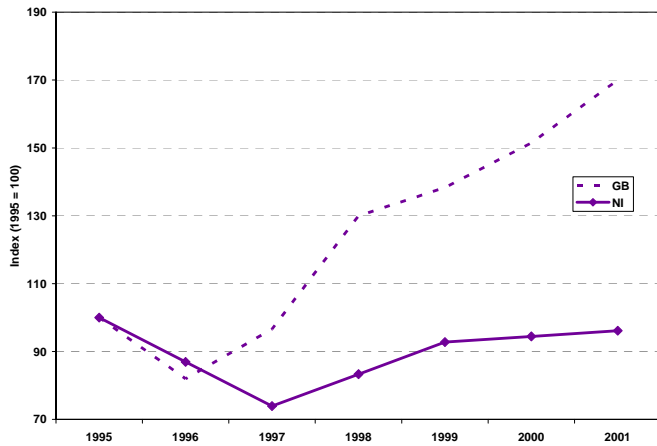
### Legal Services



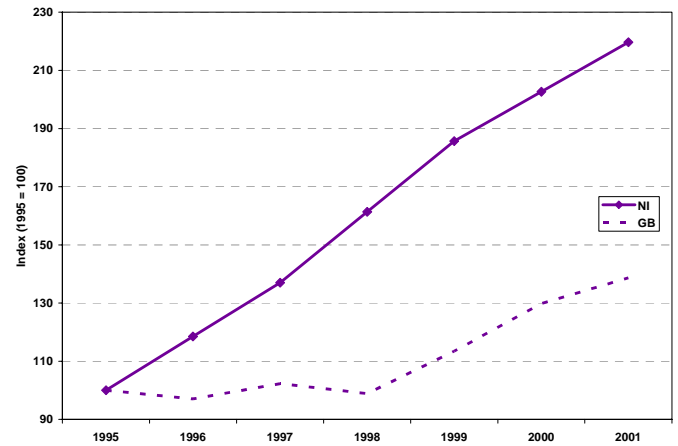
### Accountancy



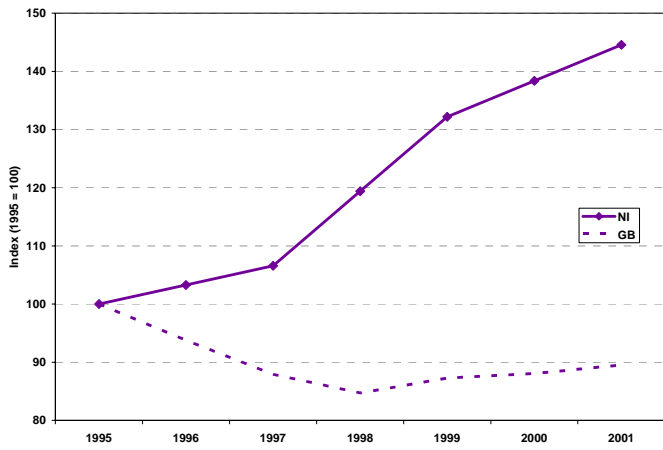
### Market Research



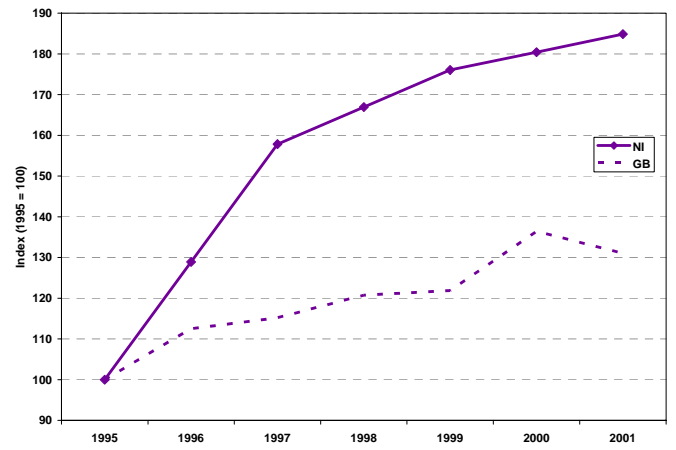
### Consultancy



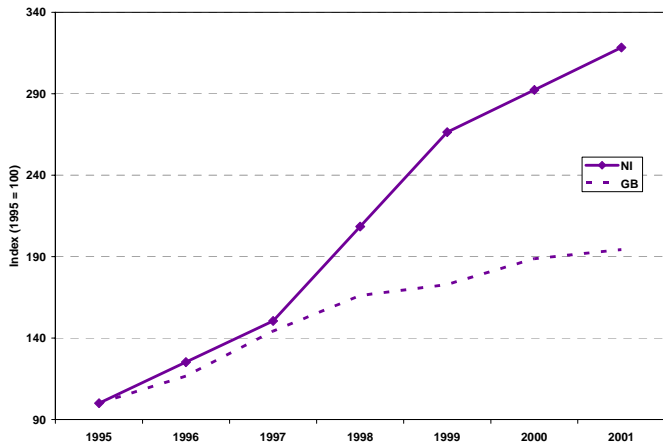
### Architecture



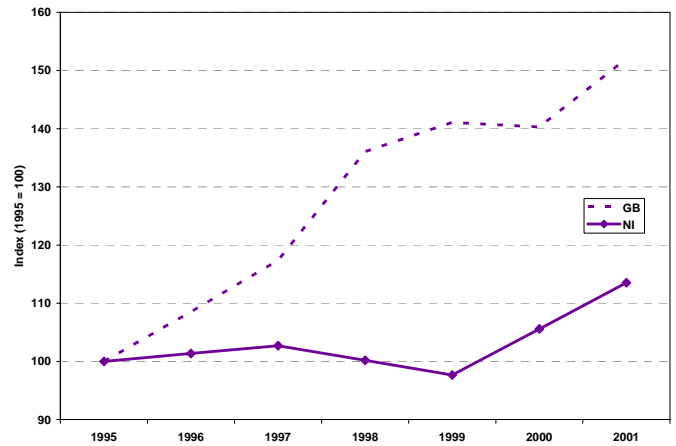
### Advertising



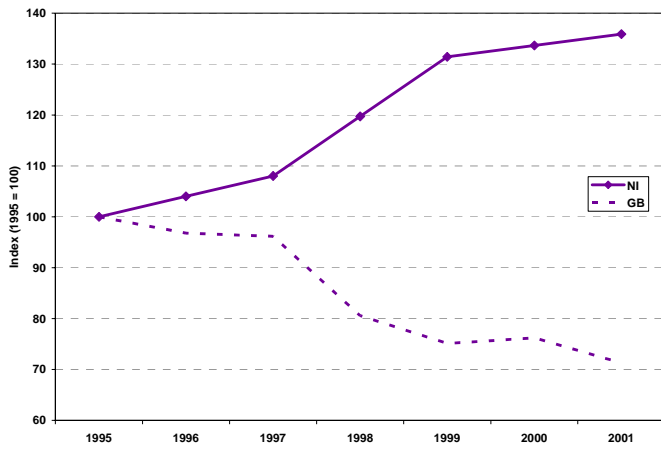
### Recruitment



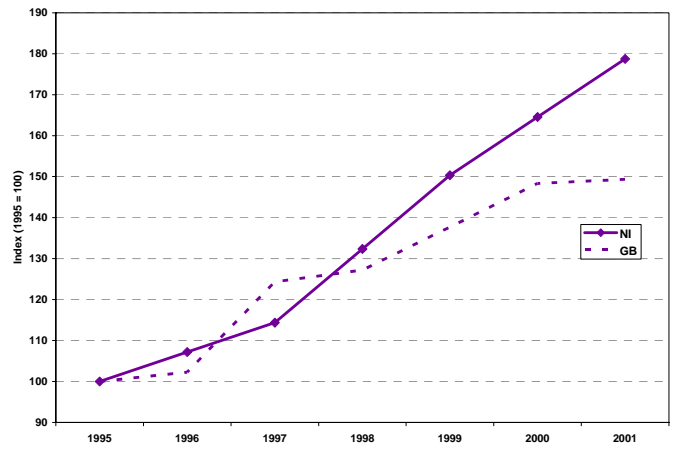
### Security



### Cleaning



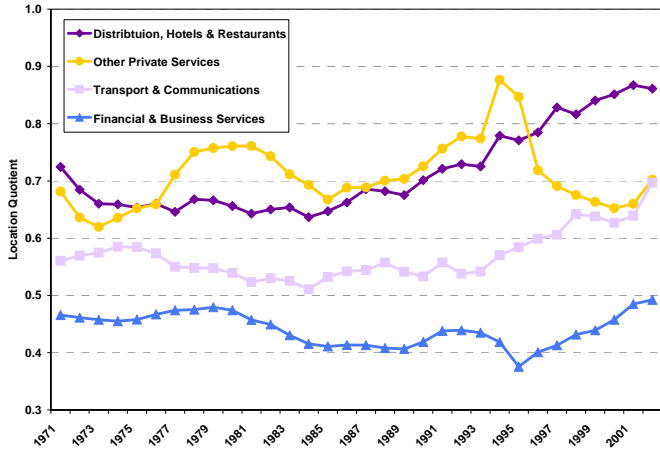
### Other Business



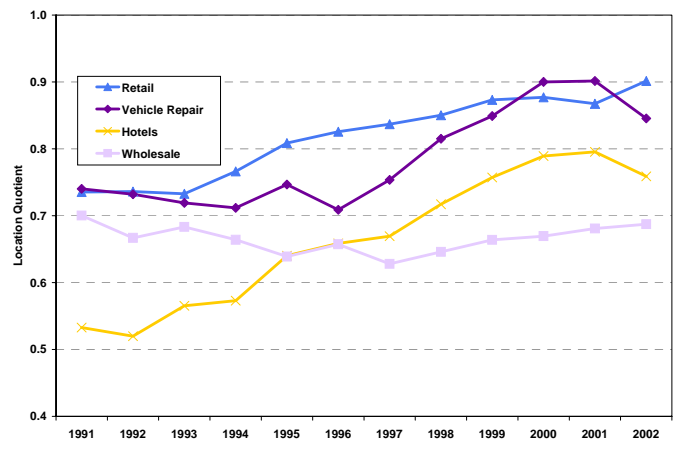
Source: DETI Quarterly Employment Survey

### Annex 10: Location Quotients

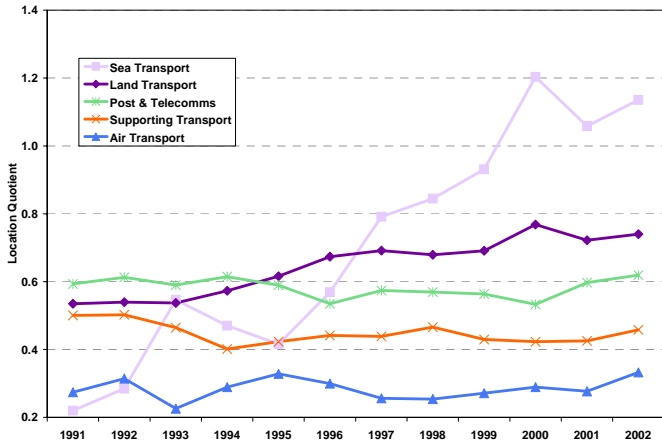
(i) Private Services



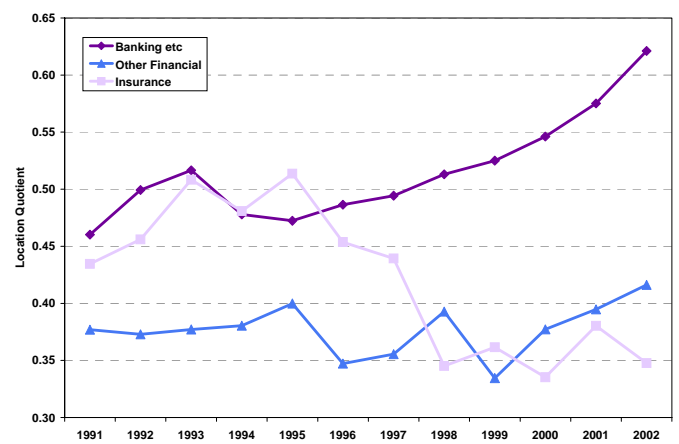
(ii) Distribution, Hotels & Restaurants



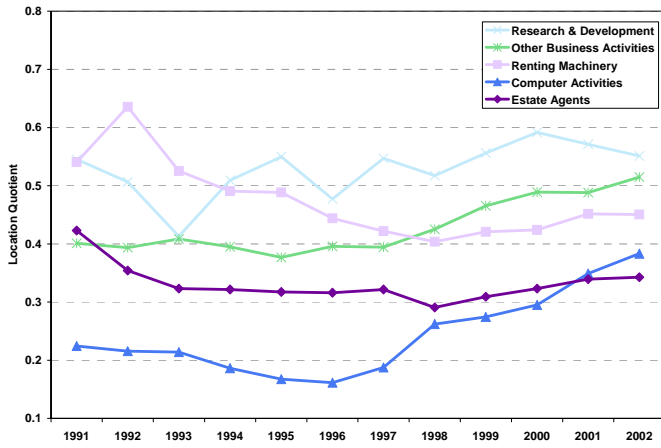
(iii) Transport & Communications



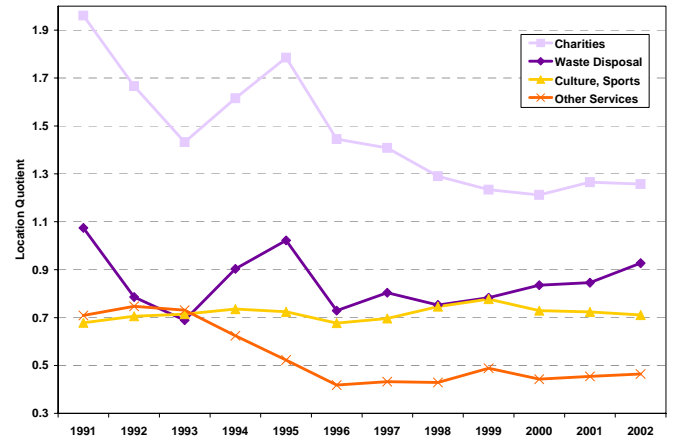
(iv) Financial Services



(v) Business Services



(vi) Other Private Services



Source: DETI Quarterly Employment Survey

## **Annex 11: Private Services Model**

All of the modelling presented in this chapter is underpinned by the regional forecast model, of which an overview of its workings is set out below:

### **Overview of Regional Model**

Regional Forecasts multi-regional model (MRM) was originally developed by Graham Gudgin (who became Director of the NIERC in 1985) while at the University of Cambridge. In 1985 the MRM became the basis for the UK's first regional industrial forecasting service. RF produces an annual report on the economic outlook for the UK regions on a biannual basis. The model currently forms the basis of a fully-fledged regional forecasting service offered in conjunction with Oxford Economic Forecasting (OEF) and services a range of clients including major UK organisations both public and private.

The geographical scope of the MRM encompasses the thirteen Government Office Regions of the UK. The model is industrially disaggregated. For each region, employment projections on the SIC92 are made for 26 industries. GDP estimates, also on the SIC92, are made for 23 industries. Other economic and demographic indicators projected include unemployment, the labour force, population, average earnings, personal income, and consumers' expenditure.

The MRM is run in conjunction with the Oxford Economic Forecasting (OEF) system of econometric models. OEF runs three models, each of which is integrated with the others. OEF's UK Macro-economic model is itself fully integrated with OEF's world model, enabling MRM to reflect a range of global economic developments.

### **The RF Multi-Regional Model (MRM)**

The MRM regionalises UK forecasts of employment, output, the personal sector and the labour market. UK forecasts are taken from OEF's UK Macro-economic and industry models. The major link between the OEF models and MRM is at the level of individual industry output and employment forecasts from the UK industry model (Figure 11.1). Other variables, such as non-oil GDP growth, personal disposable income and consumers expenditure, are fed in directly from the UK Macro-economic model. The integrated forecasting system also has the capacity to incorporate the regional effects of alternative scenarios for world economic activity and UK competitiveness including the UK's position relative to other European economies.

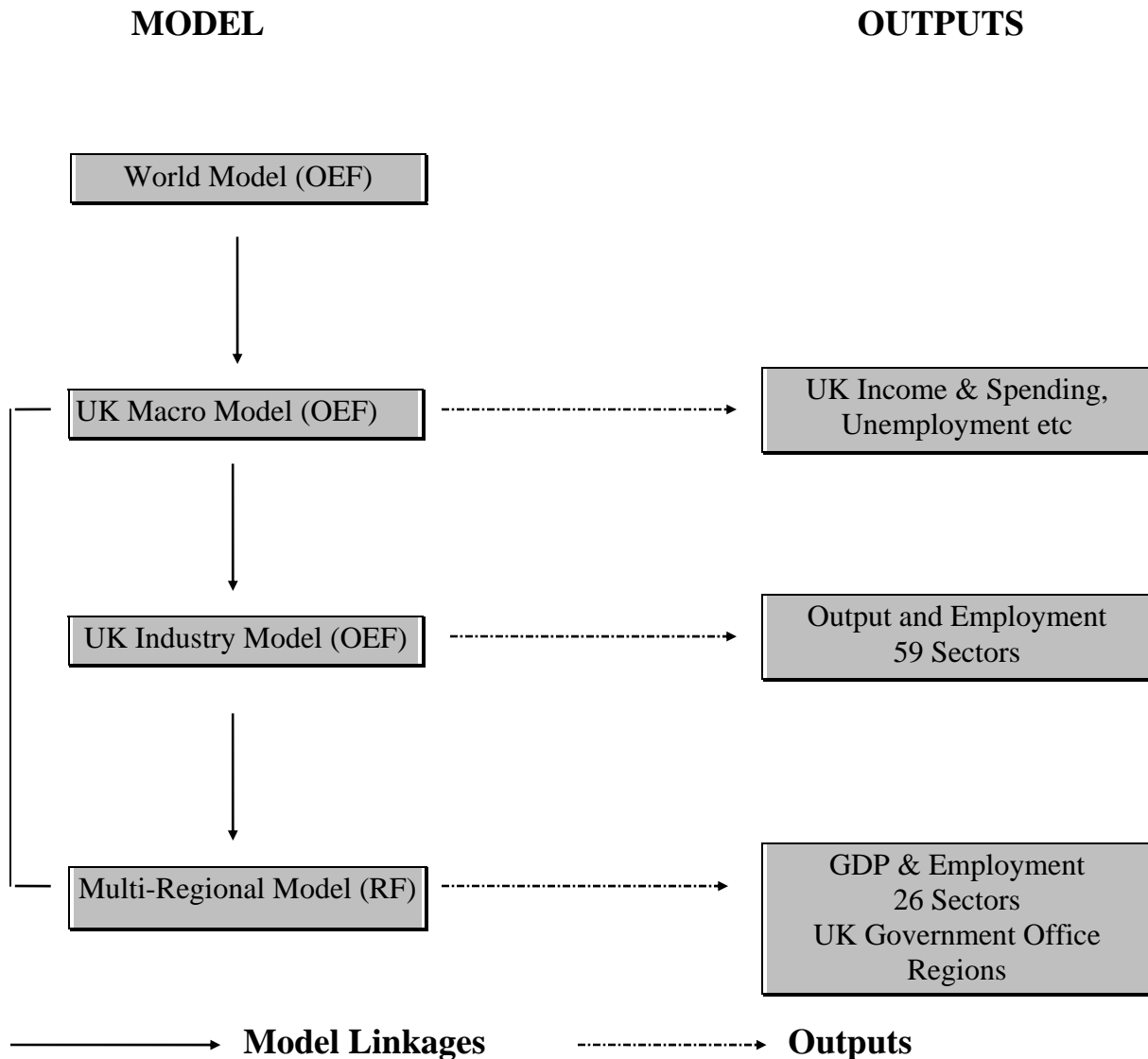
Each of the UK variables becomes an argument in the various regional model equations. The relation between the MRM and the OEF models is thus not merely a mechanical imposition of constraints; it ensures that the projections are *fully consistent with a coherent macro-economic background*. Further, quantifiable alterations in the UK national or international context can be 'cascaded down' through the OEF models to the

MRM and their regional implications traced out. A number of standard Warwick Bureau tests such as a one pence drop in income tax etc, have been applied to the MRM and resultant short- to medium-term simulation/forecasts compared to our competitors (Hunt et al, 1996). MRM regional impacts, although evidencing a degree of difference in size of impact across regions compared to our competitors, were completely within a priori expectations.

The MRM is a highly *simultaneous system* with well-articulated feedback links between labour supply, population growth, employment demand and personal incomes. Figure 11.2 sketches the various modules of the regional model. Average earnings depend on regional labour market conditions and this enhances the simultaneity between the labour market and the income and spending modules.

The detailed attention paid to *regional labour markets* in the MRM is a distinguishing feature of the model. Regional labour markets in the MRM are permitted to adjust through a variety of mechanisms, including migration and participation. This is important. The fact that the MRM features a significant degree of simultaneity between each region's share of economic activity, and its supply of labour and population levels ensures that the system captures some of the important complexities of the real world. Research also suggests that regional econometric models ought to pay particular attention to labour markets, partly because migration responses are a key element underlying regional differences in population growth, and hence in interregional shifts in demand. In a comparison of alternative approaches to regional econometric modelling, Taylor (1982) found that a simultaneous structure within which regional labour market conditions affect levels of population, employment and income significantly improves model accuracy by comparison with simpler, recursive models using an export-base approach.

**Figure 11.1: Modelling Framework**



Output and employment in each region are projected at a detailed level of *industrial disaggregation*. The sectoral composition of output and employment is a factor of perennial interest in the analysis of regional economic performance (see RF, 1992, for an analysis of patterns of specialisation in the UK). This is because, even within highly integrated nation-states such as the UK, individual regions evolve different industrial structures.

The behavioural equations of the system are estimated on *time-series data and incorporate causal influences*. For example, the equations for manufacturing include such determinants of inter-regional competitiveness as relative earnings and relative

industrial property rents as well as a measure of the effectiveness of regional policy. We currently find a number of important links between industrial property rental values and the level of economic activity, particularly in the South East. This is clear for the manufacturing sector. We also find relative average earnings to have significant effects, independent of demand indicators such as personal incomes, in the equations for private sector service industries in some regions, most notably in the South East. Thus, the MRM implicitly models regional location patterns, both for industries and people. This means that, for a given macro-economic scenario, the projected regional growth rates are influenced by regional patterns in competitiveness indicators such as earnings. Regional variations in population movements resulting from projected migration flows also have a strong influence on the forecasts.

Because of the way in which labour markets are modelled, the MRM combines elements of *both top-down and bottom-up approaches*. It is a top-down model in so far as the projections for employment and output are constrained to agree with pre-determined national totals, though employment and output projections also depend heavily on local factors as outlined in the previous paragraph. The model is 'bottom-up' in the sense that the supply of labour in each region is completely endogenous, that is, determined wholly within the model. UK projections for the working-age population are partly dependent on migration and obtained by adding up the regional projections. The separation of population growth into its components of change, that is, natural increase and net migration, is also recommended by Taylor (1982).

The MRM also incorporates well-established trends, including especially *the urban-rural shift*. This refers to the gradual movement of jobs and people away from the conurbations and into less urbanised and less congested areas. The urban-rural shift of manufacturing activity away from large urban areas to more rural locations has been shown to be a key influence on the regional geography of employment growth in the UK (Fothergill and Gudgin, 1982; Fothergill, Kitson and Monk, 1985; Townsend, 1993; Gudgin, 1995). Underlying the urban-rural shift in the UK is the influence of land supply as a constraint on development. In densely populated and congested urban areas, scarcity of land constrains local producers, particularly in periods of fast growth when the need to expand is sharpest. Land constraints have the effect of diverting activity to less constrained rural locations where land is more readily available. The role of land supply as a constraint on development means that economically strong regions, such as the South East of England, can appear to be moderate or average performers on measures of relative employment or output growth. Thus, the urban-rural shift can disguise a region's inherent strength since supply constraints bite more deeply and more quickly in the more dynamic but congested regions.

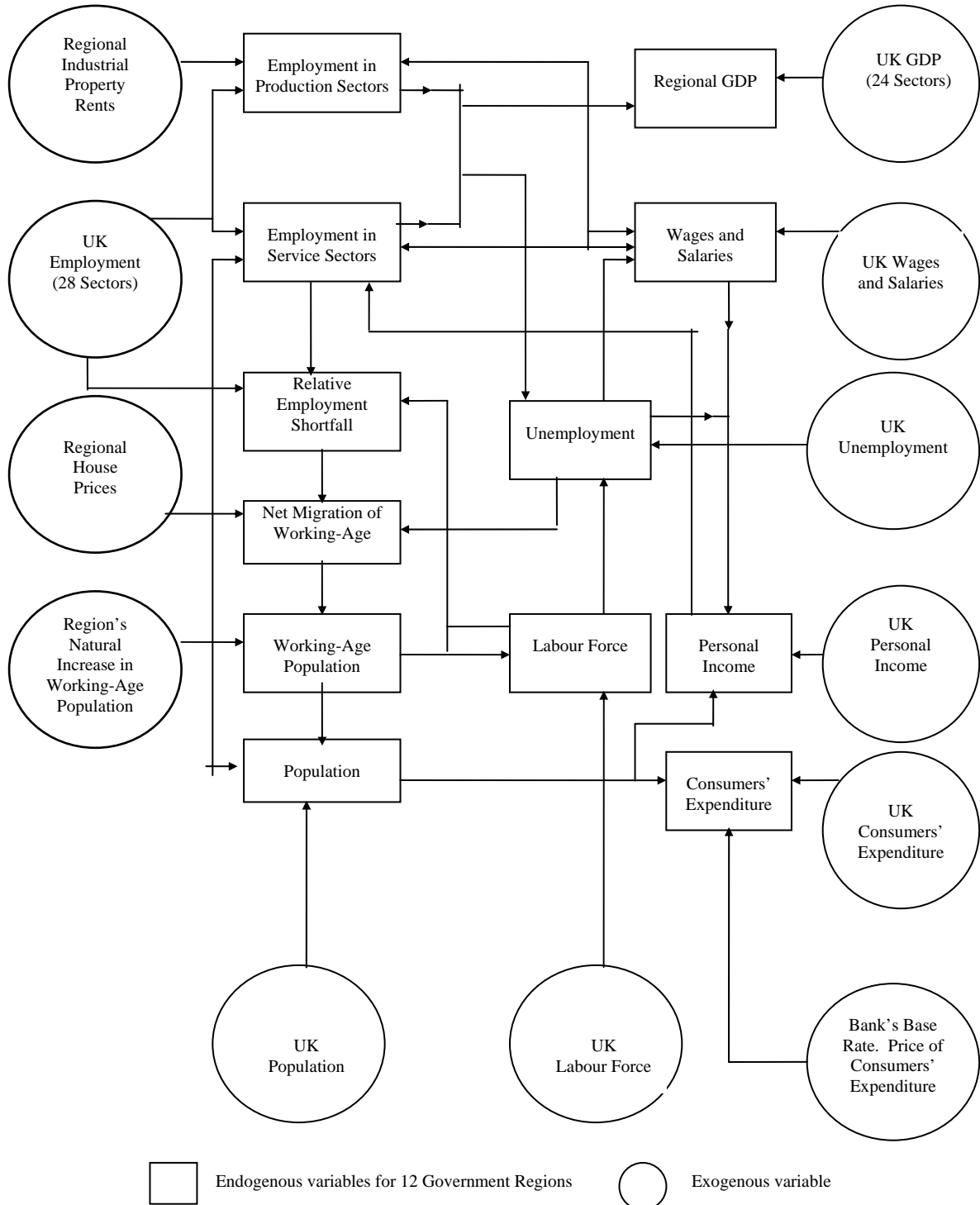
The urban-rural shift is implicitly modelled in the MRM by the inclusion of time trends, which capture the secular tendency towards decentralisation from congested highly urbanised regions, and also by the inclusion of relative industrial property rentals. The inclusion of the latter variable means that the MRM has the capacity to capture the cyclical element of the urban-rural shift. Rapid growth in aggregate demand increases the pressure on industrial space. Since the supply of industrial property in urban areas is inelastic in the short run, quantity constraints can curtail growth. Due to data limitations,

the model does not pick up these quantity constraints directly, but depends on movements in property rentals. Such movements signal the existence of excess capacity demand in property markets during periods of rapid output growth.

The MRM captures regional variations in cyclical behaviour through other mechanisms besides property rentals. This is because the model determines migration and participation (and hence labour supply growth) simultaneously with employment demand and also because the model pays attention to regional variations in prices of factor inputs including average earnings in addition to industrial property rentals. Regional deviations in the movement of factor prices typically emerge as a result of regional differences in the balance between supply and demand.

Regional *output* growth for each sector in the MRM is projected by applying forecast employment to projected UK productivity in the sector, with a fixed adjustment for relative regional productivity calculated from historical data. This reverses the more usual formulation in economic models in which output levels determine employment demand. The primary reason for adopting the employment-led approach in the MRM is that regional employment data are more reliable than the published regional GDP estimates. Further, they are available on a more timely basis with considerably shorter lags in the publication of data. Finally, employment data are generally available for longer time periods thus facilitating more precise estimation of the coefficients in the econometric equations. Indeed, regional GDP data for individual manufacturing industries are not published prior to 1978. This greatly constrains the estimation of a sectorally disaggregated system of demand equations. The RF's approach is not at all unusual in regional econometric modelling (cf. Bolton, 1985, for examples of US models which adopt the same approach for much the same reasons). It is also preferable in a forecasting context to use the more reliable and accurate measures. Since we constrain our sectoral output and employment forecasts to national controls, what is really required are forecasts of regional differentials in growth rates. In the UK context, employment data are quite simply the more reliable indicator of the regional pattern in economic activity in individual sectors.

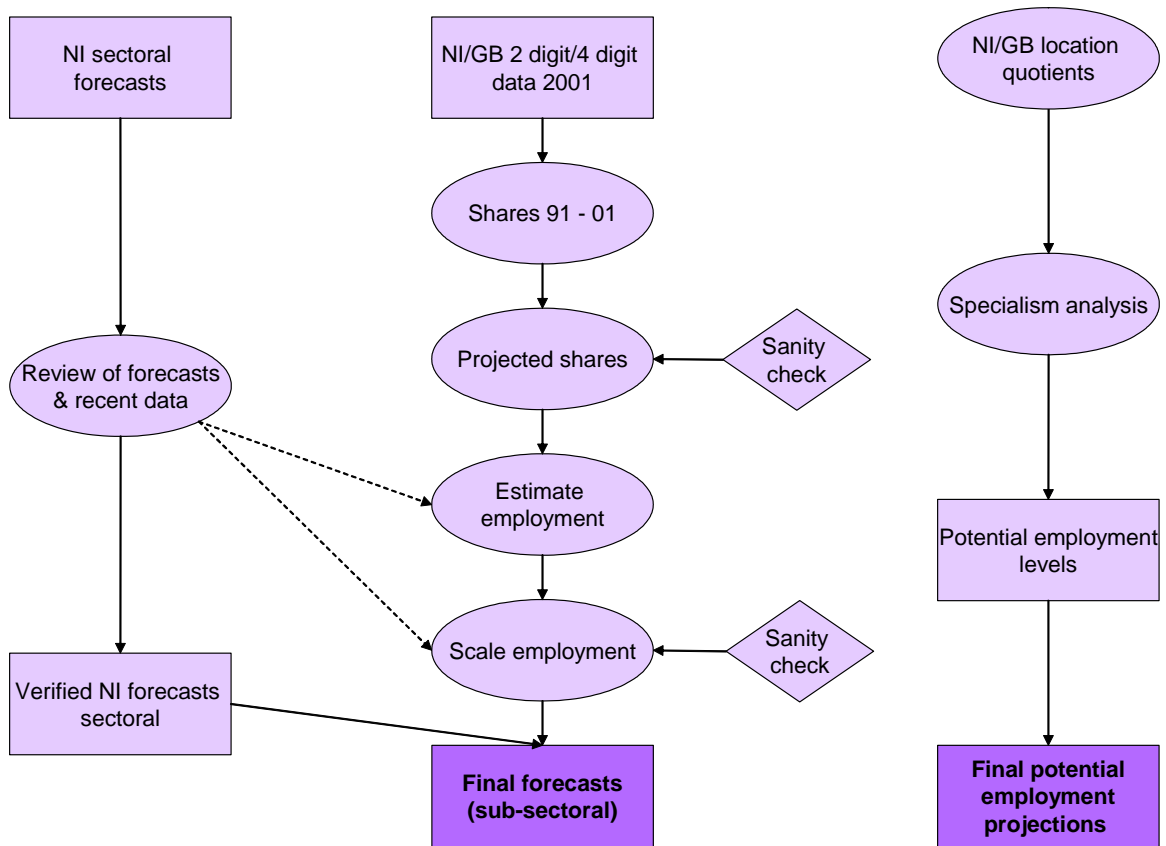
Figure 11.2: Regional Forecasts Multi-Regional Model



## Overview of Private Services Forecasts

This modelling set out in this chapter is again 'linked' in to the overarching set of forecasts set out above. The methods used to generate the private services sub-sectoral forecasts are depicted in the figure below:

**Figure 11.3: Approach to Forecasting Private Services Sub Sectors**

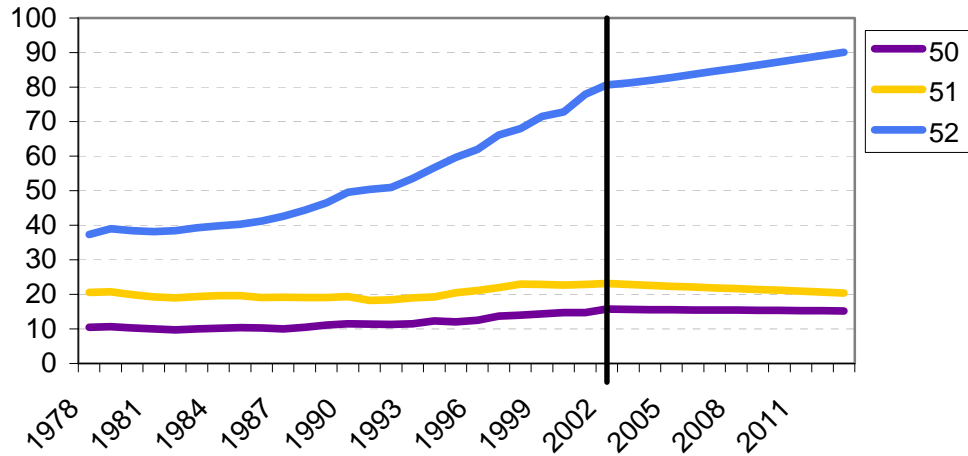


As the figure suggests, the projections use a forecast of employment shares methodology to arrive at sub-sectoral projections.

## Annex 12: Additional Forecast Data

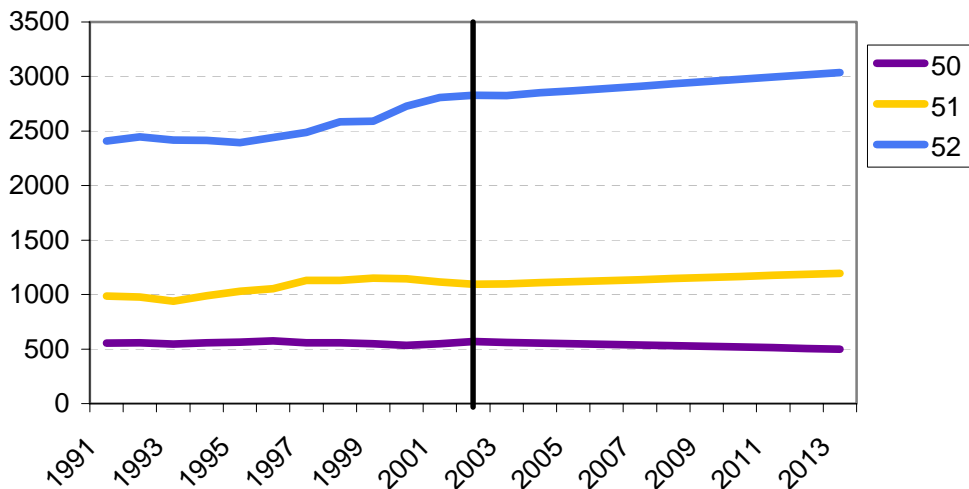
The following charts set out the sub-sectoral forecasts for each private services sector for Northern Ireland and GB separately.

**Figure 12.1 Retail and Distribution Sub-Sector Employment Forecasts: NI**



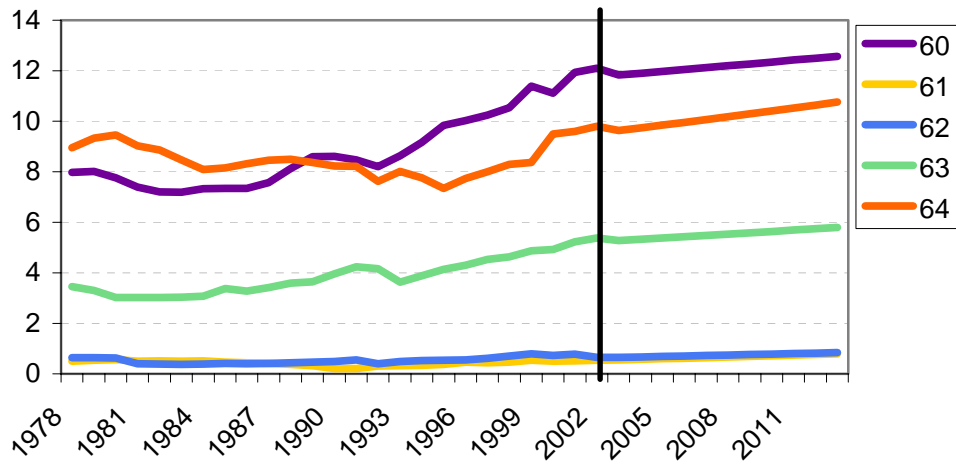
Source: National Statistics, Regional Forecasts

**Figure 12.2 Retail and Distribution Sub-Sector Employment Forecasts: GB**



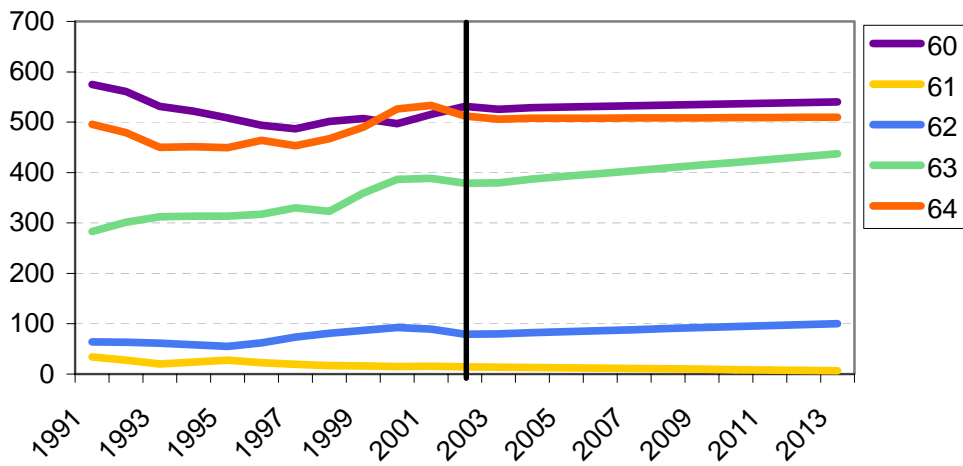
Source: National Statistics, Regional Accounts

**Figure 12.3 Transport and Communication Sub-Sector Employment Forecasts: NI**



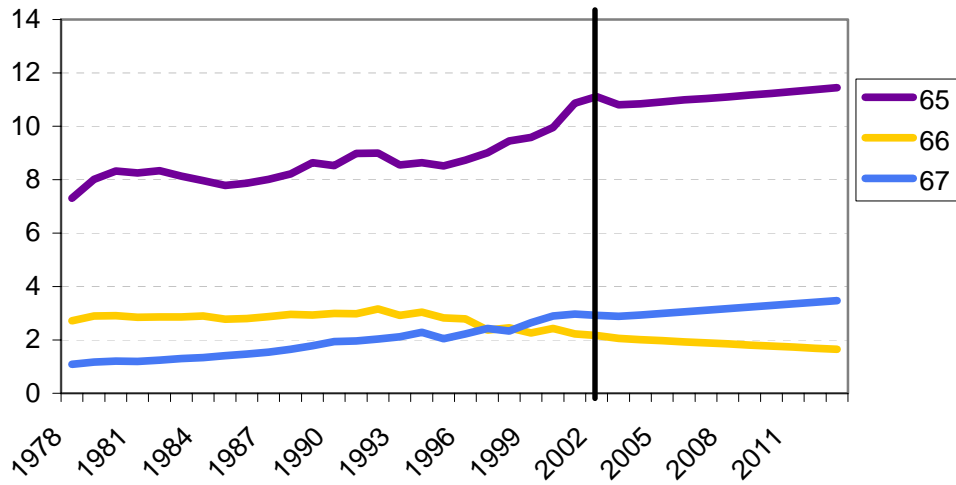
Source: National Statistics, Regional Accounts

**Figure 12.4 Transport and Communication Sub-Sector Employment Forecasts: GB**



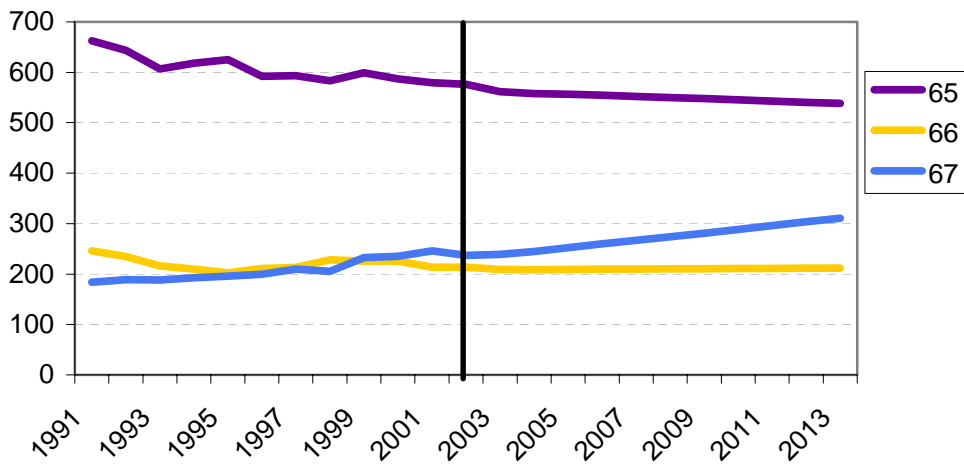
Source: National Statistics, Regional Accounts

**Figure 12.5 Financial Services Sub-Sector Employment Forecasts: NI**



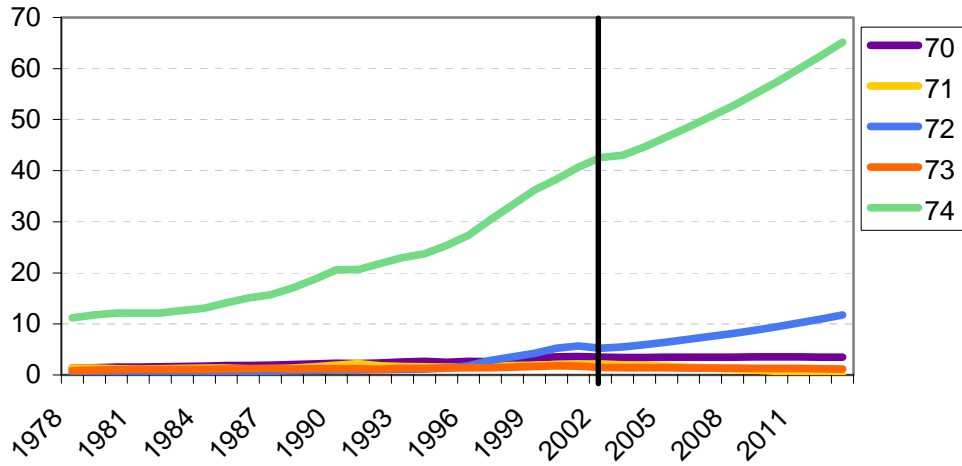
Source: National Statistics, Regional Accounts

**Figure 12.6 Financial Services Sub-Sector Employment Forecasts: GB**



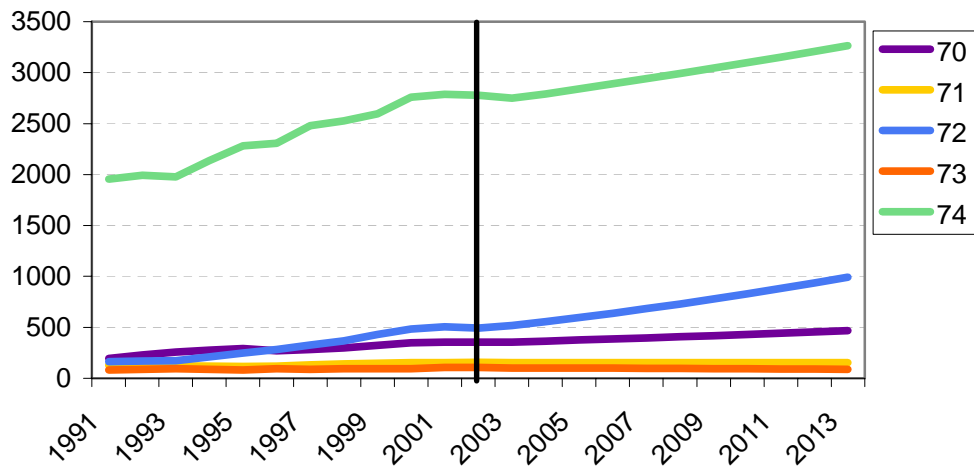
Source: National Statistics, Regional Accounts

**Figure 12.7 Business Services Sub-Sector Employment Forecasts: NI**



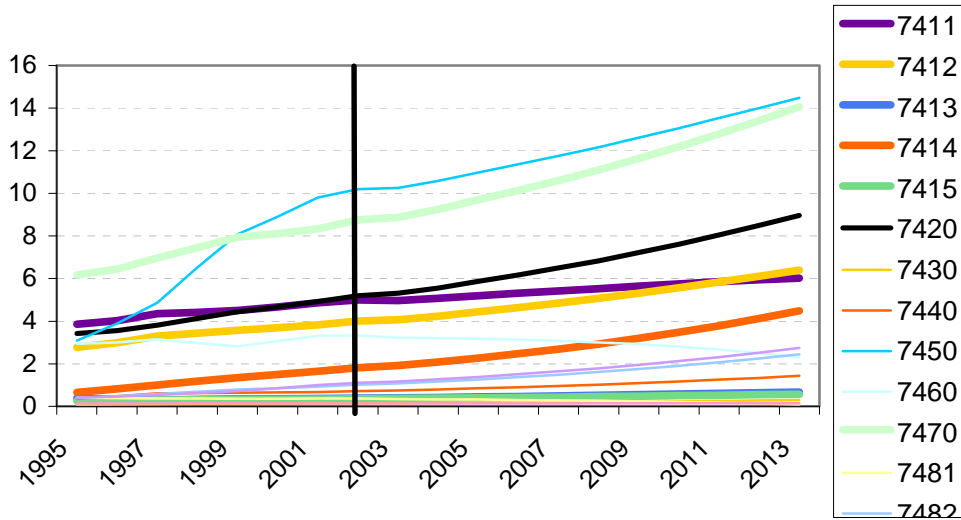
Source: National Statistics, Regional Accounts

**Figure 12.8 Business Services Sub-Sector Employment Forecasts: GB**



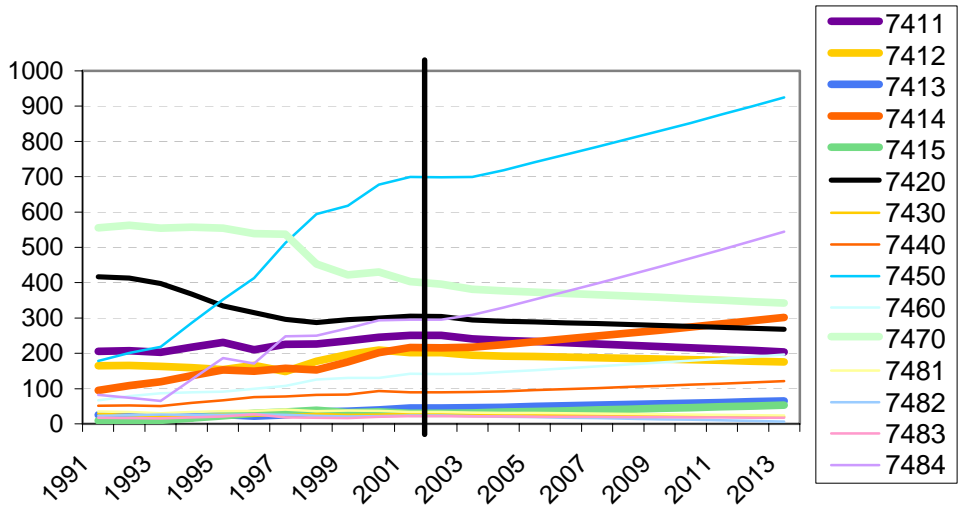
Source: National Statistics, Regional Accounts

**Figure 12.9 Other Business Services Sub-Sector Employment Forecasts: NI**



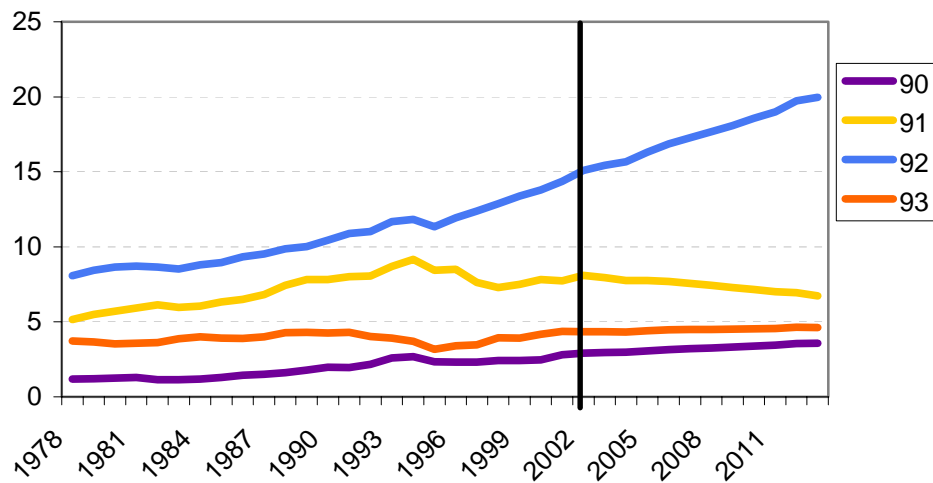
Source: National Statistics, Regional Forecasts

**Figure 12.10 Other Business Services Sub-Sector Employment Forecasts: GB**



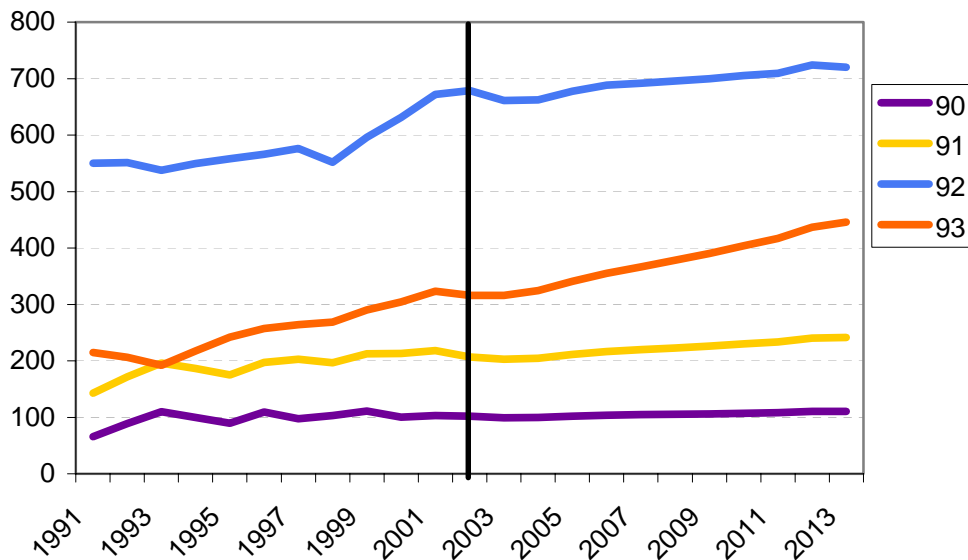
Source: National Statistics, Regional Forecasts

**Figure 12.11 Other Private Services Sub-Sector Employment Forecasts: NI**



Source: National Statistics, Regional Forecasts

**Figure 12.12 Other Private Services Sub-Sector Employment Forecasts: GB**



Source: National Statistics, Regional Forecasts

## Country Location Quotient Tables

The following tables set out the top 10 countries in each private services sector in terms of location quotient. These are used in arriving at the potential ‘specialist’ LQ level.

Industry	Distribution
Gwynedd	1.3
Buckinghamshire	1.3
Lincolnshire	1.2
Hereford and Worcester	1.2
Isle of Wight	1.2
Hertfordshire	1.2
Highland	1.1
Somerset	1.1
Kent	1.1
Cumbria	1.1

Industry	Vehicle repair
Buckinghamshire	1.5
Isle of Wight	1.5
Lincolnshire	1.5
Cumbria	1.5
Staffordshire	1.4
Hereford and Worcester	1.4
Northamptonshire	1.4
Gwynedd	1.3
Suffolk	1.3
Powys	1.3

Industry	Wholesale
Buckinghamshire	1.8
Lincolnshire	1.5
Warwickshire	1.4
Bedfordshire	1.4
Berkshire	1.4
Northamptonshire	1.4
Surrey	1.4
Hertfordshire	1.3
Hereford and Worcester	1.3
Greater Manchester	1.3

Industry	Retail
Gwynedd	1.5
Dyfed	1.3
Somerset	1.3
Highland	1.3
Isle of Wight	1.2
Tayside	1.2
Essex	1.2
Cumbria	1.2
Central	1.2
Kent	1.2

Industry	Hotels & restaurants
Cornwall and Isles of Scilly	1.9
Orkney Islands	1.9
Powys	1.9
Western Isles	1.9
Isle of Wight	1.8
Highland	1.7
North Yorkshire	1.7
Dumfries and Galloway	1.6
Shetland Islands	1.6
Warwickshire	1.5

Industry	Transport & communications
Orkney Islands	1.8
West Sussex	1.7
Shetland Islands	1.6
Suffolk	1.6
Bedfordshire	1.4
Northamptonshire	1.3
Surrey	1.2
Humberside	1.2
Essex	1.2
Hertfordshire	1.2

Industry	Land transport
Shetland Islands	1.8
Northamptonshire	1.7
North Yorkshire	1.7
Western Isles	1.6
Highland region	1.5
Orkney Islands	1.5
Warwickshire	1.5
Gwent	1.4
Cumbria	1.4
Dumfries and Galloway	1.4

Industry	Water transport
Orkney Islands	27.9
Shetland Islands	21.6
Dumfries and Galloway	10.8
Gwynedd	9.4
Isle of Wight	9.2
Kent	6.7
Dyfed	4.0
Suffolk	3.9
Hampshire	3.7
Highland	3.0

Industry	Air transport
West Sussex	17.4
Bedfordshire	10.1
Surrey	4.9
Grampian	3.4
Shetland Islands	2.8
Essex	2.7
Leicestershire	2.0
Greater Manchester	1.9
Western Isles	1.5
Tyne and Wear	1.5

Industry	Transport support
Orkney Islands	2.5
Suffolk	2.3
Surrey	2.0
West Sussex	2.0
Humberside	1.8
Grampian	1.5
Essex	1.4
Greater Manchester	1.4
Northamptonshire	1.4
Shetland Islands	1.4

Industry	Post and communications
Berkshire	2.3
Hertfordshire	1.9
Durham	1.6
Suffolk	1.6
Devon	1.5
Avon	1.4
South Glamorgan	1.4
Buckinghamshire	1.4
Tyne and Wear	1.3
Cheshire	1.2

Industry	Financial services
Lothian	2.8
East Sussex	2.3
Dorset	1.8
Avon	1.6
South Glamorgan	1.5
Gloucestershire	1.5
Surrey	1.4
Essex	1.3
Norfolk	1.3
Northamptonshire	1.3

Industry	Banking
East Sussex	3.3
Lothian	2.9
Dorset	2.2
Northamptonshire	1.9
Cheshire	1.6
Fife	1.5
Buckinghamshire	1.4
Merseyside	1.3
West Midlands	1.3
Avon	1.3

Industry	Insurance
Central	3.4
Norfolk	3.1
Lothian	3.0
South Glamorgan	2.3
Avon	2.2
Surrey	2.0
Gloucestershire	1.9
West Sussex	1.8
Cambridgeshire	1.7
Wiltshire	1.6

Industry	Other financial services
Lothian	2.5
Gloucestershire	2.3
Surrey	2.2
Dorset	1.9
Essex	1.8
Avon	1.8
Kent	1.7
Suffolk	1.6
South Glamorgan	1.4
Oxfordshire	1.3

Industry	Business services
Orkney Islands	1.8
West Sussex	1.7
Shetland Islands	1.6
Suffolk	1.6
Northamptonshire	1.3
Surrey	1.2
Humberside	1.2
Essex	1.2
Hertfordshire	1.2
Berkshire	1.2

Industry	Real estate activities
Surrey	2.1
West Sussex	1.8
Borders	1.6
Dorset	1.5
Northumberland	1.4
Essex	1.4
East Sussex	1.4
Hampshire	1.3
Oxfordshire	1.2
North Yorkshire	1.2

Industry	Renting of machinery etc.
Bedfordshire	1.9
Grampian	1.5
Wiltshire	1.5
Orkney Islands	1.5
Avon	1.4
Greater Manchester	1.3
Berkshire	1.3
West Yorkshire	1.2
Derbyshire	1.2
Western Isles	1.2

Industry	Computer services
Berkshire	4.6
Surrey	2.9
Buckinghamshire	2.3
Hertfordshire	2.1
Cambridgeshire	1.8
Hampshire	1.6
Wiltshire	1.6
Oxfordshire	1.5
Shropshire	1.5
West Sussex	1.3

Industry	Research and development
Oxfordshire	9.4
Cambridgeshire	4.4
Berkshire	3.4
Wiltshire	2.7
Hertfordshire	2.5
Western Isles	2.3
Lothian	2.3
Warwickshire	2.2
Surrey	2.1
Buckinghamshire	2.0

Industry	Other business services
Surrey	1.6
Hertfordshire	1.5
Berkshire	1.5
West Sussex	1.4
Oxfordshire	1.4
Grampian	1.3
Hampshire	1.3
Buckinghamshire	1.3
Wiltshire	1.3
Lothian	1.2

Industry	Legal activities
Lothian	2.4
South Glamorgan	1.8
Greater Manchester	1.5
Avon	1.4
Merseyside	1.4
Tyne and Wear	1.3
West Yorkshire	1.3
West Midlands	1.2
Lancashire	1.2
South Yorkshire	1.1

Industry	Accounting
Powys	1.8
Berkshire	1.5
West Sussex	1.4
Lothian	1.4
Hertfordshire	1.3
West Midlands	1.3
Surrey	1.3
Greater Manchester	1.3
South Glamorgan	1.3
Somerset	1.3

Industry	Market research
Warwickshire	7.0
Buckinghamshire	6.5
Oxfordshire	5.9
Berkshire	4.5
Surrey	3.5
West Sussex	2.5
East Sussex	2.3
Greater Manchester	1.7
Devon	1.3
Bedfordshire	1.2

Industry	Consultancy activities
Buckinghamshire	2.8
West Sussex	2.6
Surrey	2.4
Hertfordshire	2.4
Oxfordshire	2.1
Shetland Islands	2.1
Berkshire	1.9
Wiltshire	1.9
Gwynedd	1.5
Cambridgeshire	1.5

Industry	Management activities
Nottinghamshire	2.4
Wiltshire	2.4
Kent	2.1
Lancashire	2.1
Highland	1.7
Surrey	1.6
Buckinghamshire	1.6
Cambridgeshire	1.6
South Yorkshire	1.6
West Sussex	1.5

Industry	Architectural/engineering activities
Grampian	3.4
Western Isles	2.3
Surrey	2.0
Cheshire	1.8
Cambridgeshire	1.6
Cleveland	1.4
West Sussex	1.4
Avon	1.4
Oxfordshire	1.3
Highland	1.3

Industry	Technical testing and analysis
Grampian	6.1
Cambridgeshire	3.7
Northumberland	3.7
Hampshire	3.6
Shetland Islands	3.0
Merseyside	2.9
Derbyshire	1.8
Greater Manchester	1.5
Suffolk	1.5
Bedfordshire	1.5

Industry	Advertising
Oxfordshire	7.2
Berkshire	2.3
West Sussex	2.1
Surrey	2.0
Warwickshire	2.0
Avon	1.8
Buckinghamshire	1.6
Gloucestershire	1.4
Lothian	1.4
Greater Manchester	1.4

Industry	Recruitment
Hertfordshire	2.5
Berkshire	1.6
Oxfordshire	1.5
Wiltshire	1.5
Northamptonshire	1.5
Hampshire	1.5
Cheshire	1.4
Nottinghamshire	1.4
West Midlands	1.4
West Sussex	1.3

Industry	Investigation & security services
Cleveland	2.5
West Sussex	2.4
Gwent	1.9
Strathclyde	1.8
Greater Manchester	1.7
Tyne and Wear	1.7
Lothian	1.6
Nottinghamshire	1.6
Avon	1.6
Merseyside	1.3

Industry	Industrial cleaning
Hereford and Worcester	2.3
Bedfordshire	1.6
Fife	1.5
Hampshire	1.4
West Yorkshire	1.4
West Glamorgan	1.4
Borders	1.4
Warwickshire	1.3
Avon	1.3
Strathclyde	1.3

Industry	Photographic activities
Cornwall and Isles of Scilly	4.4
Wiltshire	2.3
Hertfordshire	1.9
Oxfordshire	1.7
Surrey	1.6
Northamptonshire	1.6
Tyne and Wear	1.5
Buckinghamshire	1.3
Suffolk	1.3
Avon	1.2

Industry	Packaging activities
Powys	9.3
Cambridgeshire	5.7
Mid Glamorgan	3.8
Clwyd	3.0
Lancashire	2.8
Northumberland	2.4
Cheshire	2.1
Warwickshire	2.0
Northamptonshire	1.6
West Yorkshire	1.5

Industry	Secretarial/translation activities
Warwickshire	7.6
Central	5.6
Avon	2.7
Buckinghamshire	2.3
Strathclyde	1.8
Northamptonshire	1.7
Tyne and Wear	1.6
Wiltshire	1.6
Hertfordshire	1.5
Bedfordshire	1.5

Industry	Miscellaneous business activities
Surrey	3.6
Berkshire	2.4
Northamptonshire	2.0
Northumberland	1.8
Buckinghamshire	1.5
Wiltshire	1.4
West Sussex	1.4
Oxfordshire	1.3
East Sussex	1.3
Hertfordshire	1.3

Industry	Other private services
Shetland Islands	1.6
Cleveland	1.5
Fife	1.4
Highland	1.3
South Glamorgan	1.3
Lothian	1.3
Gwynedd	1.3
Isle of Wight	1.2
North Yorkshire	1.2
Hampshire	1.2

Industry	Waste disposal
Cleveland	6.7
Hertfordshire	2.3
Strathclyde	2.3
Highland	2.2
Fife	2.0
Dumfries and Galloway	2.0
Lothian	1.9
Central	1.8
Tayside	1.7
Mid Glamorgan	1.6

Industry	Charities
South Glamorgan	2.3
Shetland Islands	1.9
Powys	1.7
Mid Glamorgan	1.7
Tyne and Wear	1.5
West Midlands	1.5
Northern Ireland	1.5
South Yorkshire	1.5
Cleveland	1.5
Durham	1.4

Industry	Entertainment, sports and culture
Shetland Islands	1.9
Fife	1.6
Gwynedd	1.5
Lothian	1.4
South Glamorgan	1.4
Isle of Wight	1.4
Highland	1.3
Suffolk	1.3
Merseyside	1.2
North Yorkshire	1.2

Industry	Other services
Oxfordshire	1.6
Buckinghamshire	1.6
Fife	1.3
Dorset	1.3
Hampshire	1.3
Kent	1.3
Surrey	1.3
North Yorkshire	1.3
West Sussex	1.2
Berkshire	1.2

